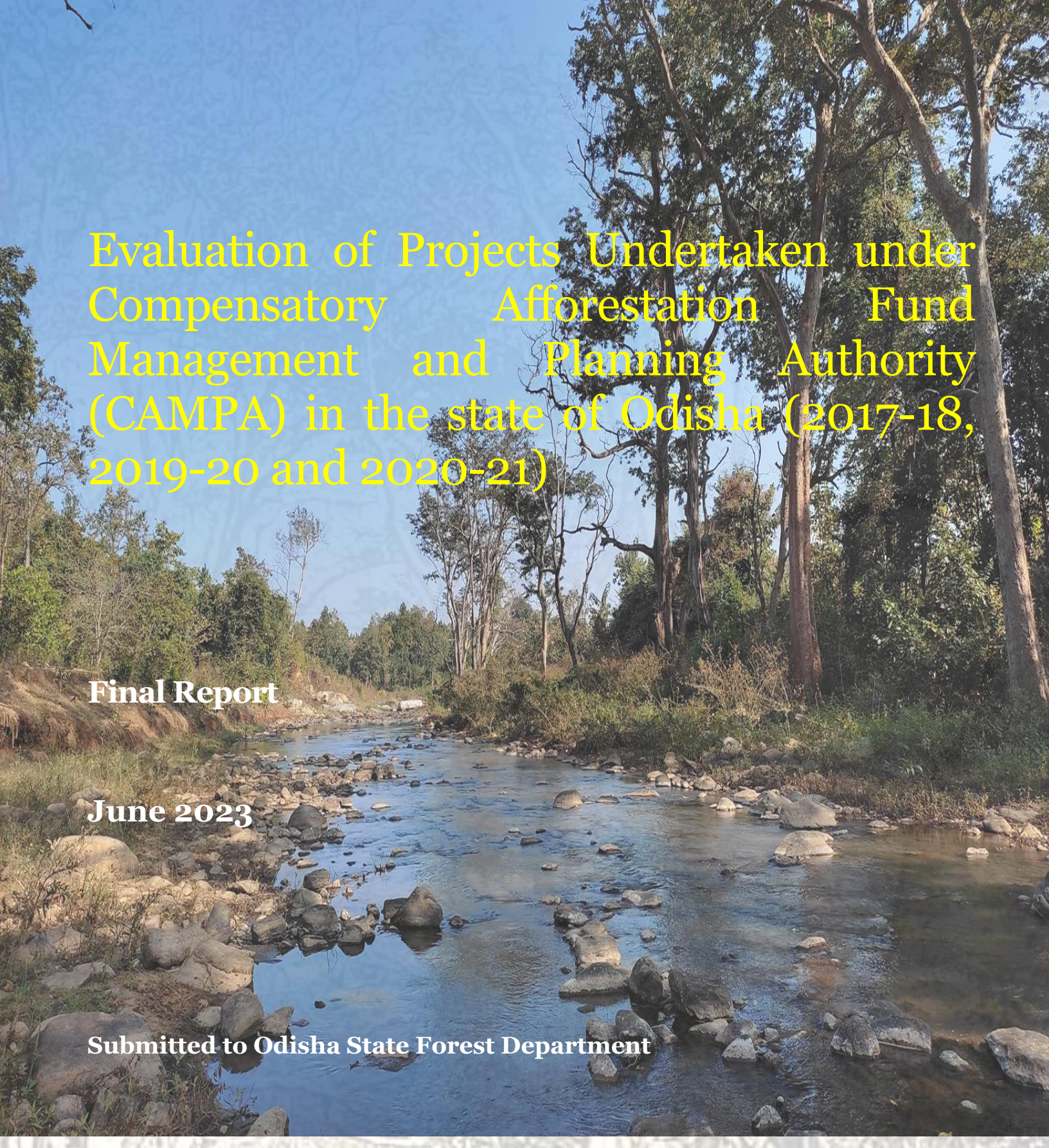

Evaluation of Projects Undertaken under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) in the state of Odisha (2017-18, 2019-20 and 2020-21)

Final Report

June 2023

Submitted to Odisha State Forest Department

pwc

Contents

Abbreviation

Ac or ac	Acre
AR	Afforestation Reforestation
APO	Annual Plan of Operations
Al	Altitude
AJY	Ama Jangala Yojana
ANR	Assisted Natural regeneration
Av. or Avg.	Average
BBSR	Bhubaneswar
cm	Centimeters
CA	Compensatory Afforestation
CG	Collar Girth
CFR	Community Forest Rights
CAMPA	Compensatory Afforestation Fund Management and Planning Authority
Compt.	Compartment
Cum	Cubic meter
DPF	Demarcated Protected Forest
EL	East Longitude
FSI	Forest Survey of India
FGD	Focused Group Discussion
G	Girth
GAP	Gap
GoO	Government of Odisha
GPS	Global Positioning System
GIS	Geographical Information System
GBH	Girth at Breast Height
GVI	Geometrical Vegetation Index
H	Height
Ha	Hectare
km	Kilo meters
m or M	Meter
mm	Milli Meters
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
N	North
No.	Numbers
NL	North Latitude

NDVI	Normalised Difference Vegetation Index
NPV	Net Present Value
OFD	Odisha Forest Dept.
PwC	PricewaterhouseCoopers Pvt. Ltd.
PVI	Perpendicular Vegetation Index
PCA	Penalty Compensatory Afforestation
PF	Protected Forest
RF	Reserve Forest
REP	Request for Proposal
R&D	Research and Development
RET	Rare, Endangered, Threatened
Rkm	Row Kilo meters
ISFR	Indian State of Forest Report
sp.	Species
SAVI	Soil Adjusted Vegetation Index
S.No.	Serial Number
Sq. m	Square meters
SDG	Sustainable Development Goals
SHGs	Self-Help Groups
SMC	Soil & Moisture Conservation
SSO	Subsidiary Silvicultural Operations
Temp	Temperature
UNDP	United Nations Development Programme
o	Degree
‘	Minutes
“	Seconds
UDPF	Undemarcated Protected Forest
Vol.	Volume
VHF	Very High Frequency
VSS	Van Surakshya Samiti
oC	Degree Centigrade
yr.	Year
WLM	Wildlife Management

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1. Introduction

Forests are an important repository of terrestrial biodiversity and are responsible for the provision of important ecosystem services for human well-being, such as wood and non-wood forest products, water regulation, carbon sequestration, soil protection and recreation.[1]Forests in India have been an integral part of the socio-economic and cultural life of its people. One in five people in India depend directly on forests for subsistence and livelihoods. Almost 50 percent of the food requirements of forest dwellers are provided by forests. However, land-use change, including agricultural intensification, urbanisation, over-exploitation, pollution, climate change, and invasive species that compete with native flora and fauna, are causing great stress on forest ecosystems.[2]Nearly 40 percent of India's forests are degraded, and this impacts the flow of forest goods and services that are critical for inclusive economic growth. Destroying forests has devastating consequences for tribal and other forest dependent communities as they often rely directly on forest ecosystem goods and services. Therefore, there is a need to improve the management of forests and other landscapes to strengthen their ecological health and, improve the livelihoods of forest-dependent communities.

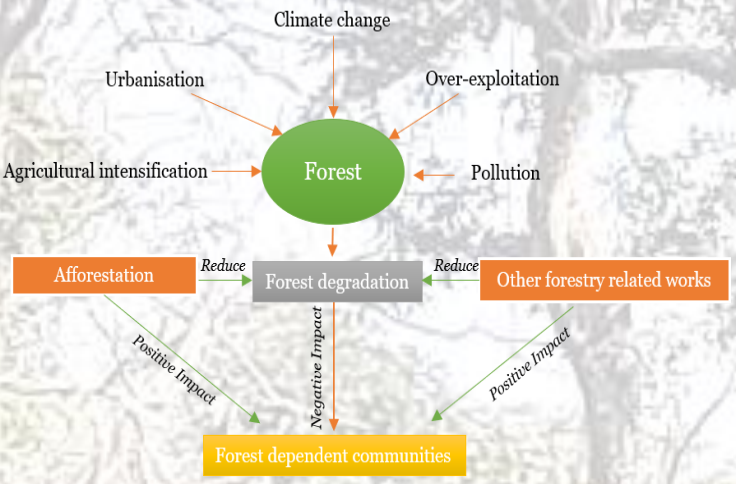

Figure 1. Climate change impacts on forest dependent communities

Afforestation and several other forestry related works are important for restoring ecosystems and ecological processes, strengthening the watershed and hydrology, enriching wildlife habitats, sequestering carbon and supporting livelihoods. Under the National Afforestation Programme, Watershed Development Programmes, MGNREGS, CAMPA and Green India Mission, large scale plantations are being taken up in all the states of the country.[3] These plantation projects are prone to several risks such as

[1]Shvidenko, A., Barber, CV., Persson, R. (2005). Forest and Woodland Systems. Ecosystems and Human Well-being: Current State and Trends.
[2]Louman, B., Keenan, R. J., Kleinschmit, D., Atmadja, S., Sitoe, A. A., Nhantumbo, I., ... & Morales, J. P. (2019). SDG 13: Climate action—impacts on forests and people. Sustainable development goals: their impacts on forests and people, 419-444.
[3] IIFM (2016). National Evaluation Manual for Compensatory Afforestation Fund Management and Planning Authority (CAMPA) Projects

persistent droughts, ground fires, grazing by cattle, damage by wildlife, competition from invasive weeds, poor soil quality etc. There is a pressing need to evaluate these plantations particularly with respect to area coverage, survival and growth parameters by using qualitative and quantitative approaches involving all the stakeholders.

In order to ensure sustainable use of natural resources, the Government of India have enacted the Indian Forest (Conservation) Act during 1980. This Act regulates diversion of Forest Lands for non-forestry purposes and provides for a framework for mitigation of loss of forest lands and environmental services through Compensatory Afforestation. These measures also include levying and collection of Net Present Value of the Forests lost in order to provide for interventions for Protection and Conservation of forests and biodiversity.

The core activities of CAMPA include compensatory afforestation, implementation of working plan prescriptions, forest protection, wildlife management and Ama Jangala Yojana. Non-core activities comprise Research and Development, Capacity Building, Publicity and Awareness, Infrastructure Development and Monitoring and Evaluation. The CAMPA Act, 2016 and CAMPA Rules 2018 are now in operation and the Annual Plans Operations are being prepared as per the provisions of CAMPA Act and Rules.

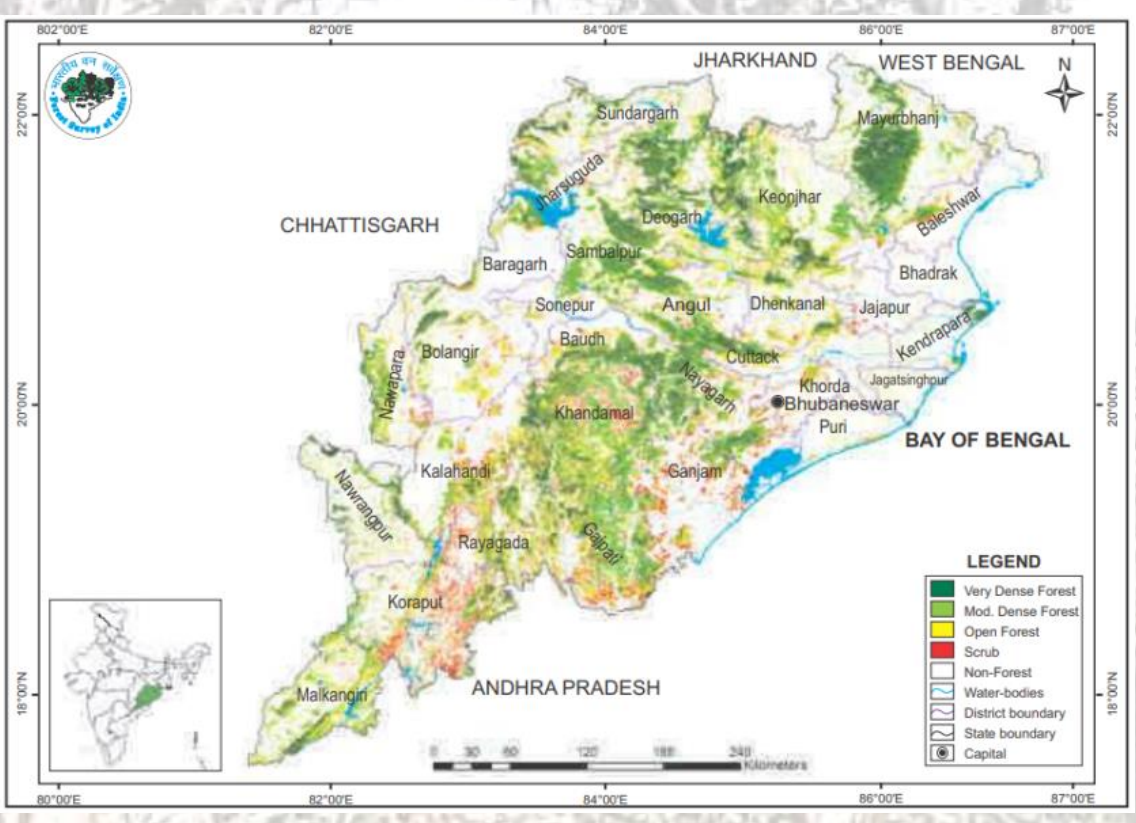

Figure 2. Forest Cover Map of Odisha (Source: ISFR, 2019)

The state of Odisha has rich and diverse forests. Its long coastline stretching over nearly 482 Km, serpentine rivers and estuarine forests and wetlands provide very good drainage lines and succor to the

agri economy of the state. The forest clad hills of the Eastern Ghats that run parallel to this coastline merging with central Indian and Chotanagpur belt provide excellent catchments for these river systems support rich and diverse flora and fauna.

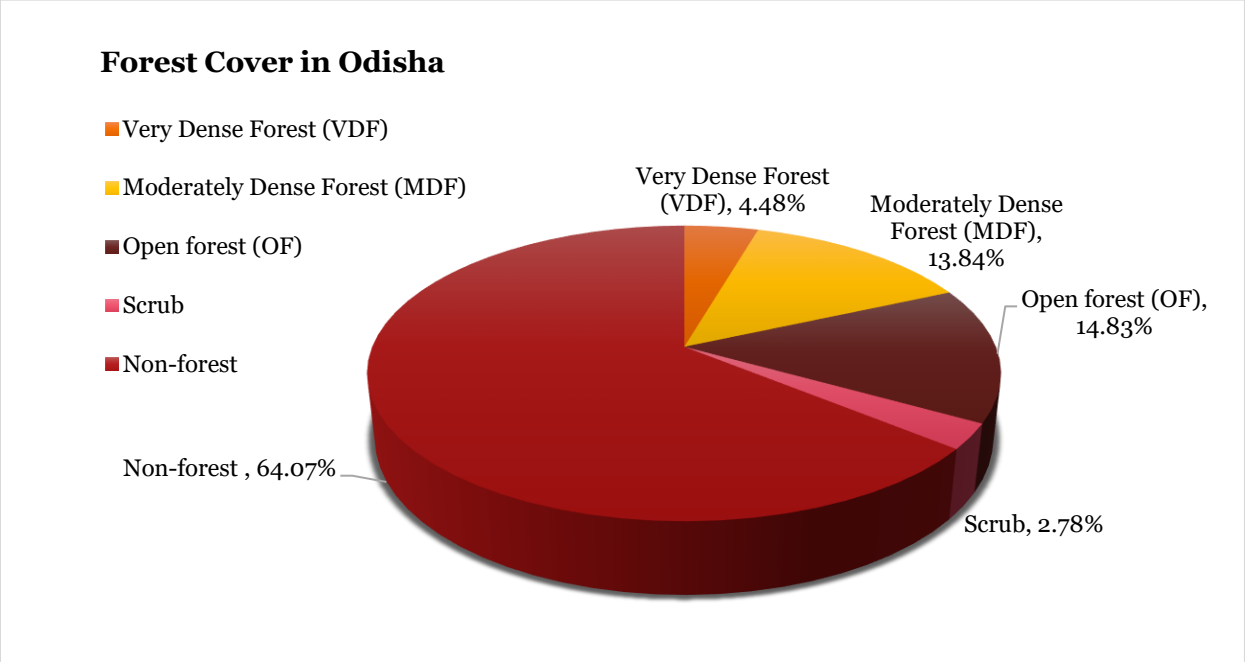

Figure 3. Forest Cover in Odisha (Source: ISFR, 2019)

Forests in Odisha extend over 61,204 Sq Km (of which 36,049 Sq Km are Reserve Forests, 25,133 Sq Km are Protected Forests and 22 Sq are unclassed). 19 Wildlife Sanctuaries and 2 National Parks constitute the Protected Area Network. Forests of Odisha belong to 19 types. 22.06% of State's Forests belong to 3C/C2e (ii) (Moist Peninsular Low-level Sal), 21.29% to 5B/C2 (Northern Dry Mixed Deciduous Forests), 17.79% to 5B/C1c (Dry Peninsular Sal Forests) and 10.51% to 5A/C3 (Southern Dry Mixed Deciduous Forests) with the balance belonging to 15 other types.

According to 2011 Census, population of Odisha is 41.97 million (3.47% of India's population) of which 22.85% are of Scheduled Tribes. Administration of the state is organized into 30 Districts of which 12 are tribal districts. The state is very rich in mineral resources which also support a number of Industries and are a major source of employment in the state. The annual rainfall ranges between 1,200 mm and 1,600 mm and the annual temperature varies from 25°C to 28°C.

The state forest department has initiated various programme in the state to improve the forest quality and ensure sustainable forest management. One such programme is CAMPA (Compensatory Afforestation of fund Management and Planning Authority). The Compensatory Afforestation Fund Management and Planning Authority is an institutional arrangement for ensuring Compensatory Afforestation and Protection and Conservation of Forests and Biodiversity. The Compensatory Afforestation Fund Management and Planning Authority (CAMPA) Odisha, constituted vide Notification No.

13995/F&E dated 14.08.2009, formulates Annual Plans of Operation (APOs) every year to carry out its operations in the forestry sector.

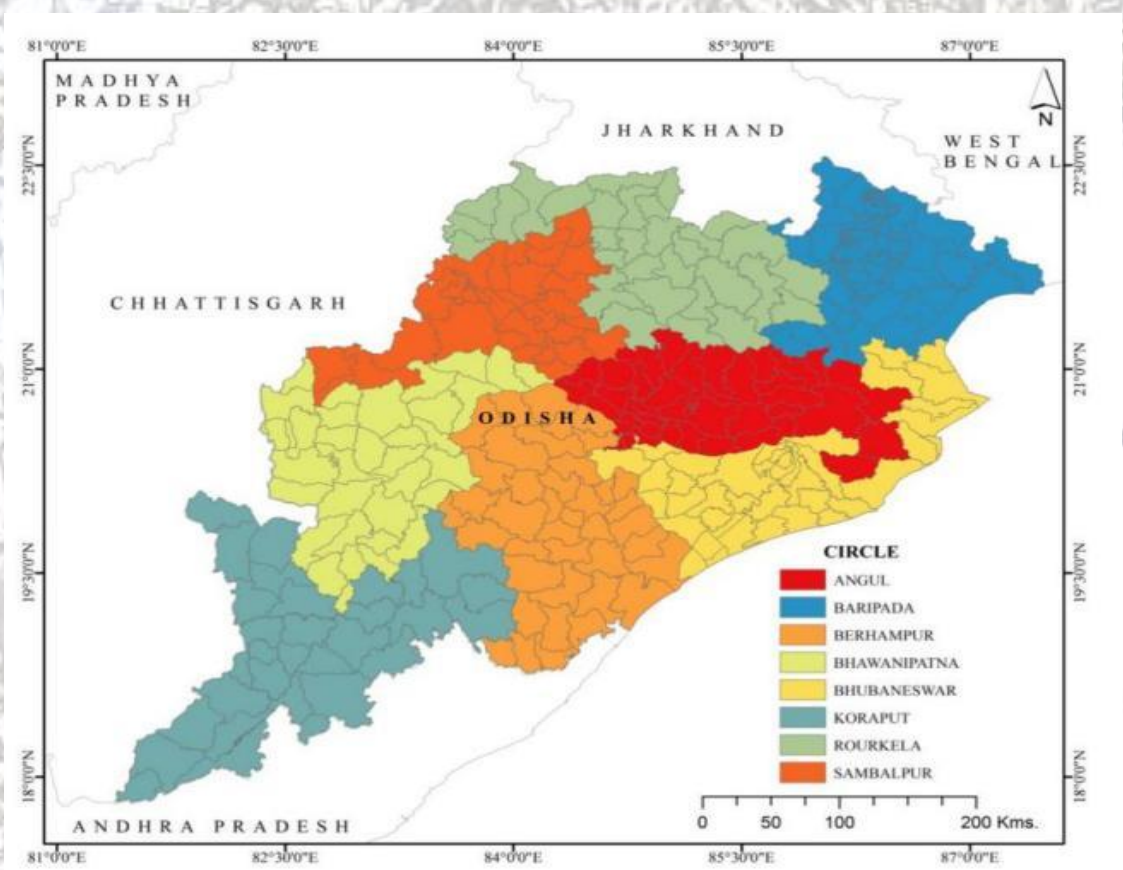

Figure 4. Forest circle and division map of Odisha

2. Objectives

Through notification No NIT No 569 Dt.16.06.2021 the Principal Chief Conservator of Forests and Head of Forest Force, Odisha invited proposals for evaluation of Projects undertaken under CAMPA in Odisha state as per Annual Plans of Operations (APO) of 2017-18, 2019-20 and 2020-21. The proposal submitted by Pricewaterhouse Coopers, after due evaluation was accepted.

The study includes:

- Evaluation of interventions (afforestation and forest conservation) implemented in accordance with approved Compensatory Afforestation Projects. These are project specific interventions.
- Evaluation of Non-Compensatory Afforestation works implemented for Protection and Conservation of Forests and Wildlife Conservation which are funded under the 'Net Present Value' Scheme. Works approved in the Annual Work Plans are studied.

3. Overview of Activities

3.1. Composition of team for evaluation

The team for third party evaluation of CAMPA works in Odisha comprise the following members:

Table 1: Team composition for evaluation work

Name	Role
Ms. Rashmi Dash	Executive Director
Ms. Madhura Mitra	Director/Project Manager
Mr. Ramesh Kalaghatgi IFS (Retd.)	Team Leader
Dr. H.D. Kulkarni	Forestry Expert
Mr. Preetish Biswal	Statistics Expert 1
Dr. Somnath Hazra	Statistics Expert 2
Mr. Shouvik K Das	GIS Expert 1
Dr. Sandip Giri	GIS Expert 2
Mr. Syed A A Farhan	Forest/ Environment Expert 1
Ms. Peer M Muna	Forest/ Environment Expert 2
Mr. Baijnath Paswan	Forest/ Environment Expert 3
Ms. Kaveri Gogoi	Forest/ Environment Expert 4
Mr. Yash Ondhia	State level coordinator

Photo 1. Evaluation team

3.2. Inception meeting

An inception meeting was conducted on 1st December 2021 to discuss the methodology and approach proposed by PwC for the evaluation work. Tools and schedules for data collection and sampling strategy were also deliberated upon. It was attended by forest department officials and PwC evaluation team. After discussion and consultation, the methodology, approach, schedules and tools, and sampling strategy were finalized. The same are detailed in subsequent paras.

3.3. Secondary data collection

Division wise achievements for the years under study were obtained from Division level offices. Relevant secondary data related to site locations, KML files, physical targets & achievements and site-wise works undertaken were also studied.

3.4. Methodology

The approach adopted for evaluating the CAMPA works undertaken as per Annual Plan of Operations (APO) of 2017-18, 2019-20 and 2020-21 is based on five key pillars:

The work includes desk research, data collection through field inspections, conducting focused group discussions and stake holder consultations, analysis of data collected, analysis of impacts with reference to sustainable development goals and stated objectives of CAMPA.

3.4.1. Desk research

After initial field visits, to understand the nature of terrain, vegetation and works, desk research was undertaken to review previous research findings to gain a broad understanding of the field. Focus was laid on performance of plantations, effect of silvicultural interventions on natural regeneration and forest improvement, effect of soil and moisture conservation works, efforts for improving forest protection and biodiversity conservation, addressing anthropogenic pressure, grazing pressure, forest fires PA management, research activities and infrastructure development works.

3.4.2. Sampling

This study covers all CAMPA activities undertaken in the APOs of 2017-18, 2019-20 and 2020-21 in all the forest divisions of Odisha state. Each forest division is considered as a unit and 10% of sites covered in each division during formation (raising/creation year) are selected as samples for detailed study.

For evaluation of block plantations including Bamboo Plantation,10% of plantation sites by year and forest division were sampled. In the selected plantation sites, sample plots of 33 m X 33 m were laid at random. The number of sample plots were assessed in order to ensure that the total sample area covers 2% of the plantation area. Location of sample plots was decided using Arc GIS, a software, and its randomiser application. The sample plots were laid on the ground duly navigating using GPS equipment. Growth and survival of plantations were assessed duly recording Height and Collar Girth of surviving seedlings planted. Impacts of silvicultural interventions and general protection and management were assessed using a pre-determined questionnaire.

For evaluation of Assisted Natural Regeneration sites, 10% of sites by year and forest divisions were selected at random. Sample plots of 1 ha size were located on site maps using Arc GIS. The number of sample plots were assessed to ensure that the total sample area corresponds to 2% of the area treated. Navigating using GPS, the starting point of each sample plot was located on the ground. Grids of 10 m X 10 m were laid from this starting point. Regeneration survey was carried out in each grid by counting and recording species, number of seedlings, saplings, and poles. Impacts of silvicultural interventions and general protection and management were assessed using a pre-determined questionnaire.

Where gap planting was done in the ANR sites, 10% of the seedlings planted (as recorded) were enumerated from a random start. Growth and survival of plantations were assessed duly recording Height and Collar Girth of surviving seedlings planted.

For evaluation work of rejuvenation of degraded bamboo forests (Bamboo SSO), 10% of treated sites were selected at random in each forest division where this work was executed. 10% of the Bamboo clusters treated were selected at random from the list of clusters (in each site) recorded and 10% of Bamboo clumps in each selected cluster were studied. Pre-determined questionnaires were used to record impacts of silvicultural interventions in these sites.

For all the other works (including infrastructure support, soil and moisture conservation works, protection, fire control and anti-poaching squads etc.) 10% of sites were selected at random in each forest division and using pre-determined questionnaire, their functioning and impacts were recorded. All the questionnaires used for data gathering are given under Annexure.

3.4.3. Data collection

Division wise achievements for the years under study were obtained from the Odisha Forest Department. From this data, sites were selected at random and sample plots were located as detailed in Para 3.4.2 Detailed work plan and deployment of human resources etc., was developed considering the Division wise distribution of work spots in consultation with the Odisha Forest Department.

Detailed formats / questionnaires were designed, and field tested for the purpose of data collection. Field enumerators and Supervisors were engaged through Samvedana, a reputed NGO having expertise in data

collection in rural development works. These enumerators and supervisors were trained on 8th and 9th December 2021 in Chandaka Forest division and on 21st to 23rd February 2022 in Ghumsur (South) forest division. After training, they were deployed in crews to collect data from sample plots / sampled sites in all the forest divisions. Data collected was recorded in 'Survey Solutions' a data collection software developed by the World Bank. Data collected was stored in an exclusive server and analysed by converting into MS Excel format, a user-friendly spreadsheet.

3.4.4. Data analysis

Data analysis is done based on primary and secondary data collected.

i. Survival rate:

The survival rate is then calculated site-wise, using the following formula

$$survival\ rate = \frac{number\ of\ surving\ plants\ occuring\ in\ sample\ plot\ (out\ of\ planted\ ones)}{number\ of\ trees\ planted\ in\ sample\ plot} x\ 100$$

The average of these site wise survival rate values is calculated for each division.

ii. Average height and collar girth

The average of collar girth and height values of planted was calculated site-wise and division-wise.

iii. Qualitative parameters for CAMPA works

Qualitative data was collected to capture performance of different CAMPA works across several parameters. Each parameter was measured on a 3-point scale of options A, B and C. Here, option A represents 'good' performance, option B is 'average' performance and option C is 'poor' performance for that particular parameter. The scale and parameters are detailed under Annexure. Observations recorded pertain to the period of survey. Data for each parameter was then analyzed by giving a score between 1 to 3 to each option. Highest score of 3 was given to good performance (option A), medium score of 2 was given to average performance (option B) and lowest score of 1 was given to poor performance (option C). The mean of these scores was calculated to quantify and measure performance for each parameter at division level. Higher is the mean, better is the performance of the division on that particular parameter. Parameters and scale for qualitative data is given under Annexure.

Table 2: Qualitative parameters for CAMPA works

Variable	Range	Description
A	>2.5	Good
B	1.5 – 2.5	Moderate/Average
C	<1.5	Poor

3.5. Questionnaire development

Separate questionnaires were developed for each type of work- block plantation, linear plantation, ANR/RDF/Silviculture interventions, and non-plantation activities/structures. Plot maps were generated using KML files on ArcGIS, each sample site and sample plots were randomly selected.

This evaluation has used *Survey Solutions* app for data collection. The app can be used online as well as offline mode that allows data collection in remote locations with ease. It also reduces the error in data entry. The questionnaires were uploaded onto the app and tested before use.

3.6. Enumerator selection, training & hand holding

Enumerators were engaged with due consideration to local knowledge and educational level for actual data collection and were adequately trained before commencement of work.

- *Enumerator selection:* Candidates, primarily with Post Graduation in Botany and Rural Management were selected.
- *Capacity Building:* During the capacity building programme on 8th and 9th December 2021, the selected enumerators were trained by the Team Leader and the other experts. The first day comprised of interactive classroom learning to acquaint the enumerators with CAMPA, its objectives & activities, laying sample plots, enumeration parameters, and demonstration of GPS and Survey Solutions app was done on the 2nd day. A field visit to Ghumsur South division was organized from 21 - 23 February 2022 for practical learning, demonstration, and onsite practice. The capacity building programme was followed by a week's handholding exercise in the first week of data collection.

Photo 2. In-house training of enumerators

3.7. Data Collection

Detailed work plan and deployment of human resources was developed considering Division wise distribution of work spots in consultation with the Odisha Forest Department. Data collection was carried out at three levels:

- Field survey to know the status of plantation sites: During site visits, enumeration team physically verified CAMPA works undertaken at the selected site. All relevant record and documents that were made available were also verified. Data was collected on the quality of the works as per the prescribed parameters and indicators.
- Focus Group Discussions (FGDs) with community members: A total of 84 FGDs have been conducted with community members living near the plantation sites. The aim was to understand socio, economic and environmental impacts of CAMPA works.
- Interview with forest officials: Interviews were conducted with forest officials to understand the challenges faced while implementing CAMPA activities.

Photo 3. Field training of enumerators

4. Site coverage

The third-party evaluation has covered sites for which data was made available to the evaluation team. Field survey was carried in 37 territorial divisions, and 14 wildlife divisions. Along with plantation and non-plantation activities, data was also collected through 84 Focus Group discussions with communities living near the plantation sites.

Table 3: Site coverage

Site coverage	Total number
Circles	8
Divisions	51
Territorial Units	37
Wildlife Units	14

Table 4: Year wise CAMPA works surveyed

Work type	Model	2017-18	2019-20	2020-21	Total
Block plantation sites (AR)	CA	9	10	19	38
	NPV	18	54	49	121
	Total	27	64	68	159
ANR With GAP	CA	16	14	15	45
	NPV	92	46	68	206
	Total	108	60	83	251
ANR Without GAP	CA	0	0	2	2
	NPV (includes AJY)	43	12	29	84
	Total	43	1	31	86
Bamboo SSR	NPV	17	20	16	53
Infrastructure (Construction)	NPV	261	209	262	732
Soil Moisture Conservation	NPV	5	9	25	39
Focus Group Discussions					84
Forest & Fire Protection Squads					58
Wildlife Protection & Anti-poaching Squads					24

In all 38918 plants planted under AR model including gap planting under ANR model in sample plots in plantations and sites surveyed and 33848 Seedlings, 18563 Saplings and 10083 Poles in sample plots in areas under ANR model were studied. Data received from various divisions, sampled, studied, and analysed is presented in the subsequent chapters.

5. Results and Analysis

Summary of Achievements

2017-18

The Annual Plan of Operations was prepared with an outlay of Rs. 566.13 crores and approved for this financial year was Rs.539.00 crores against which Rs. 511.83 crores were utilised.

Following is an assessment of targets and achievements of key activities during this financial year.

Table 5: Summary of financial achievements for APO 2017-18

2017-18 (Rupees in Crores)				
Activity	APO	Achievement	% of Proposed	% of Total Achievement
Forest Improvement	222.64	198.22	89.03	38.73
Ama Jangala Yojana	67.91	75.23	110.78	14.70
Forest and Fire Protection	48.07	47.9	99.65	9.36
Infrastructure development	65.8	51.11	77.67	9.99
Research, M&E, Training	10.36	10.14	97.88	1.98
CA, PCA etc.	25.19	22.69	90.08	4.43
Integrated WLMP	30.73	29.96	97.49	5.85
Wildlife Conservation	95.43	76.58	80.25	14.96
Grand Total	566.13	511.83	90.41	100.00

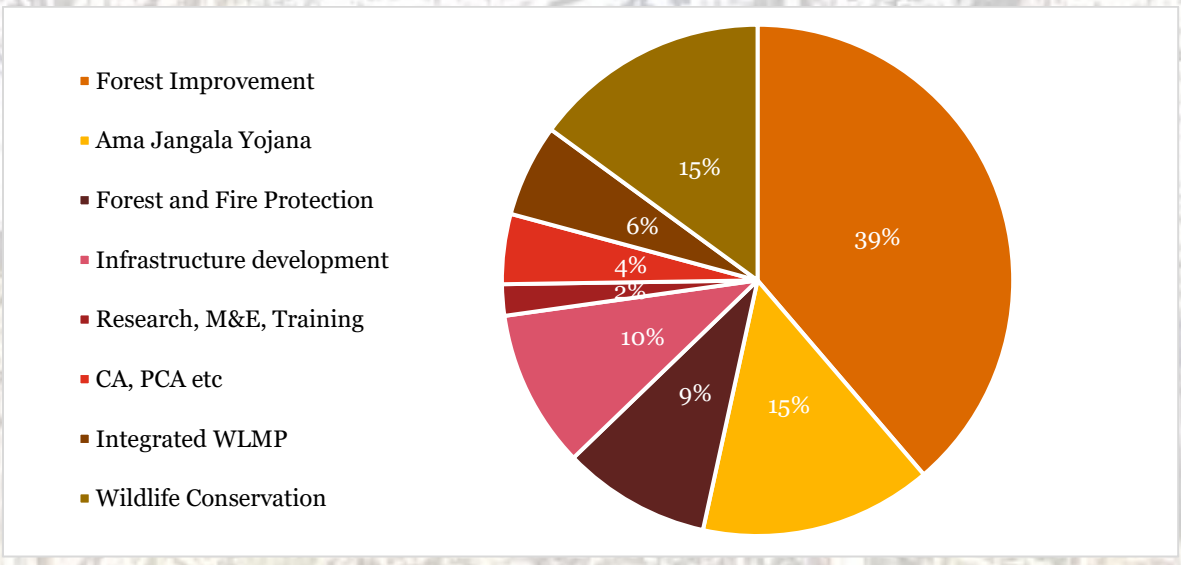

Figure 5. APO 2017-18

Source: Details of APO have been taken from the RFP published by the Odisha State Forest Department and details of financial achievements have been obtained from the MIS Cell in the Odisha State CAMPA Authority. The targets in these APOs have been taken as Physical targets.

While overall achievement is 88.04% of the target (APO), there is significant shortfall in respect of Research, Training and M&E. It is seen that 53.43% of financial achievement is utilised on activities for improvement of forests of which 14.70% accounts for Ama Jangala Yojana or participatory forest management. Wildlife and Biodiversity conservation accounts for 20.81% of total achievement. Forest Protection and Infrastructure support account for 9.36% and 9.99% respectively. While Research, Training and Monitoring and Evaluation account for 1.98% of total expenditure, Compensatory Afforestation accounts for 10.28% of financial achievement.

Targets under Compensatory Afforestation for Block Plantations or Artificial Regeneration was 734.64 ha against which an area of 163.84 ha has been planted and as against target of 2050.96 ha an area of 4808.70 was treated under ANR with Gap planting. Though a target of 115 ha was fixed for Bamboo plantations, no achievement is reported.

Under the NPV Component, as against the target of 1000 ha, 1745 ha of Block Plantations have been raised. Similarly, 72516.95 ha of forests were treated under the ANR model with Gap planting and 2000 ha of ANR without Gap planting was treated as against the target of 1,00,000 ha. 90080 ha of degraded bamboo forests were rejuvenated through Subsidiary Silvicultural Operations (as per state level report) as against the target of 1,50,000 ha . Further, as against target of 25,000 ha, an area of 18950 ha was treated under without Gap planting as part of Ama Jangala Yojana. Figures of achievement mentioned above are from data compiled from Division reports (except for Bamboo SSO).

2019-20

The Annual Plan of Operations approved for this financial year was Rs.610.56 crores against which Rs. 556.34 crores were utilized.

Following is an assessment of targets and achievements of key activities during this financial year.

Table 6: Summary of financial achievements for APO 2019-20

2019-20 (Rupees in Crores)				
Activity	APO	Achievement	% of Target	% of Total Achievement
Forest Improvement	174.62	172.67	98.89	31.04
Ama Jangala Yojana	81.57	64.78	79.41	11.64
Forest and Fire Protection	54.15	50.37	93.02	9.05
Infrastructure development	51.02	51.74	101.40	9.30

Research, M&E, Training	45.76	36.55	79.87	6.57
CA, PCA etc.	48.84	40.46	82.84	7.27
Integrated WLMP	35.72	30.00	83.99	5.39
Wildlife Conservation	118.11	109.77	92.94	19.74
Grand Total	610.52	556.34	91.12	100.00

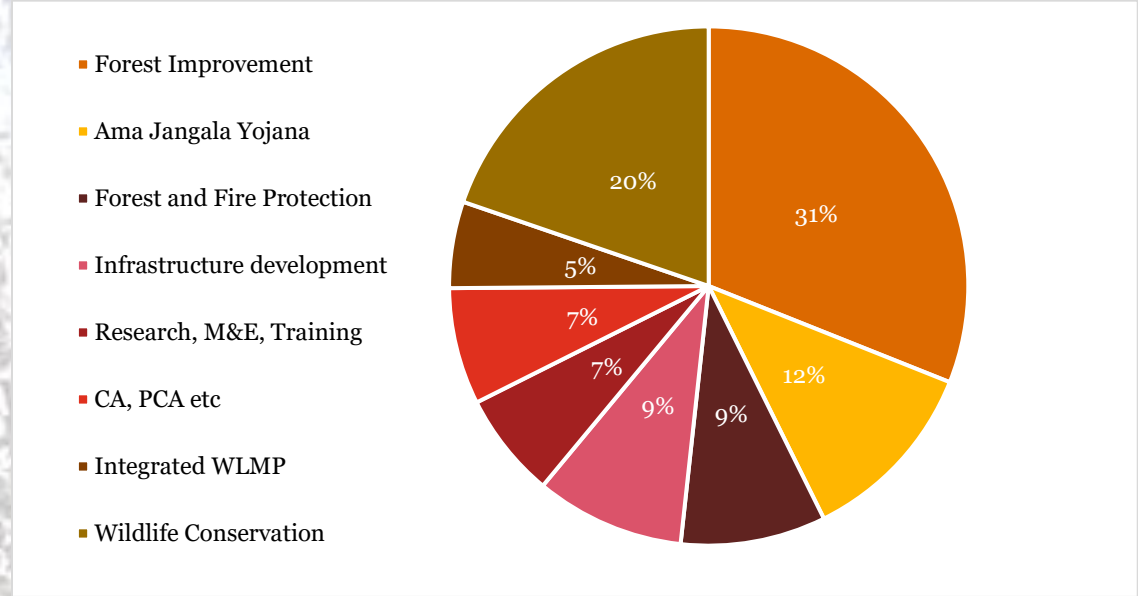

Figure 6. APO 2019-20

Source: Details of APO have been taken from the RFP published by the Odisha State Forest Department and details of financial achievements have been obtained from the MIS Cell in the Odisha State CAMPA Authority. The targets in these APOs have been taken as Physical targets.

The utilization of funds in all activities is satisfactory. 42.68% of funds (including Ama Jangala Yojana) utilised are for forest improvement while 25.12% is towards wildlife and biodiversity conservation.

As regards Compensatory Afforestation, as against target of 547.43 ha for Artificial Regeneration, an area of 638.64 ha has been planted. Similarly, the total area treated through ANR with Gap Planting is 5328.92 ha as against the target of 4448.21 ha.

Under NPV, as against the target of Artificial Regeneration of 4000 ha (2000 ha of planting Misc. species and 2000 ha of Bamboo plantations), an area of 3704 has been planted. Further 69262 ha of degraded bamboo forests have been rejuvenated as against target of 72580 ha (state level data), 18430 ha of degraded forests have been rejuvenated by way of assisting natural regeneration with supplementary gap planting as against target of 20,000 ha. Another 500 ha have been rejuvenated under ANR without Gap planting.

2020-21

The Annual Plan of Operations approved for this financial year was Rs.773.39 crores against which Rs. 674.99 crores were utilised.

Following is an assessment of targets and achievements of key activities during this financial year.

Table 7: Summary of financial achievements for APO 2020-21

2020-21 (Rupees in Crores)				
Activity	APO	Achievement	% of Target	% of Total Achievement
Forest Improvement	304.06	273.27	89.87	40.49
Ama Jangala Yojana	72.00	65.34	90.75	9.68
Forest and Fire Protection	56.31	67.44	119.76	9.99
Infrastructure development	56.01	56.94	101.67	8.44
Research, M&E, Training	56.33	17.62	31.28	2.61
CA, PCA etc	75.01	48.88	65.16	7.24
Integrated WLMP	36.42	29.41	80.75	4.36
Wildlife Conservation	117.25	116.09	99.01	17.19
Grand Total	773.39	674.99	87.28	100.00

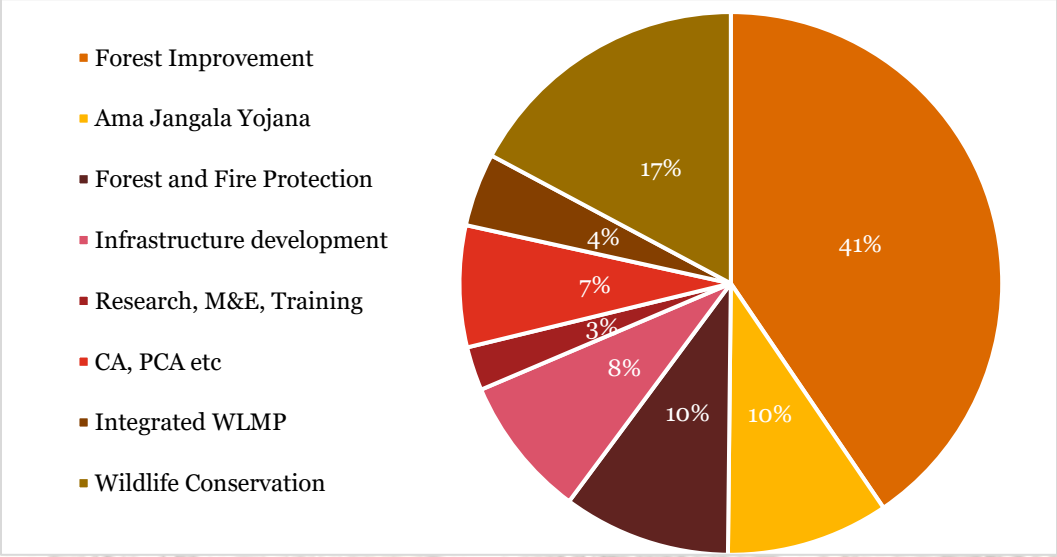

Figure 7. APO 2020-21

Source: Details of APO have been taken from the RFP published by the Odisha State Forest Department and details of financial achievements have been obtained from the MIS Cell in the Odisha State CAMPA Authority. The targets in these APOs have been taken as Physical targets.

Achievements for Forest improvement and Forest Protection including Ama Jangala Yojana are quite satisfactory. So is achievement for Wildlife and Biodiversity Conservation. There is significant shortfall in respect of Research, Training and M&E component. Target of 111.43 Crores under Compensatory Afforestation includes an amount of Rs. 36.42 Crores toward Wildlife Conservation activities. Here again there is shortfall in achievement.

Under Compensatory Afforestation, a target of 1215.59 ha (240.87 ha for Misc. plantations and 974.72 ha for Bald Hill Planting) was fixed and against this, an area of 1487.12 ha has been planted. Similarly, as against target of treating 2681.077 ha through ANR with Gap planting, an area of 2162.41 ha has been treated and an area of 479.00 ha has been treated under ANR without Gap planting as against target of 458.68 ha.

Under NPV component, as against the target of 3500 ha for Artificial Regeneration (1500 ha of Misc. species, 1000 ha of Bamboo plantations and 1000 ha of Bald Hill plantations), an area of 2911.32 ha has been planted. An area of 37,580 ha of degraded forests have been rejuvenated under ANR with Gap planting model as against target of 40,000 ha and 73,689 ha of degraded bamboo forests have been rejuvenated as against the target of 75,000 ha (State figure). 60 ha of Fani ravaged area was restored in Balukhanda-Konark Sanctuary in Balukhanda RF, Puri WL.

Further, the state level report does not have details of achievements of various activities (physical achievements) for Compensatory Afforestation works and Wildlife Conservation works. Achievement of Wildlife Conservation works were separately obtained from the O/o Chief Wildlife Warden, Odisha. It is suggested that all these are compiled at one place to ensure effective monitoring.

Extracts of APOs detailing the Physical and Financial Targets and reports received from all Divisions and the State Authority based on which the above analysis is made, are given under the Annexure.

Following is presentation of result and analysis of data collected from all Divisions, sampled and surveyed for all the three years under study.

5.1. Works implemented during APO (2017-18)

5.1.1. Compensatory Afforestation Scheme

5.1.1.1. Block Plantation

For block plantation, total area treated under CA scheme 49.88 ha in Angul circle over 3 sites, 1 ha in Berhampur circle for one site, 48.25 ha in Bhawanipatna circle in one site, 8.09 ha in Baripada circle for one site, 5 ha in Sambalpur circle in 2 sites, 51.60 ha in Rourkela circle in 5 sites. Of this, the survey was carried out in 2 sites (46.68 ha) in Angul circle, 1 site (1 ha) in Berhampur circle and 1 site (48.25 ha) in

Bhawanipatna, 1 site (8.09 ha) in Baripada Circle, 1 site (5 ha) in Sambalpur Circle and 3 sites (51.60 ha) in Rourkela Circle.

Table 8: Area and site coverage for block plantation under CA scheme (2017-18)

Circle	Division	Total Area treated		Area Studied	
		Area (ha.)	No of sites	Area (ha.)	No of sites
Angul	Angul	6.68	1	6.68	1
	Cuttack	43.22	2	40.00	1
Total		49.88	3	46.68	2
Berhampur	Berhampur	1.00	1	1.00	1
Total		1.00	1	1.00	1
Bhawanipatna	Kalahandi S	48.25	1	48.25	1
Total		48.25	1	48.25	1
Baripada	Keonjhar WL	8.09	1	8.09	1
Total		8.09	1	8.09	1
Sambalpur	Jharsuguda	5.00	2	4.10	1
Total		5.00	2	4.10	1
Rourkela	Bonai	9.07	2	1.35	1
	Keonjhar	0.20	1	0.20	1
	Sundargarh	42.33	2	2.93	1
Total		51.60	5	4.47	3
Grand Total		163.84	13	112.60	9

Artificial regeneration

It is observed that Kalahandi S, Keonjhar, Bonai, Sundargarh & Keonjhar WL Divisions have recorded higher survival rates ranging between 92-98%, followed by Cuttack, Berhampur & Jharsuguda Divisions ranging from 82.5 – 86%. At the same time, survival rate in Angul division was observed to 51%.

Table 9: Survival status for block plantation (Planted) under CA scheme (2017-18): Survival Rate

Circle	Division	No of sites studied	Survival %		
			Avg.	Min.	Max.
Angul	Angul	1	51.00	51.00	51.00
	Cuttack	1	85.00	85.00	85.00
Berhampur	Berhampur	1	82.50	82.50	82.50
Bhawanipatna	Kalahandi S	1	94.00	94.00	94.00
Baripada	Keonjhar WL	1	92.00	92.00	92.00
Sambalpur	Jharsuguda	1	86.00	86.00	86.00
Rourkela	Bonai	1	98.00	98.00	98.00
	Keonjhar	1	97.00	97.00	97.00
	Sundargarh	1	97.00	97.00	97.00

Plantations in Berhampur, Kalahandi S and Keonjhar WL Divisions performed very well on growth parameters of average height and average collar girth, which was followed by Keonjhar, Sundargarh, Cuttack, Bonai, Jharsuguda and Angul divisions as reflected in Table 10.

Table 10: Growth status for block plantation (Planted) under CA scheme (2017-18): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M)			Collar Girth (Cm)		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	0.94	0.30	1.98	7.28	2.03	20.57
	Cuttack	1	1.33	0.02	5.08	10.88	0.51	45.72
Berhampur	Berhampur	1	2.50	0.36	4.57	13.29	4.06	38.61
Bhawanipatna	Kalahandi S	1	2.39	0.51	3.38	12.59	4.57	23.93
Baripada	Keonjhar WL	1	2.54	1.65	3.30	15.44	7.11	26.92
Sambalpur	Jharsuguda	1	1.23	0.41	2.08	7.82	1.27	16.26
Rourkela	Bonai	1	1.35	0.71	2.08	8.05	4.32	14.22
	Keonjhar	1	1.85	0.76	2.79	10.13	6.10	13.46
	Sundargarh	1	1.94	1.09	2.92	10.69	5.08	21.08

Qualitative parameters

Overall, the surveyed plantation sites have performed well across all quality parameters. Cuttack, Berhampur, Keonjhar WL, Bonai, Keonjhar, Sundargarh and Kalahandi S divisions did not display any signs of grazing and fire while Angul and Jharsuguda Divisions recorded minor grazing and fires incidences. Treatment maps must be updated/completed in Angul, Cuttack, Jharsuguda, Sundargarh and Berhampur divisions. All the divisions have updated journals and completed plantation maps. Minor updates are required in the plantation map of Berhampur division. The sites are properly demarcated with boundary pillars and display board.

Table 11: Qualitative Parameters for Block Plantation (Planted) under CA scheme (2017-18)

Circle	Division	Grazing	Fire	Coppice	Soil work	Journal	Plantation Map	Treatment map	Display Board	Boundary Pillars
Angul	Angul	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Cuttack	3.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00
Berhampur	Berhampur	3.00	3.00	3.00	2.00	3.00	2.00	2.00	3.00	3.00
Bhawanipatna	Kalahandi S	3.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00
Baripada	Keonjhar WL	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Sambalpur	Jharsuguda	2.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00
Rourkela	Bonai	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00

Circle	Division	Grazing	Fire	Coppice	Soil work	Journal	Plantation Map	Treatment map	Display Board	Boundary Pillars
	Keonjhar	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
	Sundargarh	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.										

5.1.1.2. Assisted Natural Regeneration (With GAP)

For ANR (with GAP) under CA scheme, total treated area in Angul Circle is 2387.00 ha. spread across 33 sites. The survey was carried out in 7 sites that sums up to 342.05 ha. Similarly, Berhampur Circle has a total of 940.00 ha under ANR (with GAP) across 16 sites, and the survey was carried out in 2 sites (100 ha), Baripada Circle has a total area of 72.80 ha across 2 sites, and the survey was carried out in 1 site (42 ha), Bhubaneswar Circle had a total area of 47.82 ha for one site which was surveyed as well, Sambalpur Circle has a total treated area of 273.31 ha across 6 sites out of which 2 sites (228.13 ha) were surveyed and Rourkela Circle has a treated area of 1087.77 ha across 23 sites out of which 3 sites (162.97 ha) were surveyed. A grand total of 4808.70 ha has been treated across 81 sites in these 6 circles and 16 sites covering 922.97 ha was surveyed.

Table 12: Area Coverage for ANR with GAP under CA scheme (2017-18)

Circle	Division	Total Area treated		Area Studied	
		Area (ha.)	No of sites	Area (ha.)	No of sites
Angul	Angul	91.00	3	26.00	1
	Athgarh	1925.00	24	200.00	3
	Dhenkanal	371.00	6	116.05	3
Total		2387.00	33	342.05	7
Berhampur	Ghumsur North	940.00	16	100.00	2
Total		940.00	16	100.00	2
Baripada	Keonjhar WL	72.80	2	42.00	1
Total		72.80	2	42.00	1
Sambalpur	Bamra WL	213.31	1	213.31	1
Sambalpur	Jharsuguda	60.00	5	14.82	1
Total		273.31	6	228.13	3
Bhubaneshwar	Khurda	47.82	1	47.82	1
Total		47.82	1	47.82	1
Rourkela	Bonai	273.77	5	84.97	1
Rourkela	Keonjhar	814.00	18	78.00	2
Total		1087.77	23	162.97	3
Grand Total		4808.70	81	922.97	16

Regeneration status

The surveyed plantation sites have recorded good survival rates (in gaps planted) except for a few sites. Keonjhar and Khurda have highest survival rates among all the divisions with 94%. The rest of the divisions have a survival rate ranging from 46 – 89%.

Table 13: Survival status for ANR with GAP under CA scheme (2017-18): Survival Rate

Circle	Division	No of sites studied	Survival %		
			Avg.	Min.	Max.
Angul	Angul	1	68.00	68.00	68.00
	Athgarh	3	89.00	73.00	90.00
	Dhenkanal	3	74.00	60.00	97.00
Berhampur	Ghumsur North	2	79.00	79.00	79.00
Baripada	Keonjhar WL	1	76.00	76.00	76.00
Sambalpur	Bamra WL	1	68.00	68.00	68.00
	Jharsuguda	1	46.00	46.00	46.00
Bhubaneshwar	Khurda	1	94.00	94.00	94.00
Rourkela	Bonai	1	56.00	56.00	56.00
	Keonjhar	2	94.00	89.00	99.00

The performance of surveyed plantation sites on growth parameters was observed to be satisfactory. The average height of surveyed plants range between 1.36 m - 2.51 m and the average collar girth is between 4.20 cm to 24.21 cm. Ghumsur North was the highest growth kin plants at an avg. height (2.51 m) and avg. collar girth (24.21 cm).

Table 14: Growth status for ANR With GAP under CA scheme (2017-18): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M) in GP			Collar Girth (Cm) in GP		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	1.40	0.27	4.06	16.24	2.71	281.40
	Athgarh	3	1.74	0.25	6.35	14.10	2.29	92.71
	Dhenkanal	3	1.36	0.15	3.81	12.46	1.27	213.36
Berhampur	Ghumsur North	2	2.51	0.15	0.15	24.21	2.03	181.61
Baripada	Keonjhar WL	1	1.49	0.64	3.56	4.20	5.08	29.21
Sambalpur	Bamra WL	1	1.39	0.53	5.08	4.66	3.81	117.35
	Jharsuguda	1	1.78	0.64	5.08	8.26	4.06	87.88
Bhubaneshwar	Khurda	1	1.67	0.69	3.05	4.36	5.08	17.02
Rourkela	Bonai	1	2.31	1.60	3.30	6.52	12.19	21.84
	Keonjhar	2	1.62	0.97	2.54	4.28	8.13	15.24

Regeneration status

It is observed that seedlings form the highest proportion of all plants in all the surveyed divisions, followed by saplings and poles.

Table 15: Regeneration Status of ANR (with GAP) under CA scheme (2017-18)

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Angul	Angul	1	67.00	24.00	9.00
	Athgarh	3	69.00	19.00	12.00
	Dhenkanal	3	67.00	17.00	16.00
Berhampur	Ghumsur North	2	64.00	24.00	12.00
Baripada	Keonjhar WL	1	62.00	27.00	11.00
Sambalpur	Bamra WL	1	61.00	31.00	8.00
	Jharsuguda	1	55.00	35.00	10.00
Bhubaneshwar	Khurda	1	52.00	35.00	13.00
Rourkela	Bonai	1	67.00	24.00	9.00
	Keonjhar	2	54.00	28.00	18.00

Qualitative parameters

The scores are indicative of good performance of plantation sites on qualitative parameters. Minor signs of grazing were observed in few sites. The singling of coppice shoot had relatively positive effect of 2 to 4 shoots visible in the three divisions. The silvicultural operations had a positive impact on soil erosion with very few incidences of sheet erosion. There was no evidence of fire observed in the divisions, except in Ghumsur North. Density of recruits was moderate to dense.

Table 16: Qualitative parameters for ANR (with gap) under CA scheme (2017-18)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars
Angul	Angul	2.00	2.00	2.00	2.00	1.00	3.00	3.00	1.00	3.00	3.00
	Athgarh	2.50	2.50	2.00	2.25	1.80	2.00	2.00	2.00	3.00	1.50
	Dhenkanal	2.00	3.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00
Berhampur	Ghumsur North	1.00	1.00	1.00	2.00	3.00	3.00	3.00	1.00	3.00	3.00
Baripada	Keonjhar WL	2.00	3.00	2.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00
Sambalpur	Bamra WL	3.00	2.00	2.00	2.00	3.00	2.00	3.00	3.00	3.00	2.00
	Jharsuguda	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00
Bhubaneshwar	Khurda	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Rourkela	Bonai	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00
	Keonjhar	3.00	3.00	2.50	2.50	3.00	2.50	2.50	3.00	3.00	2.50

Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.

5.1.2. Net Present Value Scheme

5.1.2.1. Baldhill Plantation

Table 17: Area Coverage for Baldhill Plantation under NPV Scheme (2017-18)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha.)	No of sites
Angul	Cuttack	100.00	5	41.52	1
Total		100.00	5	41.52	1
Berhampur	Berhampur	105.00	9	15.00	1
Total		105.00	9	15.00	1
Bhawanipatna	Bolangir	75.00	4	10.00	1
	Kalahandi N	5.00	1	5.00	1
	Kalahandi S	50.00	2	48.25	1
	Khariar	75.00	8	10.00	1
	Subarnapur	75.00	4	15.00	1
Total		280.00	19	88.25	5
Bhubaneshwar	Khurda	50.00	5	10.00	1
	Nayagarh	50.00	1	50.00	1
Total		100.00	6	60.00	2
Rourkela	Rourkela	20.00	2	10.00	1
	Sundargarh	75.00	6	10.00	1
Total		95.00	8	20.00	2
Koraput	Jeypore	25.00	3	10.00	1
	Koraput	100.00	5	20.00	1
	Rayagada	50.00	4	15.00	1
Total		175.00	12	45.00	3
Grand Total		855.00	59	279.77	14

Table 18: Survival status for Baldhill plantation (Planted) under NPV scheme (2017-18): Survival Rate

Circle	Division	No of sites studied	Survival %		
			Avg.	Min.	Max.
Angul	Cuttack	1	77.00	77.00	77.00
Berhampur	Berhampur	1	73.00	73.00	73.00
Bhawanipatna	Bolangir	1	93.00	93.00	93.00
	Kalahandi N	1	90.00	90.00	90.00
	Kalahandi S	1	94.00	94.00	94.00
	Khariar	1	98.00	98.00	98.00
	Subarnapur	1	88.00	88.00	88.00
Bhubaneshwar	Khurda	1	94.00	94.00	94.00

Circle	Division	No of sites studied	Survival %		
			Avg.	Min.	Max.
	Nayagarh	1	87.00	87.00	87.00
Rourkela	Rourkela	1	97.00	97.00	97.00
	Sundargarh	1	96.00	96.00	96.00
Koraput	Jeypore	1	100.00	100.00	100.00
	Koraput	1	100.00	100.00	100.00
	Rayagada	1	99.00	99.00	99.00

Table 19: Growth status for Baldhill plantation (Planted) under NPV scheme (2017-18): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M)			Collar Girth (Cm)		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Cuttack	1	1.46	0.02	5.38	12.88	0.51	42.22
Berhampur	Berhampur	1	1.85	0.25	7.87	14.85	2.79	44.20
Bhawanipatna	Bolangir	1	2.04	0.34	4.57	23.91	3.05	229.36
	Kalahandi N	1	1.91	0.12	3.05	8.68	5.59	12.45
	Kalahandi S	1	2.39	0.51	3.38	22.59	4.57	233.93
	Khariar	1	2.08	0.46	4.32	21.05	2.54	210.82
	Subarnapur	1	1.78	0.51	3.05	11.68	3.90	15.64
Bhubaneshwar	Khurda	1	2.06	0.48	4.32	13.54	3.56	28.45
	Nayagarh	1	2.41	1.52	3.05	17.77	12.19	21.84
Rourkela	Rourkela	1	1.99	1.17	3.05	10.85	5.08	17.02
	Sundargarh	1	1.88	0.15	4.83	29.08	7.62	58.00
Koraput	Jeypore	1	2.98	0.61	5.58	22.85	5.08	152.40
	Koraput	1	4.42	1.27	6.35	23.16	8.13	46.23
	Rayagada	1	2.15	1.12	3.81	16.99	7.62	38.10

Bald-hill plantation

The performance of surveyed plantations in 12 divisions is excellent with survival above 90%. The plantations in the remaining 2 divisions are good, recording survival between 73-88%.

Qualitative Parameters

Performance of majority of the Divisions across all the quality parameters is good. No grazing signs were observed in the plantations, except minor incidences in Cuttack. Similarly, fire incidences were not found during the survey. Soil working has a positive impact on erosion.

Table 20: Qualitative parameters for block plantation (planted) under NPV scheme (2017-18)

Circle	Division	Grazing	Fire	Coppice	Soil work	Journal	Plantation Map	Treatment map	Display Board	Boundary Pillars
Angul	Cuttack	2.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
Berhampur	Berhampur	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
Bhawanipatna	Bolangir	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
	Kalahandi N	3.00	2.00	2.00	3.00	3.00	2.00	2.00	3.00	2.00
	Kalahandi S	3.00	2.00	2.00	3.00	3.00	2.00	2.00	3.00	2.00
	Khariar	3.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00
	Subarnapur	3.00	3.00	2.00	3.00	3.00	2.00	2.00	3.00	3.00
Bhubaneshwar	Khurda	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	Nayagarh	3.00	3.00	3.00	2.00	3.00	3.00	2.00	3.00	2.00
Rourkela	Rourkela	3.00	3.00	3.00	3.00	3.00	3.00	2.00	3.00	2.00
	Sundargarh	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Koraput	Jeypore	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	Koraput	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00
	Rayagada	3.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.										

5.1.2.2. Assisted Natural Regeneration (With GAP)

Under NPV scheme of 2017-18, ANR (with gap) were undertaken in 774 sites across 85,405 ha of the 8 circles, and out of which an area of 9143.70 ha was surveyed across 92 sites in these 8 circles. Table 21 gives a detailed division-wise breakdown of the same.

Table 21: Area and site coverage for ANR With Gap under NPV scheme (2017-18)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Angul	Angul	1500.00	19	236.00	3
	Athmallik	500.00	3	150.00	1
	Cuttack	1950.00	11	50.00	1
	Dhenkanal	3000.00	22	600.00	3
	Athagarh	1925.00	-	-	-
Total		8875.00	55	1036.00	8
Berhampur	Balliguda	4000.00	61	735.00	7
	Berhampur	1650.00	28	180.00	3
	Boudh	1500.00	17	180.00	3

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
	Ghumsur North	940.00	-	-	-
	Ghumsur South	1430.00	22	100.00	2
	Parlakhemundi	3000.00	9	100.00	2
	Phulbani	5000.00	39	600.00	4
Total		17520	176	1895.00	21
Bhawanipatna	Bolangir	4000.00	30	320.00	3
	Kalahandi N	5000.00	44	650.00	5
	Kalahandi S	4000.00	16	600.00	2
	Khariar	3000.00	35	500.00	4
	Subarnapur	2000.00	-	-	-
Total		18000.00	125	2070.00	14
Baripada	Baripada	1000.00	12	200.00	1
	Karanjia	500.00	8	100.00	1
	Keonjhar WL	1500.00	8	75.00	1
	Rairangpur	500.00	5	140.00	1
Total		3500.00	33	515.00	4
Sambalpur	Bamra WL	1000.00	27	30.00	3
	Bargarh	2000.00	19	250.00	2
	Jharsuguda	1000.00	15	150.00	2
	Rairakhol	1500.00	12	150.00	2
	Sambalpur	2500.00	29	500.00	3
Total		8000.00	102	1080.00	12
Bhubaneshwar	Khurda	1000.00	19	100.00	2
	Nayagarh	4720.00	39	350.00	4
	Rajnagar WL	390.00	5	50.00	1
	Chilika WL	200.00	-	-	-
Total		6310.00	63	500.00	7
Rourkela	Bonai	500.00	6	7.70	1
	Deogarh	600.00	7	100.00	1
	Keonjhar	700.00	5	50.00	1
	Rourkela	2500.00	7	300.00	1
	Sundargarh	5000.00	26	300.00	3
Total		9300.00	51	757.70	7
Koraput	Jeypore	400.00	13	70.00	2
	Koraput	2000.00	25	100.00	2
	Malkangiri	500.00	15	70.00	2
	Nabarangpur	6000.00	58	300.00	5
	Rayagada	5000.00	58	750.00	8

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Total		13900.00	169	1290.00	19
Grand Total		85,405	774	9143.70	92

Regeneration status

Plantations of Bolangir and Kalahandi N have the highest survival of 90% and 91% respectively, followed by Cuttack, Balliguda, Berhampur, Boudh, Parlakhemundi, Phulbani and Khariar in the range of 80-89.25%, and the remaining in the range of 67-76%. Division wise details are given below:

Table 22: Survival status for ANR with Gap under NPV scheme (2017-18): Survival Rate

Circle	Division	No of sites studied	Survival % in GP		
			Avg.	Min.	Max.
Angul	Angul	3	67.29	65.00	68.75
	Athmallik	1	77.00	77.00	77.00
	Cuttack	1	80.00	80.00	80.00
	Dhenkanal	4	67.00	52.00	77.00
Berhampur	Balliguda	7	88.42	85.00	98.00
	Berhampur	3	87.33	70.00	98.00
	Boudh	3	85.67	79.00	94.00
	Ghumsur South	2	75.13	69.80	80.46
	Parlakhemundi	2	86.00	79.00	93.00
	Phulbani	4	89.25	88.00	90.00
Bhawanipatna	Bolangir	3	90.00	83.00	97.00
	Kalahandi N	5	91.00	76.00	97.00
	Kalahandi S	2	68.41	61.39	75.43
	Khariar	4	86.00	81.00	92.00
Baripada	Baripada	1	86.00	86.00	86.00
	Karanjia	1	89.00	89.00	89.00
	Keonjhar WL	2	79.50	68.00	91.00
	Rairangpur	1	96.00	96.00	96.00
Sambalpur	Bamra WL	3	42.00	39.00	47.00
	Bargarh	2	85.00	83.00	88.00
	Jharsuguda	2	73.00	69.00	78.00
	Rairakhol	2	75.00	54.00	97.00
	Sambalpur	3	88.00	84.00	96.00
Bhubaneshwar	Khurda	2	84.00	83.00	86.00
	Nayagarh	4	93.00	88.00	98.00
	Rajnagar WL	1	87.00	87.00	87.00

Circle	Division	No of sites studied	Survival % in GP		
			Avg.	Min.	Max.
Rourkela	Bonai	1	91.00	91.00	91.00
	Deogarh	1	89.00	89.00	89.00
	Keonjhar	1	81.00	81.00	81.00
	Rourkela	1	89.00	89.00	89.00
	Sundargarh	3	93.00	88.00	99.00
Koraput	Jeypore	2	87.00	80.00	94.00
	Koraput	2	93.00	92.00	94.00
	Malkangiri	2	82.00	72.00	91.00
	Nabarangpur	5	93.00	88.00	99.00
	Rayagada	8	79.00	67.00	91.00

It is observed that seedlings form the highest proportion of all plants in all the surveyed divisions, indicating that silvicultural interventions carried out had a positive impact on natural regeneration in the sites.

Table 23: Regeneration Status of ANR (with GAP) under NPV scheme (2017-18)

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Angul	Angul	3	61.00	23.00	16.00
	Athmallik	1	26.00	43.00	31.00
	Cuttack	1	58.00	18.00	24.00
	Dhenkanal	4	80.00	11.00	9.00
Berhampur	Balliguda	7	62.00	21.00	17.00
	Berhampur	3	58.00	32.00	10.00
	Boudh	3	66.00	26.00	8.00
	Ghumsur South	2	57.00	31.00	12.00
	Parlakhemundi	2	62.00	21.00	17.00
	Phulbani	4	68.00	24.00	8.00
Bhawanipatna	Bolangir	3	55.00	24.00	21.00
	Kalahandi N	5	66.00	27.00	7.00
	Kalahandi S	2	62.00	27.00	11.00
	Khariar	4	58.00	31.00	11.00
Baripada	Baripada	1	70.00	19.00	11.00
	Karanjia	1	68.00	22.00	10.00
	Keonjhar WL	2	46.00	33.00	21.00
	Rairangpur	1	65.00	28.00	7.00
Sambalpur	Bamra WL	3	79.00	16.00	5.00

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
	Bargarh	2	62.00	27.00	11.00
	Jharsuguda	2	64.00	25.00	11.00
	Rairakhol	2	47.00	33.00	20.00
	Sambalpur	3	63.00	30.00	7.00
Bhubaneshwar	Khurda	2	54.00	30.00	16.00
	Nayagarh	4	42.00	41.00	17.00
	Rajnagar WL	1	45.00	31.00	24.00
Rourkela	Bonai	1	68.00	24.00	8.00
	Deogarh	1	48.00	29.00	23.00
	Keonjhar	1	59.00	31.00	10.00
	Rourkela	1	58.00	28.00	14.00
	Sundargarh	3	50.00	42.00	8.00
Koraput	Jeypore	2	51.00	27.00	22.00
	Koraput	2	61.00	26.00	13.00
	Malkangiri	2	52.00	38.00	10.00
	Nabarangpur	5	56.00	29.00	15.00
	Rayagada	8	46.00	37.00	17.00

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Qualitative parameters

The data indicates good performance of the surveyed sites across qualitative parameters. The sites did not display any significant signs of grazing and fire incidences. Other than a few minor incidences of sheet erosion observed in few sites, the overall quality of silvicultural operations had a positive impact on soil erosion. Density of recruits was moderate to dense.

The official documents of the plantation sites were found to be well maintained and updated with the exception of a few divisions where the treatment maps were not made available during the field visit.

Table 24: Qualitative parameters for ANR with GAP under NPV scheme (2017-18)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars
Angul	Angul	2.34	2.34	1.66	2.00	1.34	2.71	2.63	1.00	2.31	3.00
	Athmallik	3.00	3.00	3.00	2.00	2.00	3.00	3.00	1.00	2.00	2.00
	Cuttack	3.00	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	2.00
	Dhenkanal	2.33	2.83	2.68	2.66	2.16	2.83	2.50	1.00	2.83	3.00

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars
Berhampur	Balliguda	2.71	2.86	2.00	2.29	2.31	3.00	3.00	1.00	3.00	2.00
	Berhampur	2.33	3.00	2.00	2.00	2.00	3.00	3.00	1.00	3.00	3.00
	Boudh	2.67	2.67	3.00	2.00	2.00	2.00	2.00	1.00	3.00	3.00
	Ghumsur South	2.50	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.50
	Parlakhemundi	1.50	2.50	1.00	1.50	2.00	2.00	2.00	2.00	3.00	2.00
	Phulbani	2.75	3.00	2.75	2.35	2.00	3.00	2.25	1.75	2.00	2.50
Bhawanipatna	Bolangir	2.00	3.00	3.00	2.70	2.70	2.70	2.10	2.00	1.50	2.50
	Kalahandi N	2.67	2.33	2.00	2.00	2.00	2.50	2.50	2.00	2.00	2.50
	Kalahandi S	2.50	2.00	2.00	1.80	2.00	2.00	2.00	2.00	2.00	2.00
	Khariar	2.50	3.00	2.50	2.00	2.00	3.00	2.60	2.00	2.80	2.50
Baripada	Baripada	3.00	3.00	2.00	3.00	3.00	3.00	3.00	2.00	3.00	2.00
	Karanjia	3.00	3.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	2.00
	Keonjhar WL	2.50	3.00	2.50	2.00	3.00	3.00	3.00	2.00	3.00	3.00
	Rairangpur	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00
Sambalpur	Bamra WL	1.67	2.00	2.00	1.50	2.00	3.00	2.67	2.67	3.00	2.33
	Bargarh	2.50	3.00	2.00	2.00	2.50	3.00	3.00	2.50	3.00	2.50
	Jharsuguda	2.50	2.50	2.00	2.00	2.00	3.00	2.50	2.00	3.00	2.50
	Rairakhol	2.50	2.50	2.00	2.00	2.00	3.00	2.50	2.00	3.00	2.50
	Sambalpur	3.00	2.67	2.00	2.67	2.00	3.00	2.67	2.33	2.67	2.33
Bhubaneshwar	Khurda	3.00	2.67	2.00	2.67	2.00	3.00	2.67	2.33	2.67	2.33
	Nayagarh	2.75	3.00	2.25	2.25	2.75	3.00	2.25	2.00	2.75	2.25
	Rajnagar WL	3.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	2.00
Rourkela	Bonai	3.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Deogarh	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Keonjhar	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Rourkela	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Sundargarh	2.67	2.67	2.33	2.33	2.33	3.00	3.00	2.67	3.00	2.67
Koraput	Jeypore	2.50	3.00	2.50	2.50	2.50	3.00	3.00	2.00	3.00	2.50
	Koraput	3.00	3.00	2.50	2.50	2.50	3.00	3.00	3.00	3.00	2.50
	Malkangiri	2.50	3.00	2.50	2.50	3.00	3.00	3.00	2.50	3.00	2.50
	Nabarangpur	2.40	2.80	2.40	2.40	2.80	3.00	2.80	2.40	3.00	2.80
	Rayagada	2.50	2.63	2.50	2.50	2.50	2.60	2.60	2.50	2.60	2.50
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.											

5.1.2.3. Assisted Natural Regeneration (Without GAP)

For ANR (without GAP) under NPV in 2017-18, total treated area in Berhampur Circle was 3150.00 ha, spread across 63 sites. The survey was carried out in 7 of these sites, equating to 350 ha. In Bhawanipatna Circle, total treated area was 10000.00 ha, spread across 183 sites. Of these, 20 sites with an area of 1000.00 ha were surveyed. The two sites in Subarnapur division have been raised under NPV scheme and the rest have been raised under the Ama Jangal Yojana (AJY) scheme. In Rourkela Circle, total treated area was 1050.00 ha across 21 sites and survey was carried out in 150 ha across 3 sites. For Koraput circle, 6750 ha was treated across 135 sites and survey was carried out 650 ha over 13 sites in total.

Table 25: Area and site coverage for ANR Without GAP under NPV scheme (2017-18)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Bhawanipatna	Subarnapur	2000.00	23	200.00	2
Total		2000.00	23	200.00	2

Table 26: Area and site coverage for ANR Without GAP under AJY scheme (2017-18)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Berhampur	Balliguda	1000.00	20	150.00	3
	Parlakhemundi	2150.00	43	200.00	4
Total		3150.00	63	350.00	7
Bhawanipatna	Bolangir	7000.00	140	800.00	16
	Khariar	1000.00	20	100.00	2
Total		8000.0	160	900.00	18
Rourkela	Rourkela	1050.00	21	150.00	3
Total		1050.00	21	150.00	3
Koraput	Malkangiri	5000.00	100	500.00	10
	Nabarangpur	1750.00	35	150.00	3
Total		6750.00	135	650.00	13
Grand Total		20950.00	402	2250.00	43

Regeneration status

Majority of the plants found during the survey of NPV scheme in 2017-18, accounted for seedlings, followed by saplings and poles. However, the proportion of saplings and poles had little variation in Khariar Division.

Table 27: Regeneration Status of ANR (without GAP) under NPV scheme (2017-18): Regeneration Survey percentage

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Bhawanipatna	Subarnapur	2	65.00	25.00	10.00

Table 28: Regeneration Status of ANR (without GAP) under AJY scheme (2017-18): Regeneration Survey percentage

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Berhampur	Balliguda	3	60.00	30.00	10.00
	Parlakhemundi	4	52.00	28.00	20.00
Bhawanipatna	Bolangir	16	52.00	29.00	19.00
	Khariar	2	40.00	28.00	31.00
Rourkela	Rourkela	3	58.00	27.00	15.00
Koraput	Malkangiri	10	56.00	33.00	11.00
	Nabarangpur	3	55.00	32.00	13.00

Qualitative parameters

The performance of the sites surveyed was observed to be good across quality parameters. No signs of grazing and fire were observed during the field survey. Density of recruits was moderate to dense, and interventions were effective in controlling erosion. The official documents were made available to the enumeration team during the survey and were found to be in order.

Table 29: Qualitative parameters for ANR without GAP under NPV scheme (2017-18)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars	VSS
Bhawanipatna	Subarnapur	3.00	2.50	2.50	2.00	2.00	3.00	3.00	2.50	3.00	2.50	2.50
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

Table 30: Qualitative parameters for ANR without GAP under AJY scheme (2017-18)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars	VSS
Berhampur	Balliguda	2.80	2.50	2.00	2.00	2.00	3.00	3.00	1.00	2.00	3.00	3.00

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Journal	Plantation	Man Treatment man	Display Board	Boundary pillars	VSS
	Parlakhemundi	2.00	3.00	2.70	2.50	2.50	2.00	2.00	2.00	2.00	2.50	2.50
Bhawanipatna	Bolangir	2.00	2.50	2.80	2.20	2.20	2.80	2.80	1.50	2.70	2.50	2.50
	Khariar	2.80	2.00	2.10	2.00	2.50	3.00	3.00	2.00	2.00	2.00	2.50
Rourkela	Rourkela	2.67	3.00	2.67	2.67	2.67	3.00	3.00	2.67	2.67	2.67	2.33
Koraput	Malkangiri	2.50	2.80	2.20	2.40	2.80	3.00	2.70	2.50	2.70	2.70	2.80
	Nabarangpur	2.67	3.00	2.67	2.67	2.67	3.00	3.00	2.67	2.67	2.67	2.67
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

5.1.2.4. Bamboo SSO (2017-18)

Table 31: Bamboo SSO under NPV Scheme (2017-18)

Circle	Division	No of sites studied	Total Clusters			No. of Clusters studied		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	80	80	80	8	8	8
	Athgarh	1	85	85	85	8	8	8
	Athmallik	1	110	110	110	11	11	11
	Dhenkanal	1	100	100	100	10	10	10
Berhampur	Balliguda	2	60	30	90	6	3	9
	Phulbani	3	52	30	80	5	3	8
Sambalpur	Bargarh	2	95	50	140	9	5	14
	Rairakhol	1	85	85	85	9	9	9
Bhawanipatna	Kalahandi N	2	50	20	80	5	2	8
	Khariar	1	80	80	80	8	8	8
	Subarnapur	1	160	160	160	16	16	16
Rourkela	Bonai	1	50	50	50	5	5	5
	Sundargarh	1	70	70	70	7	7	7
Koraput	Koraput	-	-	-	-	-	-	-
	Jeypore	-	-	-	-	-	-	-
	Malkangiri	-	-	-	-	-	-	-

Note: Each cluster consists of 40 clumps on an average. Study has not been conducted in Koraput circle.

Table 32: Growth Status of Bamboo SSO work under NPV Scheme (2017-18)

Circle	Division	Clump girth (Cm)			Regeneration of new shoots
		Average	Minimum	Maximum	Average
Angul	Angul	600.41	276.86	932.18	6

Circle	Division	Clump girth (Cm)			Regeneration of new shoots
		Average	Minimum	Maximum	Average
	Athgarh	137.03	27.432	249.428	4
	Athmallik	32.65	5.08	73.66	3
	Dhenkanal	66.55	46	107	3
Berhampur	Balliguda	212.69	101.6	292.1	5
	Phulbani	190.08	106.68	297.18	5
Sambalpur	Bargarh	83.2	15.24	215.9	3
	Rairakhol	131.03	24.432	199.428	4
Bhawanipatna	Kalahandi N	200.82	91.44	304.8	5
	Khariar	237.42	45.72	368.3	5
	Subarnapur	96.52	58.42	132.08	3
Rourkela	Bonai	150.37	86.36	218.44	4
	Sundargarh	255.78	193.04	355.6	6

Table 33: Qualitative Parameters for Bamboo SSO work under NPV Scheme (2017-18)

Circle	Division	Grazing	Fire	Coppice	Erosion	Shrubs	Decongestion	Mounding	Plantation Journal	Treatment Register	Display Board	boundary pillars
Angul	Angul	2.00	3.00	1.00	3.00	2.00	1.00	1.00	3.00	1.00	1.00	1.00
	Athgarh	2.49	2.00	3.00	2.51	3.00	3.00	2.51	1.00	1.00	1.00	1.00
	Athmallik	3.00	3.00	1.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	1.00
	Dhenkanal	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	3.00
Berhampur	Balliguda	2.54	2.33	2.77	2.67	2.89	3.00	2.67	1.44	1.44	1.54	1.00
	Phulbani	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	3.00
Sambalpur	Bargarh	2.54	2.33	2.77	2.67	2.89	3.00	2.67	1.44	1.44	1.54	1.00
Bhawanipatna	Kalahandi N	2.49	2.00	3.00	2.51	3.00	3.00	2.51	1.00	1.00	1.00	1.00
	Khariar	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	3.00
	Subarnapur	3.00	3.00	1.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	1.00
Rourkela	Bonai	3.00	3.00	1.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	1.00
	Rourkela	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

The performance of Bamboo SSO work in terms of controlling erosion, fire or grazing incidents have been good, the treatment registers were missing in some divisions while most of them had the registers maintained. Mounding work was also clearly visible across the sites surveyed.

5.1.2.5. Infrastructure works

Infrastructure works covered in the survey included buildings, roads and waterbodies (water holes). Performance of these structures are as follows:

Building infrastructure

Majority of the structures were found to be in use, ideally located and structurally stable as indicated in the table below. A few structures needed minor repairing. This analysis includes information of 80 buildings in total across the 51 divisions.

Table 34: Building infrastructure works under NPV scheme (2017-18)

Circle	Division	Buildings				
		General Condition	Site Location	Purpose	Stability	Present use Free of dampness and leakage
Angul	Angul	2.75	2.75	2.50	2.50	3.00
	Athgarh	3.00	3.00	3.00	3.00	3.00
	Athmallik	3.00	2.80	2.70	3.00	3.00
	Cuttack	2.50	2.50	2.50	3.00	2.50
	Dhenkanal	3.00	3.00	2.75	3.00	2.88
	Mahanadi WL	2.86	3.00	2.86	3.00	2.71
	Satkosia WL	3.00	2.80	2.72	2.75	2.70
Berhampur	Balliguda	3.00	3.00	3.00	2.75	3.00
	Berhampur	3.00	2.80	2.50	3.00	3.00
	Boudh	2.80	3.00	2.80	3.00	3.00
	Ghumsur North	3.00	2.50	2.50	3.00	3.00
	Ghumsur South	3.00	2.80	2.80	3.00	2.80
	Parlakhemundi	3.00	3.00	2.75	3.00	2.80
	Phulbani	3.00	3.00	2.50	3.00	3.00
Bhawanipatna	Bolangir	3.00	3.00	3.00	3.00	3.00
	Kalahandi N	2.67	3.00	3.00	2.67	2.83
	Kalahandi S	3.00	3.00	3.00	3.00	3.00
	Khariar	3.00	3.00	3.00	3.00	3.00
	Subarnapur	3.00	3.00	3.00	3.00	3.00
	Sunabeda WL	3.00	3.00	3.00	3.00	3.00
Baripada	Balasore WL	3.00	3.00	3.00	3.00	3.00
	Baripada	3.00	3.00	3.00	3.00	3.00
	Karanjia	3.00	3.00	3.00	3.00	3.00
	Keonjhar WL	3.00	3.00	3.00	3.00	3.00

Circle	Division	Buildings				
		General Condition	Site Location	Purpose	Stability	Present use Free of dampness and leakage
	Rairangpur	3.00	3.00	3.00	3.00	3.00
	STR South	3.00	3.00	3.00	3.00	3.00
Sambalpur	Bamra WL	3.00	3.00	3.00	3.00	3.00
	Bargarh	3.00	2.75	2.75	2.75	2.75
	Hirakud WL	3.00	3.00	3.00	3.00	3.00
	Jharsuguda	2.50	3.00	3.00	2.50	2.50
	Rairakhol	3.00	3.00	3.00	3.00	3.00
	Sambalpur	3.00	2.67	2.33	3.00	2.33
Bhubaneswar	Bhadrakh WL	3.00	3.00	3.00	3.00	3.00
	Chandaka WL	3.00	3.00	3.00	3.00	3.00
	Chilika WL	3.00	3.00	3.00	3.00	3.00
	City Forest	3.00	3.00	3.00	3.00	3.00
	Khurda	3.00	3.00	3.00	3.00	3.00
	Nayagarh	2.50	3.00	2.50	3.00	3.00
	Puri WL	3.00	3.00	3.00	3.00	3.00
	Rajnagar WL	2.75	2.75	2.75	3.00	3.00
Rourkela	Bonai	3.00	3.00	3.00	3.00	3.00
	Deogarh	3.00	3.00	3.00	3.00	3.00
	Keonjhar	3.00	3.00	3.00	3.00	2.50
	Rourkela	3.00	3.00	3.00	3.00	3.00
	Sundargarh	3.00	2.71	2.86	2.71	3.00
Koraput	Jeypore	3.00	3.00	3.00	3.00	3.00
	Koraput	3.00	3.00	3.00	3.00	3.00
	Malkangiri	3.00	3.00	3.00	3.00	3.00
	Nabarangpur	3.00	3.00	3.00	2.60	3.00
	Rayagada	3.00	3.00	3.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.						

Road infrastructure

The surveyed road sites were in good condition with two sites in need for minor repair. The location of the roads was appropriately selected. They are used frequently and have improved connectivity, particularly to remote locations. This analysis includes information of 6 forest roads, 5 culverts and 4 causeways.

Table 35: Road infrastructure works under NPV scheme (2017-18)

Circle	Division	General Condition	Utility of the road	Serving the intended purpose	Duration of usage in a year
Angul	Athgarh	2.50	2.50	2.00	2.00
	Athmallik	3.00	3.00	3.00	3.00
	Cuttack	3.00	2.00	2.00	2.00
	Dhenkanal	3.00	3.00	2.00	2.00
	Mahanadi WL	2.50	3.00	3.00	3.00
	Satkosia WL	3.00	3.00	3.00	2.50
Berhampur	Berhampur	3.00	3.00	2.50	2.50
	Boudh	3.00	3.00	3.00	2.50
	Ghumsur South	3.00	3.00	3.00	3.00
	Parlakhemundi	3.00	3.00	2.33	2.67
Bhawanipatna	Bolangir	3.00	3.00	2.25	2.75
	Kalahandi N	3.00	3.00	3.00	3.00
	Kalahandi S	3.00	3.00	3.00	3.00
	Khariar	3.00	3.00	3.00	2.50
	Subarnapur	3.00	3.00	3.00	3.00
	Sunabeda WL	3.00	3.00	2.50	2.50
Baripada	Balasore WL	3.00	2.75	3.00	2.50
	Baripada	2.00	2.00	2.00	3.00
	Karanjia	3.00	3.00	3.00	3.00
	Keonjhar WL	2.00	2.00	2.00	2.00
	Rairangpur	3.00	3.00	3.00	2.00
	STR South	3.00	3.00	3.00	2.00
Sambalpur	Bamra WL	3.00	3.00	3.00	2.00
	Bargarh	2.00	2.00	2.00	1.00
	Hirakud WL	3.00	3.00	3.00	3.00
	Jharsuguda	2.00	3.00	3.00	2.50
	Rairakhol	2.67	3.00	2.33	2.33
	Sambalpur	2.00	2.00	2.00	2.00
Bhubaneswar	Bhadrakh WL	3.00	3.00	2.00	3.00
	Chandaka WL	3.00	3.00	3.00	3.00
	Chilika WL	3.00	3.00	2.00	3.00
	City Forest	3.00	3.00	3.00	1.50
	Khurda	3.00	3.00	3.00	2.50
	Nayagarh	3.00	3.00	3.00	3.00
	Puri WL	2.00	2.00	3.00	2.00
	Rajnagar WL	3.00	3.00	3.00	3.00

Circle	Division	General Condition	Utility of the road	Serving the intended purpose	Duration of usage in a year
Rourkela	Bonai	3.00	3.00	3.00	2.00
	Deogarh	3.00	3.00	3.00	3.00
	Keonjhar	2.00	3.00	3.00	2.00
	Rourkela	3.00	3.00	3.00	3.00
	Sundargarh	3.00	3.00	3.00	3.00
Koraput	Jeypore	2.33	3.00	3.00	3.00
	Koraput	3.00	3.00	3.00	3.00
	Malkangiri	3.00	3.00	3.00	3.00
	Nabarangpur	3.00	3.00	3.00	1.00
	Rayagada	3.00	3.00	3.00	1.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.					

Water infrastructure

Waterbodies surveyed include tube-wells and ponds. Majority of the sites were in good physical condition with minor repair needs in few divisions. The structures were built at strategic locations which have positively impacted ground water recharge. These structures are used by the local communities residing near the plantation sites. This analysis includes information from 14 waterbodies, 9 tube-wells and 1 percolation tank.

Table 36: Water infrastructure works under NPV scheme (2017-18)

Circle	Division	Water Bodies & Tube well		
		General Condition	Site Location	Serving the intended purpose
Angul	Angul	3.00	3.00	2.00
	Athmallik	3.00	2.50	2.50
	Dhenkanal	2.33	3.00	3.00
	Mahanadi WL	2.00	3.00	2.00
	Satkosia WL	3.00	3.00	3.00
Berhampur	Balliguda	2.00	2.00	2.00
	Ghumsur North	3.00	3.00	3.00
	Ghumsur South	2.67	3.00	3.00
	Parlakhemundi	2.67	2.33	2.33
	Phulbani	3.00	3.00	3.00
Bhawanipatna	Bolangir	3.00	3.00	3.00
	Kalahandi N	3.00	3.00	3.00
	Kalahandi S	3.00	3.00	3.00
	Khariar	3.00	3.00	3.00

Circle	Division	Water Bodies & Tube well		
		General Condition	Site Location	Serving the intended purpose
	Subarnapur	2.67	2.67	2.67
	Sunabeda WL	3.00	3.00	3.00
Baripada	Balasore WL	3.00	3.00	3.00
	Baripada	3.00	3.00	3.00
	Karanjia	3.00	3.00	3.00
	Keonjhar WL	3.00	3.00	3.00
	Rairangpur	2.00	3.00	2.00
	STR South	3.00	3.00	3.00
Sambalpur	Bamra WL	3.00	3.00	3.00
	Bargarh	3.00	3.00	3.00
	Hirakud WL	2.50	3.00	2.50
	Jharsuguda	3.00	3.00	3.00
	Rairakhol	3.00	3.00	3.00
	Sambalpur	3.00	3.00	2.50
Bhubaneswar	Bhadrakh WL	3.00	3.00	3.00
	Chandaka WL	3.00	3.00	3.00
	Chilika WL	3.00	3.00	3.00
	City Forest	3.00	3.00	3.00
	Khurda	3.00	3.00	3.00
	Nayagarh	3.00	3.00	3.00
	Puri WL	2.00	3.00	2.00
	Rajnagar WL	2.50	2.50	2.50
Rourkela	Bonai	3.00	3.00	3.00
	Deogarh	3.00	3.00	3.00
	Keonjhar	3.00	3.00	3.00
	Rourkela	3.00	3.00	3.00
	Sundargarh	3.00	3.00	3.00
Koraput	Jeypore	2.50	3.00	3.00
	Koraput	3.00	3.00	3.00
	Malkangiri	3.00	3.00	3.00
	Nabarangpur	3.00	3.00	3.00
	Rayagada	3.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.				

5.1.2.6. Soil and Moisture Conservation under Wildlife Conservation (SMC)

A total of 23 soil and moisture conservation sites (under Satkosia, Hirakud and Malkangiri division of Angul, Sambalpur, Koraput Circle respectively) were visited under Wildlife conservation. The data

collected during field visits indicate that the structures are strategically constructed on gently sloping terrain that allow maximum water retention and reduce runoff. The structures have proved to be useful in controlling soil erosion. Most of the structures are moderately stable in nature with minor repairing needs.

Apart from a few sites, the overall performance of SMC structures was found to be satisfactory when evaluated over parameters of erosion control, water impounding, structural stability and relevance of location and structure. There were few sites which needed minor repair. Performance across indicators is summarized below.

Table 37: SMC work studied under NPV scheme (2017-18)

Circle	Division	Type of Structure	Av. Measurements recorded in Journal (Length (M), Breadth (M), Height (M))	Measurements observed (Length (M), Breadth (M), Height (M))
Angul	Satkosia WL	LBCD (7)	1.20 x 0.46 x 0.20	1.20 x 0.40 x 0.25
		Check Dam (1)	1.58 x 0.45 x 0.45	1.58 x 0.45 x 0.53
Sambalpur	Hirakud WL	Staggered Trench (5)	4.05 x 0.35 x 1.3	4.05 x 0.35 x 1.3
		Staggered Trench (9)	2.06 x 0.16 x 0.48	2.06 x 0.16 x 0.48
Koraput	Malkangiri	Rockfill Dam (1)	4.20 x 1.30 x 0.45	4.20 x 1.32 x 0.48

Note: Figures in parenthesis indicate number of structures studied.

Table 38: Qualitative parameters for SMC work studied under NPV scheme (2017-18)

Circle	Division	Erosion	Impounding water	Stability	Location	Relevance of structure	Impact on vegetation
Angul	Satkosia WL	3.00	3.00	3.00	3.00	3.00	3.00
Sambalpur	Hirakud WL	3.00	3.00	3.00	3.00	3.00	2.00
Koraput	Malkangiri	3.00	2.00	3.00	3.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.							

5.2. Works implemented during APO (2019- 20)

5.2.1. Compensatory Afforestation Scheme

5.2.1.1. Block Plantation

For block plantation, total area treated under CA scheme 131.23 ha in Angul circle which has spread over 5 sites, 3.79 ha in Berhampur circle for one site, 46.39 ha in Bhawanipatna circle in one site. 116 ha in Sambalpur circle for 2 sites, 11.78 ha in Rourkela circle for 2 sites and 329.45 ha in Koraput circle over 11 sites. Of this, the survey was carried out in 2 sites (48.23 ha) in Angul circle, 1 site (3.79 ha) in Berhampur

circle, 1 site (46.39ha) in Bhawanipatna, 1 site (16 ha) in Sambalpur, 1 site (1.11 ha) in Rourkela and 2 sites (92.34 ha) in Koraput.

Table 39: Area and site coverage for block plantation under CA scheme (2019-20)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Angul	Angul	1.23	1	1.23	1
	Cuttack	130.00	4	47.00	1
Total		131.23	5	48.23	2
Berhampur	Berhampur	3.79	1	3.79	1
Total		3.79	1	3.79	1
Bhawanipatna	Kalahandi S	46.39	1	46.39	1
Total		46.39	1	46.39	1
Sambalpur	Jharsuguda	116.00	2	16.00	1
Total		116.00	2	16.00	1
Rourkela	Sundargarh	11.78	3	1.11	1
Total		11.78	3	1.11	1
Koraput	Koraput	126.00	3	15.00	1
Koraput	Rayagada	203.45	8	77.34	3
Total		329.45	11	92.34	4
Grand Total		638.64	23	207.86	10

Artificial regeneration

It is observed that Angul, Berhampur and Kalahandi S, Jharsuguda, Sundargarh, Koraput and Rayagada Divisions have recorded higher survival rates ranging between 83-98%. At the same time, survival rate in Cuttack division was observed to 79%.

Table 40: Survival status for block plantation (Planted) under CA scheme (2019-20)

Circle	Division	No of sites studied	Survival %		
			Avg.	Min.	Max.
Angul	Angul	1	83.00	83.00	83.00
	Cuttack	1	79.00	79.00	79.00
Berhampur	Berhampur	1	81.87	81.87	81.87
Bhawanipatna	Kalahandi S	1	93.75	93.75	93.75
Sambalpur	Jharsuguda	1	88.00	88.00	88.00
Rourkela	Sundargarh	1	87.00	87.00	87.00
Koraput	Koraput	1	96.00	96.00	96.00
	Rayagada	3	98.00	95.00	100.00

Plantations in Koraput Division performed very well on growth parameters of average height (2.22 m) and average collar girth (18.02 cm), which was followed by Rayagada, Sundargarh, Kalahandi S, Jharsuguda, Berhampur, Cuttack and Angul divisions as reflected in the Table below.

Table 41: Growth status for block plantation (Planted) under CA scheme (2019-20): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M)			Collar Girth (Cm)		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	1.07	0.10	8.89	5.67	0.25	86.87
	Cuttack	1	0.82	0.02	3.81	4.92	1.78	61.47
Berhampur	Berhampur	1	0.79	0.18	1.88	5.37	2.79	9.14
Bhawanipatna	Kalahandi S	1	1.29	0.33	2.64	9.58	3.05	18.03
Sambalpur	Jharsuguda	1	1.00	0.64	1.32	7.54	5.08	10.67
Rourkela	Sundargarh	1	1.44	1.09	2.62	10.39	5.08	18.08
Koraput	Koraput	1	2.22	0.64	4.06	18.02	5.33	48.01
Koraput	Rayagada	3	1.26	0.46	2.41	10.45	5.08	33.53

Qualitative parameters

Overall, the surveyed plantation sites have performed well across all quality parameters. Angul and Bhawanipatna divisions did not display any signs of grazing and fire while Cuttack and Berhampur recorded minor grazing and there was no record of fires incidences in the divisions. Treatment maps must be updated/completed in Angul and Berhampur divisions. All the divisions have updated journals and completed plantation maps. The sites Cuttack and Kalahandi S are properly demarcated with boundary pillars and display board while Angul and Berhampur recorded sign of area with unclear boundaries and some cases of display board in Angul.

Table 42: Qualitative Parameters for Block Plantation (Planted) under CA scheme (2019-20)

Circle	Division	Grazing	Fire	Coppice	Soil work	Journal	Plantation Map	Treatment map	Display Board	Boundary Pillars
Angul	Angul	3.00	3.00	2.00	2.00	3.00	3.00	2.00	2.00	2.00
	Cuttack	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Berhampur	Berhampur	2.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00
Bhawanipatna	Kalahandi S	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
Sambalpur	Jharsuguda	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	2.00
Rourkela	Sundargarh	3.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00
Koraput	Koraput	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
Koraput	Rayagada	2.67	2.67	2.50	2.33	3.00	3.00	3.00	2.33	2.70
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.										

5.2.1.2. ANR With GAP

For ANR (with GAP) under CA scheme, total treated area in Angul Circle is 2109.00 ha. spread across 18 sites. The survey was carried out in 3 sites that equates to 352.00 ha. and, Berhampur Circle has a total of 300.00 ha under ANR (with GAP) across 6 sites, and the survey was carried out in 1 site (50 ha), while Bhawanipatna Circle has a total of 4.48 ha in 1 site, and the survey was carried out in 1 site (4.48 ha).

Table 43: Area Coverage for ANR with GAP under CA scheme (2019-20)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Angul	Angul	935.00	7	110.00	1
	Athgarh	500.00	9	50.00	1
	Dhenkanal	674.00	2	192.00	1
Total		2109.00	18	352.00	3
Berhampur	Parlakhemundi	300.00	6	50.00	1
Total		300.00	6	50.00	1
Bhawanipatna	Kalahandi S	4.48	1	4.48	1
Total		4.48	1	4.48	1
Baripada	Rairangpur	10.00	1	10.00	1
Total		10.00	1	10.00	1
Sambalpur	Jharsuguda	337.00	4	100.00	1
Total		337.00	4	100.00	1
Rourkela	Bonai	217.82	3	77.66	1
	Keonjhar	1021.00	6	17.00	2
	Rourkela	63.62	1	63.62	1
	Sundargarh	413.00	12	38.00	2
Total		1715.44	22	196.28	6
Koraput	Koraput	853.00	7	96.00	1
Total		853.00	7	96.00	1
Grand Total		5328.92	59	808.76	14

Regeneration status

Most of the surveyed plantation sites have recorded good survival rates ranging between 64-100%. Rairangpur division has recorded 100% survival rate and the lowest among the divisions is Jharsuguda with 51% survival rate.

Table 44: Survival status for ANR with GAP under CA scheme (2019-20): Survival Rate

Circle	Division	No of sites studied	Survival % in GP		
			Avg.	Min.	Max.
Angul	Angul	1	78.00	78.00	78.00

Circle	Division	No of sites studied	Survival % in GP		
			Avg.	Min.	Max.
	Athgarh	1	69.00	69.00	69.00
	Dhenkanal	1	65.00	65.00	65.00
Berhampur	Parlakhemundi	1	81.00	81.00	81.00
Bhawanipatna	Kalahandi S	1	90.00	90.00	90.00
Baripada	Baripada	1	82.00	82.00	82.00
	Rairangpur	1	100.00	100.00	100.00
Sambalpur	Jharsuguda	1	51.00	51.00	51.00
Rourkela	Bonai	1	64.00	64.00	64.00
	Keonjhar	2	52.00	51.00	53.00
	Rourkela	1	95.00	95.00	95.00
	Sundargarh	2	82.00	74.00	90.00
Koraput	Koraput	1	91.00	91.00	91.00

The performance of surveyed plantation sites on growth parameters was observed to be satisfactory. The average height of surveyed plants range between 1.05-1.94 and the average collar girth is between 7.40 cm to 15.01 cm. Parlakhemundi was the highest growth kin plants at an avg. height (1.94 m) and avg. collar girth (12.37 cm).

Table 45: Growth status for ANR With GAP under CA scheme (2019-20): Average Height and Collar Girth

Circle	Division	No of sites studied	Height(M) in GP			Collar Girth (Cm) in GP		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	1.30	0.10	7.11	10.33	0.25	114.30
	Athgarh	1	1.46	0,51	5.08	11.24	2.79	63.50
	Dhenkanal	1	1.05	0.90	7.11	7.40	5.76	71.12
Berhampur	Parlakhemundi	1	1.94	0.06	7.62	12.37	3.81	124.21
Bhawanipatna	Kalahandi S	1	1.83	0.88	2.52	15.01	7.87	23.62
Baripada	Baripada	1	3.32	0.17	5.08	10.60	11.68	57.20
	Rairangpur	1	1.50	0.76	2.29	4.24	3.81	18.54
Sambalpur	Jharsuguda	1	0.65	0.10	2.29	1.27	0.25	11.94
Rourkela	Bonai	1	1.47	0.84	2.79	3.28	5.59	14.22
	Keonjhar	2	1.34	0.71	2.13	2.88	3.56	10.67
	Rourkela	1	1.58	0.89	2.54	3.72	5.84	17.78
	Sundargarh	2	1.77	1.22	2.18	5.68	8.64	19.05
Koraput	Koraput	1	1.28	0.30	5.84	3.59	2.54	81.28

Regeneration status

It is observed that seedlings form the higher proportion of all plants in all the surveyed divisions, followed by saplings and poles.

Table 46: Regeneration Status of ANR (with GAP) under CA scheme (2019-20)

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Angul	Angul	1	61.00	17.00	22.00
	Athgarh	1	51.00	41.00	8.00
	Dhenkanal	1	77.00	16.00	7.00
Berhampur	Parlakhemundi	1	64.00	23.00	13.00
Bhawanipatna	Kalahandi S	1	67.00	21.00	12.00
Baripada	Baripada	1	69.00	19.00	12.00
	Rairangpur	1	71.00	21.00	8.00
Sambalpur	Jharsuguda	1	25.00	53.00	22.00
Rourkela	Bonai	1	52.00	28.00	20.00
	Keonjhar	2	68.00	21.00	11.00
	Rourkela	1	48.00	35.00	17.00
	Sundargarh	2	52.00	33.00	15.00
Koraput	Koraput	1	47.00	34.00	19.00

Qualitative parameters

The scores are indicative of good performance of plantation sites on qualitative parameters. Signs of grazing were observed in most of the sites. The singling of coppice shoot had relatively positive effect of 2 to 4 shoots visible in the two divisions. The silvicultural operations had a positive impact on soil erosion with few incidences of sheet erosion.

Table 47: Qualitative parameters for ANR (with gap) under CA scheme (2019-20)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion	Journal	Plantation Map	Treatment Map	Display Board	Boundary Pillars
Angul	Angul	2.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Athgarh	2.00	3.00	3.00	3.00	3.00	3.00	2.00	1.00	1.00	1.00
	Dhenkanal	2.00	3.00	2.00	1.00	2.00	3.00	3.00	1.00	3.00	3.00
Berhampur	Parlakhemundi	2.00	3.00	3.00	2.00	2.00	3.00	3.00	2.00	2.00	2.00

Circle	Division	Grazing	Fire	Coppice	Density	Erosion	Journal	Plantation Map	Treatment Map	Display Board	Boundary Pillars
Bhawanipatna	Kalahandi S	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
Baripada	Baripada	3.00	3.00	3.00	3.00	2.00	3.00	3.00	2.00	3.00	3.00
	Rairangpur	3.00	3.00	2.00	3.00	2.00	3.00	3.00	3.00	3.00	2.00
Sambalpur	Jharsuguda	2.00	1.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
Rourkela	Bonai	2.00	1.00	1.00	1.00	2.00	3.00	3.00	1.00	3.00	2.00
	Keonjhar	2.00	1.00	1.50	1.00	2.00	3.00	3.00	2.00	3.00	2.00
	Rourkela	3.00	3.00	2.00	3.00	3.00	3.00	3.00	2.00	3.00	2.00
	Sundargarh	2.50	3.00	3.00	2.50	2.50	3.00	3.00	2.50	3.00	2.00
Koraput	Koraput	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.											

5.2.2. Net Present Value Scheme

5.2.2.1. Block Plantation

Total area treated for block plantation under NPV scheme for the year 2019-20 is 3704 ha across 218 sites, out of which 1142 ha were surveyed covering 54 sites in all the 8 circles, Division-wise details are mentioned below in Table 48.

Table 48: Area and site coverage for block plantation under NPV scheme (2019-20)

Circle	Division	Total Area treated		Area Studied	
		Area	No of sites	Area	No of sites
Angul	Angul	70.00	3	20.00	1
	Athgarh	70.00	2	40.00	1
	Athmallik	30.00	1	30.00	1
	Cuttack	70.00	6	20.00	1
	Dhenkanal	170.00	5	90.00	2
Total		410.00	17	200.00	6
Berhampur	Balliguda	120.00	13	15.00	2
	Berhampur	90.00	7	25.00	2

Circle	Division	Total Area treated		Area Studied	
		Area	No of sites	Area	No of sites
	Boudh	170.00	12	30.00	2
	Ghumsur North	70.00	2	35.00	1
	Ghumsur South	170.00	15	30.00	2
	Parlakhemundi	130.00	11	20.00	2
	Phulbani	70.00	3	25.00	1
Total		820.00	63	170.00	12
Bhawanipatna	Bolangir	200.00	7	80.00	2
	Kalahandi N	84.00	4	55.00	2
	Kalahandi S	50.00	1	50.00	1
	Khariar	170.00	9	20.00	2
	Subarnapur	170.00	6	90.00	2
Total		674.00	27	295.00	9
Baripada	Baripada	50.00	3	20.00	1
	Karanjia	100.00	12	5.00	1
Total		150.00	15	25.00	2
Sambalpur	Bamra WL	70.00	3	40.00	1
	Bargarh	60.00	2	20.00	1
	Sambalpur	70.00	4	15.00	1
	Jharsuguda				
Total		200.00	9	75.00	3
Bhubaneshwar	Khurda	100.00	7	10.00	1
	Nayagarh	190.00	11	40.00	2
Total		290.00	18	50.00	3
Rourkela	Bonai	110.00	4	80.00	2
	Deogarh	170.00	9	40.00	2
	Rourkela	30.00	3	20.00	2
	Sundargarh	170.00	9	50.00	2
Total		480.00	25	190.00	8
Koraput	Jeypore	170.00	14	27.00	2
	Koraput	170.00	10	30.00	2
	Malkangiri	170.00	9	40.00	2
	Nabarangpur	100.00	5	20.00	1
	Rayagada	70.00	6	10.00	1
Total		680.00	44	127.00	8
Grand Total		3704.00	218	1142.00	54

Artificial regeneration

The performance of surveyed plantations in majority divisions is Excellent with survival above 90%. The plantations in the few divisions are good, recording survival between 81-88%. The plantation in the remaining 3 division is satisfactory, recording survival between 65-76%. The growth of plants in the plantations is observed to be healthy with average height ranging between 1.49 - 2.53 m and average collar girth between 4.24 to 17.74 cm. Division wise details are presented in the tables below.

Table 49: Survival status for block plantation (Planted) under NPV scheme (2019-20)

Circle	Division	No of sites studied	Survival %		
			Avg.	Min.	Max.
Angul	Angul	1	82.00	82.00	82.00
	Athgarh	1	81.00	93.00	81.00
	Athmallik	1	76.00	98.00	76.00
	Cuttack	1	65.00	65.00	65.00
	Dhenkanal	2	77.00	71.00	83.00
Berhampur	Balliguda	2	82.00	82.00	83.00
	Berhampur	2	82.00	76.00	88.00
	Boudh	2	94.00	92.00	96.00
	Ghumsur North	1	85.00	85.00	85.00
	Ghumsur South	2	86.00	82.00	90.00
	Parlakhemundi	2	90.00	89.00	91.00
	Phulbani	1	96.00	96.00	96.00
Bhawanipatna	Bolangir	2	93.00	91.00	95.00
	Kalahandi N	2	94.00	93.00	94.00
	Kalahandi S	1	99.00	99.00	99.00
	Khariar	2	88.00	83.00	93.00
	Subarnapur	2	84.00	74.00	94.00
Baripada	Baripada	1	93.00	93.00	93.00
	Karanjia	1	100.00	100.00	100.00
Sambalpur	Bamra WL	1	98.00	98.00	98.00
	Bargarh	1	93.00	93.00	93.00
	Sambalpur	1	98.00	98.00	98.00
Bhubaneshwar	Khurda	1	96.00	96.00	96.00
	Nayagarh	2	74.00	71.00	77.00
Rourkela	Bonai	2	96.00	92.00	100.00
	Deogarh	2	99.00	98.00	100.00
	Rourkela	2	96.50	94.00	99.00
	Sundargarh	2	95.00	91.00	98.00
Koraput	Jeypore	2	89.00	87.00	92.00

Circle	Division	No of sites studied	Survival %		
			Avg.	Min.	Max.
	Koraput	2	96.00	93.00	98.00
	Malkangiri	2	90.50	90.00	91.00
	Nabarangpur	1	96.00	96.00	96.00
	Rayagada	1	99.00	99.00	99.00

The performance of surveyed plantation sites on growth parameters was observed to be satisfactory. The average height of surveyed plants range between 0.33 m – 3.32 m and the average collar girth is between 1.78 cm to 15.13 cm. Baripada Division under Baripada Circle has the highest avg. height (3.32 m) and Kalahandi division of Bhawanipatna Circle has the highest avg. collar girth (15.13 cm).

Table 50: Growth status for block plantation (Planted) under NPV scheme (2019-20): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M)			Collar Girth (Cm)		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Cuttack	1	1.51	0.48	2.29	9.16	3.05	19.05
	Dhenkanal	2	1.68	0.13	2.79	4.24	3.51	33.02
Berhampur	Balliguda	2	1.51	0.64	11.43	11.14	3.30	92.46
	Berhampur	2	2.53	0.43	7.11	13.43	3.05	38.61
	Boudh	2	1.32	0.56	1.91	11.26	3.30	19.05
	Ghumsur North	1	0.76	0.46	1.07	4.45	2.54	6.35
	Ghumsur South	2	1.71	0.40	4.70	12.40	2.29	91.44
	Parlakhemundi	2	1.14	0.31	5.33	7.84	2.81	76.20
	Phulbani	1	1.99	0.18	6.60	17.74	4.32	64.80
Bhawanipatna	Bolangir	2	2.04	0.34	4.57	23.91	3.05	79.36
	Kalahandi N	2	2.28	0.76	3.81	17.54	4.57	83.93
	Kalahandi S	1	1.99	1.09	3.68	15.46	9.14	33.27
	Khariar	2	1.49	0.15	3.30	10.43	2.54	81.28
	Subarnapur	2	1.72	0.97	3.02	11.71	4.06	33.02
Baripada	Baripada	1	1.79	1.09	3.68	15.16	9.14	30.27
	Karanjia	1	1.30	0.97	1.65	11.10	6.35	15.75
Bhubaneshwar	Khurda	1	2.07	1.45	2.79	13.59	9.40	17.78
	Nayagarh	2	1.39	0.69	2.29	10.56	5.33	22.10
Rourkela	Bonai	2	2.15	1.40	3.30	17.74	8.38	42.28
	Deogarh	2	1.27	0.89	1.80	9.37	5.08	13.46
	Rourkela	2	2.05	1.09	3.05	14.94	8.59	58.29
	Sundargarh	2	1.04	0.69	1.47	3.99	2.24	25.48
Koraput	Jeypore	2	2.72	0.18	6.10	22.19	5.33	52.83
	Koraput	2	3.42	0.18	6.10	15.52	3.56	28.96

Circle	Division	No of sites studied	Height (M)			Collar Girth (Cm)		
			Avg.	Min.	Max.	Avg.	Min.	Max.
	Malkangiri	2	1.19	0.33	2.41	5.55	2.03	14.22
	Nabarangpur	1	4.44	1.17	6.86	23.90	8.13	37.08

5.2.2.2. Bamboo Plantation

Table 51: Growth status for bamboo plantation (Planted) under NPV scheme (2019-20): Clump girth and no. of culms

Circle	Division	No of Sites Studied	Clump Girth (Cm)			No. Of Culms		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	34.98	2.03	76.20	4.17	1.00	14.00
	Athgarh	1	32.50	5.33	83.82	8.39	2.00	22.00
	Athmallik	1	19.57	8.76	73.66	4.11	1.00	35.00
Berhampur	Balliguda	1	15.89	4.00	25.00	4.18	1.00	8.00
	Berhampur	1	21.69	5.50	59.00	4.05	1.00	7.00
	Boudh	1	88.88	38.10	137.16	6.73	3.00	12.00
	Gh North	1	10.29	7.51	22.86	2.89	1.00	6.00
	Gh South	1	56.15	22.10	152.4	5.05	2.00	13.00
	Parlakhemundi	1	14.03	3.00	37.00	5.13	2.00	12.00
	Phulbani	1	81.17	30.48	137.16	5.55	2.00	10.00
Bhawanipatna	Bolangir	1	21.50	14.00	100.00	7.48	2.00	60.00
	Kalahandi N	1	35.51	16.26	54.102	6.00	2.00	18.30
	Kalahandi S	1	78.39	15.24	248.92	9.28	4.00	72.00
	Khariar	1	31.63	14.80	47.30	8.38	4.00	15.00
	Subarnapur	1	34.51	19.00	83.00	4.75	2.00	10.00
Sambalpur	Bamra WL	1	43.92	8.89	87.63	9.79	3.00	23.00
	Bargarh	1	103.58	40.64	220.98	20.43	8.00	34.00
	Sambalpur	1	113.28	50.80	223.52	21.31	12.00	44.00
Rourkela	Bonai	1	97.89	55.88	142.24	8.40	4.00	15.00
	Deogarh	1	16.96	6.10	27.94	3.45	1.00	6.00
	Sundargarh	1	69.92	17.78	129.54	4.72	2.00	9.00
Koraput	Jeypore	1	48.11	26.10	121.92	3.44	1.00	6.00
	Malkangiri	1	69.96	50.80	93.98	6.63	4.00	10.00
	Rayagada	1	143.57	52.86	195.58	11.91	7.00	56.00

Qualitative parameters

Performance of majority of the Divisions across all the quality parameters is good. No grazing signs were observed in the plantations, except minor incidences in Athmallik, Cuttack, Balliguda, Kalahandi (S),

Satkosia WL and Ghumsur North divisions. Similarly, fire incidences were not found during the survey, except minor incidences in Athmallik, Cuttack, Satkosia WL, Kalahandi (S), and Khariar divisions. Weeding in this region was found to be moderately effective with few exceptions of patches that had weed. Soil work was done but the quality could have been improved. There were sign of unclear demarcated boundaries and unavailability of treatment map in some of the divisions.

Table 52: Qualitative Parameters for bamboo plantation (Planted) under NPV scheme (2019-20)

Circle	Division	Grazing	Fire	Weeding	Soil Work	Journal	Plantation Map	Treatment Map	Display Board	Boundary Pillars
Angul	Angul	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Athgarh	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Athmallik	2.00	2.00	1.00	2.00	3.00	3.00	2.00	3.00	2.00
	Cuttack	2.50	2.50	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Satkosia WL	2.50	2.50	2.00	2.00	3.00	3.00	2.00	3.00	2.00
Berhampur	Balliguda	2.50	3.00	1.00	2.00	3.00	3.00	2.00	3.00	2.00
	Berhampur	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	Boudh	3.00	3.00	2.00	2.00	3.00	3.00	2.00	2.00	2.00
	Ghumsur North	2.50	3.00	2.00	2.00	2.50	2.50	2.00	2.50	2.00
	Ghumsur South	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
	Parlakhemundi	3.00	3.00	3.00	3.00	3.00	3.00	2.00	3.00	2.00
	Phulbani	3.00	3.00	2.00	2.50	3.00	3.00	2.50	3.00	2.50
Bhawanipatna	Bolangir	3.00	3.00	2.00	2.50	3.00	3.00	2.50	3.00	2.50
	Kalahandi N	3.00	3.00	2.00	2.00	3.00	3.00	2.50	3.00	2.00
	Kalahandi S	2.50	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Khariar	3.00	2.00	1.00	2.00	3.00	3.00	2.00	3.00	3.00
Baripada	Baripada	3.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	2.00
	Karanjia	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Sambalpur	Bamra WL	3.00	3.00	3.00	3.00	3.00	3.00	2.00	3.00	2.00
	Bargarh	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00

Circle	Division	Grazing	Fire	Weeding	Soil Work	Journal	Plantation Map	Treatment Map	Display Board	Boundary Pillars
	Sambalpur	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
Bhubaneswar	Khurda	3.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00
	Nayagarh	3.00	3.00	2.00	2.50	3.00	2.50	2.50	3.00	2.50
Rourkela	Bonai	3.00	3.00	3.00	2.50	3.00	3.00	3.00	3.00	3.00
	Deogarh	3.00	3.00	2.50	3.00	3.00	3.00	3.00	2.50	3.00
	Rourkela	3.00	3.00	3.00	3.00	3.00	3.00	2.50	3.00	2.50
	Sundargarh	3.00	3.00	2.50	2.50	3.00	3.00	2.50	3.00	2.50
Koraput	Jeypore	3.00	3.00	2.50	2.50	3.00	3.00	2.50	2.50	2.50
	Koraput	3.00	3.00	2.50	3.00	3.00	3.00	2.50	2.50	2.50
	Malkangiri	3.00	3.00	2.50	2.50	3.00	3.00	2.50	3.00	2.50
	Nowrangour	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.50	2.00
	Rayagada	3.00	3.00	3.00	2.50	3.00	3.00	2.00	3.00	2.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.										

5.2.2.3. ANR with GAP

Under NPV scheme of 2019-20, ANR (with GAP) were undertaken in 1550.00 ha (23 sites) of Angul Circle, 4900.00 ha (89 sites) of Berhampur Circle and 2200.00 ha (38 sites) of Bhawanipatna Circle. The survey was conducted in 350.00 ha of Angul, 645.00 ha of Berhampur and 300.00 ha of Bhawanipatna Circles.

Table 53: Area Coverage for ANR with GAP under NPV scheme (2019-20)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No. of sites	Area (ha)	No. of sites
Angul	Angul	500.00	8	100.00	1
	Athmallik	50.00	1	50.00	1
	Cuttack	500.00	6	150.00	1
	Dhenkanal	500.00	8	50.00	1
Total		1550.00	23	350.00	4
Berhampur	Balliguda	800.00	17	150.00	2
	Berhampur	500.00	13	95.00	2
	Boudh	500.00	8	100.00	1

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No. of sites	Area (ha)	No. of sites
	Ghumsur North	500.00	10	50.00	1
	Ghumsur South	500.00	10	50.00	1
	Parlakhemundi	1300.00	21	100.00	2
	Phulbani	800.00	10	100.00	1
Total		4900.00	89	645.00	10
Bhawanipatna	Bolangir	500.00	10	50.00	1
	Kalahandi N	800.00	11	50.00	1
	Kalahandi S	100.00	1	100.00	1
	Khariar	800.00	16	100.00	2
Total		2200.00	38	300.00	5
Baripada	Baripada	500.00	7	50.00	1
	Karanjia	500.00	9	100.00	1
	Keonjhar WL	500.00	6	100.00	1
Total		1500.00	22	250.00	3
Sambalpur	Bamra WL	400.00	15	35.00	2
	Bargarh	200.00	2	100.00	1
	Jharsuguda	200.00	3	100.00	1
	Rairakhol	500.00	5	80.00	1
	Sambalpur	500.00	9	50.00	1
Total		1800.00	34	365.00	6
Bhubaneshwar	Chilika WL	200.00	3	50.00	1
	Khurda	500.00	8	50.00	1
	Nayagarh	500.00	9	50.00	1
Total		1200.00	20	150.00	3
Rourkela	Bonai	500.00	14	100.00	2
	Deogarh	500.00	8	50.00	1
	Keonjhar	500.00	8	50.00	1
	Rourkela	780.00	8	100.00	1
	Sundargarh	500.00	6	50.00	1
Total		2780.00	44	350.00	6
Koraput	Jeypore	500.00	13	85.00	2
	Koraput	500.00	7	50.00	1
	Malkangiri	500.00	18	45.00	2
	Nabarangpur	500.00	10	100.00	2
	Rayagada	500.00	10	100.00	2
Total		2500.00	58	380.00	9
Grand Total		18430.00	328	2790.00	46

Regeneration status

Plantations of Bolangir, Dhenkanal, Khariar, Parlakhemundi and Kalahandi N have the higher survival ranging from 91% and 98% respectively, followed by Cuttack, Balliguda, Berhampur, Boudh, Phulbani and in the range of 80-89.25%, and the remaining in the range of 71-78%. Division wise details are given below:

Table 54: Survival status for ANR with GAP under NPV scheme (2019-20): Survival Rate

Circle	Division	No of sites studied	Survival % in GP		
			Avg.	Min.	Max.
Angul	Angul	1	78.00	78.00	78.00
	Athmallik	1	78.00	78.00	78.00
	Cuttack	1	81.00	81.00	81.00
	Dhenkanal	1	98.00	98.00	98.00
Berhampur	Balliguda	2	77.00	76.00	78.00
	Berhampur	2	86.00	81.00	92.00
	Boudh	1	87.00	87.00	87.00
	Ghumsur North	1	75.00	75.00	75.00
	Ghumsur South	1	78.00	78.00	78.00
	Parlakhemundi	2	94.00	90.00	98.00
	Phulbani	1	89.00	89.00	89.00
Bhawanipatna	Bolangir	1	91.00	91.00	91.00
	Kalahandi N	1	96.00	96.00	96.00
	Kalahandi S	1	71.00	71.00	71.00
	Khariar	2	93.00	91.00	95.00
Baripada	Baripada	1	86.00	86.00	86.00
	Karanjia	1	96.00	96.00	96.00
	Keonjhar WL	1	99.00	99.00	99.00
Sambalpur	Bamra WL	2	53.00	53.00	53.00
	Bargarh	1	91.00	91.00	91.00
	Jharsuguda	1	64.00	64.00	64.00
	Rairakhol	1	85.00	85.00	85.00
	Sambalpur	1	76.00	76.00	76.00
Bhubaneshwar	Chilika WL	1	87.00	87.00	87.00
	Khurda	1	90.00	90.00	90.00
	Nayagarh	1	64.00	64.00	64.00
Rourkela	Bonai	2	57.50	56.00	59.00
	Deogarh	1	99.00	99.00	99.00
	Keonjhar	1	84.00	84.00	84.00
	Rourkela	1	82.00	82.00	82.00
	Sundargarh	1	97.00	97.00	97.00

Circle	Division	No of sites studied	Survival % in GP		
			Avg.	Min.	Max.
Koraput	Jeypore	2	79.00	72.00	86.00
	Koraput	1	96.00	96.00	96.00
	Malkangiri	2	72.00	62.00	82.00
	Nabarangpur	2	93.00	90.00	96.00
	Rayagada	2	81.00	71.00	91.00

Table 55: Growth status for ANR With GAP under NPV scheme (2019-20): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M) in GP			Collar Girth (Cm) in GP		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	1.30	0.10	7.11	10.34	2.54	114.30
	Athmallik	1	1.85	0.25	7.37	14.94	2.54	177.80
	Cuttack	1	1.81	0.20	4.57	11.59	0.51	68.58
	Dhenkanal	1	1.07	0.13	11.52	6.00	2.29	73.97
Berhampur	Balliguda	2	1.69	0.25	10.41	12.78	2.54	203.30
	Berhampur	2	2.47	0.52	7.67	12.22	2.54	109.98
	Boudh	1	1.78	0.45	3.32	13.45	3.55	210.82
	Ghumsur North	1	0.33	0.07	0.77	5.39	0.51	63.50
	Ghumsur South	1	1.85	0.25	5.87	12.43	2.54	96.05
	Parlakhemundi	2	1.77	0.15	8.25	9.81	2.54	81.79
	Phulbani	1	2.43	0.45	4.07	15.12	5.08	27.94
Bhawanipatna	Bolangir	1	1.29	0.56	2.80	12.62	2.54	82.30
	Kalahandi N	1	2.33	1.14	3.57	12.05	8.12	19.05
	Kalahandi S	1	2.28	1.06	3.30	15.13	10.41	106.81
	Khariar	2	1.61	0.18	6.25	14.37	2.54	101.60
Baripada	Baripada	1	3.32	0.17	5.08	10.60	11.68	57.20
	Karanjia	1	1.74	1.02	2.79	4.05	4.57	16.26
	Keonjhar WL	1	1.91	1.14	3.18	6.50	7.87	25.91
Sambalpur	Bamra WL	2	1.07	0.28	2.29	2.81	2.79	45.72
	Bargarh	1	1.17	0.15	3.05	5.05	0.51	83.82
	Jharsuguda	1	0.44	0.10	1.02	1.78	0.51	17.78
	Rairakhol	1	1.39	0.30	8.89	4.22	0.51	114.30
	Sambalpur	1	1.18	0.30	2.29	2.57	0.51	21.08
Bhubaneshwar	Chilika WL	1	1.98	1.35	3.30	5.28	10.67	24.38
	Khurda	1	1.24	0.46	2.41	2.95	2.54	14.22
	Nayagarh	1	1.26	0.41	2.29	3.73	3.05	63.50
Rourkela	Bonai	2	1.76	0.94	2.59	5.57	7.62	43.18
	Deogarh	1	1.84	0.76	5.33	4.09	4.32	33.27

Circle	Division	No of sites studied	Height (M) in GP			Collar Girth (Cm) in GP		
			Avg.	Min.	Max.	Avg.	Min.	Max.
	Keonjhar	1	1.77	1.07	2.21	4.79	8.13	18.80
	Rourkela	1	1.59	1.14	3.05	4.71	7.62	25.40
	Sundargarh	1	2.03	0.76	3.81	5.33	5.08	27.94
Koraput	Jeypore	2	1.91	0.36	4.83	4.56	2.54	25.40
	Koraput	1	1.22	0.38	2.16	3.33	2.54	15.49
	Malkangiri	2	2.50	0.23	4.83	7.51	2.54	90.50
	Nabarangpur	2	3.31	0.84	6.60	9.27	5.33	57.40
	Rayagada	2	2.13	1.91	3.07	7.15	11.43	25.91

Regeneration Status

It is observed that seedlings form the highest proportion of all plants in all the surveyed divisions, indicating that plantation activities carried out had a positive impact on natural regeneration in the sites.

Table 56: Regeneration Status of ANR (with GAP) under NPV scheme (2019-20)

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Angul	Angul	1	37.00	41.00	22.00
	Athmallik	1	45.00	36.00	19.00
	Cuttack	1	56.00	32.00	12.00
	Dhenkanal	1	47.00	28.00	25.00
Berhampur	Balliguda	2	58.00	31.00	11.00
	Berhampur	2	48.00	32.00	20.00
	Boudh	1	54.00	34.00	12.00
	Ghumsur North	1	77.00	20.00	3.00
	Ghumsur South	1	54.00	24.00	22.00
	Parlakhemundi	2	57.00	25.00	18.00
	Phulbani	1	67.00	24.00	9.00
Bhawanipatna	Bolangir	1	60.00	24.00	16.00
	Kalahandi N	1	58.00	28.00	14.00
	Kalahandi S	1	43.00	31.00	26.00
	Khariar	2	44.00	31.00	25.00
Baripada	Baripada	1	45.00	34.00	21.00
	Karanjia	1	49.00	30.00	21.00
	Keonjhar WL	1	46.00	38.00	16.00
Sambalpur	Bamra WL	2	72.00	16.00	12.00
	Bargarh	1	63.00	24.00	13.00

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
	Jharsuguda	1	69.00	26.00	5.00
	Rairakhol	1	67.00	18.00	15.00
	Sambalpur	1	77.00	15.00	8.00
Bhubaneshwar	Chilika WL	1	59.00	31.00	10.00
	Khurda	1	54.00	31.00	15.00
	Nayagarh	1	62.00	34.00	4.00
Rourkela	Bonai	2	72.00	17.00	11.00
	Deogarh	1	53.00	37.00	10.00
	Keonjhar	1	74.00	15.00	11.00
	Rourkela	1	48.00	35.00	17.00
	Sundargarh	1	55.00	27.00	18.00
Koraput	Jeypore	2	56.00	23.00	21.00
	Koraput	1	60.00	19.00	21.00
	Malkangiri	2	54.00	25.00	21.00
	Nabarangpur	2	59.00	29.00	12.00
	Rayagada	2	46.00	38.00	16.00

Qualitative parameters

The data indicates good performance of the surveyed sites across qualitative parameters. The sites did not display any significant signs of grazing and fire incidences. Other than a few incidences of sheet erosion observed in few sites, the overall quality of silvicultural operations had a positive impact on soil erosion. Density of recruits was moderate to dense.

The official documents of the plantation sites were found to be well maintained and updated except for a few divisions where the treatment maps were not made available during the field visits.

Table 57: Qualitative parameters for ANR (with gap) under NPV scheme (2019-20)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Soil Work	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars
Angul	Angul	3.00	3.00	2.00	2.00	1.00	2.00	3.00	2.00	2.00	3.00	3.00
	Athmallik	3.00	3.00	3.00	2.00	2.00	2.00	3.00	2.00	1.00	3.00	2.00
	Cuttack	3.00	3.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Dhenkanal	3.00	3.00	3.00	1.00	1.00	2.00	3.00	3.00	1.00	3.00	2.00

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Soil Work	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars
Berhampur	Balliguda	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	1.00	3.00	2.00
	Berhampur	2.50	3.00	3.00	2.50	3.00	2.00	3.00	3.00	2.00	3.00	2.50
	Boudh	3.00	3.00	2.00	2.00	3.00	2.00	3.00	3.00	2.00	3.00	2.00
	Ghumsur North	3.00	3.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	3.00	3.00
	Ghumsur South	3.00	3.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Parlakhemundi	3.00	3.00	1.50	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
	Phulbani	3.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
Bhawanipatna	Bolangir	3.00	3.00	2.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00
	Kalahandi N	3.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00
	Kalahandi S	3.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Khariar	2.50	3.00	2.00	2.00	2.50	2.50	3.00	3.00	2.50	3.00	2.50
Baripada	Baripada	3.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
	Karanjia	3.00	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
	Keonjhar WL	3.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Sambalpur	Bamra WL	2.00	2.00	1.50	2.00	2.00	2.50	3.00	3.00	3.00	2.00	3.00
	Bargarh	3.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	2.50	3.00
	Jharsuguda	2.00	2.00	1.50	2.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00
	Rairakhol	3.00	3.00	2.00	2.00	2.50	3.00	3.00	3.00	3.00	3.00	3.00
	Sambalpur	3.00	3.00	3.00	2.00	2.50	2.00	3.00	3.00	3.00	2.00	3.00
Bhubaneswar	Chilika WL	3.00	3.00	2.00	2.00	2.50	2.00	3.00	3.00	3.00	2.00	3.00
	Khurda	3.00	3.00	3.00	3.00	2.50	2.00	3.00	3.00	3.00	2.00	3.00
	Nayagarh	3.00	3.00	3.00	3.00	2.50	3.00	3.00	3.00	3.00	2.00	3.00
Rourkela	Bonai	2.00	2.00	2.00	2.00	2.50	2.00	3.00	3.00	3.00	2.00	3.00
	Deogarh	3.00	3.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00
	Keonjhar	3.00	3.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Soil Work	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars
	Rourkela	3.00	3.00	2.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Sundargarh	3.00	3.00	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
Koraput	Jeypore	3.00	2.00	2.00	2.00	2.50	2.00	3.00	3.00	3.00	2.50	3.00
	Koraput	3.00	3.00	3.00	2.00	2.00	2.50	3.00	3.00	3.00	3.00	3.00
	Malkangiri	3.00	2.00	2.00	2.00	2.50	2.00	3.00	3.00	3.00	3.00	3.00
	Nabarangpur	3.00	3.00	3.00	3.00	2.50	2.50	3.00	3.00	3.00	3.00	3.00
	Rayagada	3.00	3.00	3.00	3.00	2.50	2.50	3.00	3.00	3.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

5.2.2.4. ANR without GAP

For plantation under NPV in 2019-20, total treated area in Berhampur Circle was 450.00 ha, spread across 9 sites. The survey was carried out in 1 of these sites, equating to 50 ha. In Bhawanipatna Circle, total treated area was 2500.00 ha, spread across 49 sites. Of these, 5 sites with an area of 250.00 ha were surveyed. The one site in Subarnapur division was raised under NPV scheme and the others under AJY scheme.

Table 58: Area and site coverage for ANR Without GAP under NPV scheme (2019-20)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Bhawanipatna	Subarnapur	500.00	9	50.00	1
Total		500.00	9	50.00	1

Table 59: Area and site coverage for ANR Without GAP under AJY scheme (2019-20)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Berhampur	Parlakhemundi	450.00	9	50.00	1
Total		450.00	9	50.00	1
Bhawanipatna	Khariar	2000.00	40	200.00	4
Total		2000.00	40	200.00	4

Baripada	Balasore WL	1048.00	19	81.00	2
Total		1048.00	19	81.00	2
Koraput	Malkangiri	2000.00	40	500.00	4
Total		2000.00	40	500.00	4
Grand Total		5998.00	117	881.00	12

Regeneration Status

Majority of the regeneration found during the survey of NPV scheme in 2019-20, accounted for seedlings, followed by saplings and poles. It is observed that seedlings form the highest proportion of all plants in all the surveyed divisions, indicating plantation activities carried out had a positive impact on natural regeneration.

Table 60: Regeneration Status of ANR (without GAP) under NPV scheme (2019-20): Regeneration Survey percentage

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Bhawanipatna	Subarnapur	1	62.00	22.00	16.00

Table 61: Regeneration Status of ANR (without GAP) under AJY scheme (2019-20): Regeneration Survey percentage

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Berhampur	Parlakhemundi	1	43.00	32.00	25.00
Bhawanipatna	Khariar	4	50.00	24.00	26.00
Baripada	Balasore WL	2	52.00	34.00	14.00
Koraput	Malkangiri	4	56.00	28.00	16.00

Qualitative parameters

The performance of the surveyed was observed to be good across quality parameters. No signs of grazing and fire were observed in Subarnapur division, minor grazing was recorded in Parlakhemundi and Khariar during the field survey. Density of recruits was moderate to dense sites and plantation works were effective in controlling erosion. The official documents were unavailable in some of the cases in Parlakhemundi and Subarnapur division to the enumeration team during the survey. The soil work could have been improved in Parlakhemundi division.

Table 62: Qualitative parameters for ANR without GAP under NPV scheme (2019-20)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Soil Work	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars
Bhawanipatna	Subarnapur	3.00	3.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

Table 63: Qualitative parameters for ANR without GAP under AJY scheme (2019-20)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Soil Work	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars
Berhampur	Parlakhemundi	2.00	3.00	3.00	3.00	2.00	1.00	2.00	2.00	1.00	3.00	2.00
Bhawanipatna	Khariar	2.75	2.75	2.00	2.00	2.00	2.50	3.00	2.50	2.50	2.75	2.50
Baripada	Balasore WL	3.00	3.00	2.50	2.50	2.50	2.50	3.00	3.00	2.50	3.00	2.00
Koraput	Malkangiri	2.67	2.50	2.50	2.50	2.50	2.50	3.00	3.00	2.00	2.50	2.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

5.2.2.5. Bamboo SSO

Table 64: Bamboo SSO under NPV Scheme (2019-20)

Circle	Division	No of sites studied	Total Clusters			No. of Clusters studied		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	40	40	40	4	4	4
	Athgarh	1	50	50	50	5	5	5
Berhampur	Boudh	3	38	16	50	4	1	5
	Gh South	1	30	30	30	3	3	3
	Gh North	1	45	45	45	5	5	5
	Berhampur	1	58	58	58	6	6	6
	Parlakhemundi	1	70	70	70	7	7	7
	Phulbani	1	38	38	38	4	4	4
Sambalpur	Rairakhol	2	110	60	160	11	6	16

Circle	Division	No of sites studied	Total Clusters			No. of Clusters studied		
			Avg.	Min.	Max.	Avg.	Min.	Max.
	Bargarh							
	Sambalpur	2	95	60	130	10	6	13
Bhubaneshwar	Nayagarh	3	145	90	200	15	9	20
	Khurda	1	70	70	70	7	7	7
Bhawanipatna	Kalahandi N	1	20	20	20	2	2	2
	Kalahandi S	1	30	30	30	3	3	3
	Bolangir	1	67	67	67	7	7	7
	Khariar	1	45	45	45	4	4	4
	Subarnapur	1	60	60	60	16	16	16
Koraput	Malkangiri	2	80	50	110	8	5	11
	Rayagada	1	30	30	30	3	3	3
Rourkela	Sundargarh	1	55	55	55	5	5	5

Note: Each Cluster consists of 40 clumps on an average.

Table 65: Growth Status of Bamboo SSO work under NPV Scheme (2019-20)

Circle	Division	Clump girth (cm)			Regeneration of new shoots
		Avg.	Min.	Max.	Avg.
Angul	Angul	170.84	63.5	482.6	5
	Athgarh	66.54	24.892	163.83	3
Berhampur	Boudh	128.53	85.51	152.71	4
	Gh South	123.37	55.88	203.2	4
	Gh North	162.12	57.03	273.12	5
	Berhampur	114.29	65.21	201.34	4
	Parlakhemundi	212.80	127	304.8	5
	Phulbani	113.21	53.34	210.82	4
Sambalpur	Rairakhol	100.60	35.72	213.36	4
	Sambalpur	97.47	35.62	212.4	3
Bhubaneshwar	Nayagarh	106.04	25.4	243.84	4
	Khurda	99.78	34.29	189.76	3
Bhawanipatna	Kalahandi N	212.80	127	304.8	5
	Kalahandi S	209.47	137.16	292.1	5
	Bolangir	205.48	114.67	301.11	5
	Khariar	189.67	101.34	287.56	5
	Subarnapur	96.52	58.42	132.08	3
Koraput	Malkangiri	285.58	91.44	482.6	6
	Rayagada	209.47	137.16	292.1	5
Rourkela	Sundargarh	146.43	98.12	297.12	4

Table 66: Qualitative Parameters of Bamboo SSO work under NPV Scheme (2019-20)

Circle	Division	Grazing	Fire	Coppice	Erosion	Shrubs	Decongestion	Mounding	Plantation Journal	Treatment Register	Display Board	boundary pillars
Angul	Angul	2.00	3.00	3.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
	Athgarh	2.00	3.00	3.00	3.00	2.00	2.00	1.00	1.00	1.00	1.00	2.00
Berhampur	Boudh	2.76	2.68	2.52	2.93	2.76	2.93	2.60	2.33	2.33	1.28	1.28
	Gh South	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	1.00
	Gh North	2.54	2.33	2.77	2.67	2.89	3.00	2.67	1.44	1.44	1.23	1.54
	Berhampur	2.50	2.50	1.61	2.50	2.50	2.00	2.50	2.50	1.30	1.00	1.70
	Parlakhemundi	2.00	3.00	2.32	2.68	2.00	2.00	2.00	1.32	1.32	1.00	1.32
	Phulbani	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	1.00
Sambalpur	Rairakhol	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	1.00
	Bargarh	3.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00
	Sambalpur	3.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	2.00
Bhubaneshwar	Nayagarh	3.00	3.00	3.00	2.55	2.55	2.00	2.00	1.00	1.00	1.00	1.00
	Khurda	3.00	3.00	3.00	2.66	2.34	1.17	1.00	2.66	2.66	1.97	2.14
Bhawanipatna	Kalahandi N	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	1.00
	Kalahandi S	2.54	2.33	2.77	2.67	2.89	3.00	2.67	1.44	1.44	1.23	1.54
	Bolangir	2.50	2.50	1.61	2.50	2.50	2.00	2.50	2.50	1.30	1.00	1.70
	Khariar	2.00	3.00	2.32	2.68	2.00	2.00	2.00	1.32	1.32	1.00	1.32
	Subarnapur	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	1.00
Koraput	Malkangiri	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	1.00
	Rayagada	2.00	3.00	3.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Rourkela	Sundargarh	2.00	3.00	3.00	3.00	2.00	2.00	1.00	1.00	1.00	1.00	2.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

The incidence of fire or grazing have been minimal across the divisions surveyed under Bamboo SSO work, mounding of bamboo clumps have also been done in most of the divisions, although treatment registers were not presented during evaluation work in few of the divisions.

5.2.2.6. Infrastructure

Infrastructure works covered in the survey included buildings, roads and waterbodies. Performance of these structures are as follows:

Building infrastructure

Majority of the structures were found to be in use, ideally located and structurally stable as indicated in the table below. A few structures needed minor repairing. This analysis includes information collected from 94 buildings across the 51 divisions.

Table 67: Building infrastructure works under NPV scheme (2019-20)

Circle	Division	Buildings				
		General Condition	Site Location	Serving the intended purpose	Structural stability	Present use Free of dampness and leakage
Angul	Angul	2.80	2.80	2.80	2.50	2.80
	Athgarh	2.50	2.70	3.00	2.80	2.80
	Athmallik	3.00	2.80	2.50	3.00	2.75
	Cuttack	2.55	2.67	2.83	2.50	2.67
	Dhenkanal	2.55	2.85	2.70	3.00	2.80
	Mahanadi WL	2.50	3.00	3.00	2.70	3.00
	Satkosia WL	3.00	3.00	3.00	3.00	3.00
Berhampur	Balliguda	2.67	3.00	3.00	2.67	2.83
	Berhampur	3.00	3.00	3.00	3.00	3.00
	Boudh	3.00	3.00	2.75	3.00	2.88
	Ghumsur North	2.86	3.00	2.86	3.00	2.71
	Ghumsur South	3.00	2.80	2.72	2.75	2.70
	Parlakhemundi	2.75	2.75	2.50	2.50	3.00
	Phulbani	3.00	3.00	3.00	3.00	3.00
Bhawanipatna	Bolangir	3.00	2.80	2.70	3.00	3.00
	Kalahandi N	2.50	2.50	2.50	3.00	2.50
	Kalahandi S	3.00	3.00	2.75	3.00	2.88
	Khariar	2.86	3.00	2.86	3.00	2.71
	Subarnapur	3.00	3.00	2.00	3.00	3.00
	Sunabeda WL	2.80	2.70	2.50	2.80	3.00
Baripada	Balasore WL	3.00	3.00	3.00	3.00	3.00
	Baripada	3.00	3.00	3.00	3.00	3.00
	Karanjia	3.00	3.00	3.00	3.00	3.00

Circle	Division	Buildings				
		General Condition	Site Location	Serving the intended purpose	Structural stability	Present use Free of dampness and leakage
	Keonjhar WL	3.00	3.00	3.00	3.00	3.00
	Rairangpur	3.00	3.00	2.88	2.88	3.00
	STR South	3.00	3.00	3.00	3.00	3.00
Sambalpur	Bamra WL	3.00	3.00	3.00	3.00	3.00
	Bargarh	3.00	3.00	3.00	3.00	2.50
	Hirakud WL	3.00	3.00	3.00	2.67	3.00
	Jharsuguda	3.00	3.00	2.80	2.80	3.00
	Rairakhol	3.00	3.00	3.00	3.00	3.00
	Sambalpur	3.00	3.00	3.00	3.00	2.00
Bhubaneswar	Bhadrakh WL	3.00	2.67	2.33	3.00	3.00
	Chandaka WL	3.00	3.00	3.00	3.00	3.00
	Chilika WL	3.00	3.00	3.00	3.00	3.00
	City Forest	3.00	3.00	3.00	3.00	3.00
	Khurda	2.00	2.00	2.33	2.33	3.00
	Nayagarh	3.00	3.00	3.00	3.00	3.00
	Puri WL	3.00	3.00	3.00	3.00	3.00
	Rajnagar WL	3.00	3.00	3.00	3.00	3.00
Rourkela	Bonai	2.50	3.00	3.00	2.00	2.50
	Deogarh	3.00	3.00	3.00	3.00	3.00
	Keonjhar	3.00	3.00	3.00	3.00	3.00
	Rourkela	2.67	2.33	2.67	2.67	2.67
	Sundargarh	3.00	3.00	3.00	3.00	3.00
Koraput	Jeypore	3.00	3.00	3.00	3.00	3.00
	Koraput	3.00	3.00	2.50	2.50	2.50
	Malkangiri	2.75	2.75	2.50	3.00	2.75
	Nabarangpur	3.00	3.00	3.00	3.00	3.00
	Rayagada	2.67	3.00	2.33	2.67	2.67
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.						

Road infrastructure

The surveyed road sites were in good condition with two sites in need for minor repair. The location of the roads was appropriately selected. They are used frequently and have improved connectivity, particularly to remote locations. This analysis includes information of 7 forest roads, 7 causeways and 3 culverts.

Table 68: Road infrastructure works under NPV scheme (2019-20)

Circle	Division	Roads			
		General Condition	Utility of the road	Serving the intended purpose	Duration of usage in a year
Angul	Angul	3.00	2.25	2.75	3.00
	Athgarh	3.00	3.00	3.00	3.00
	Athmallik	3.00	3.00	3.00	2.50
	Cuttack	3.00	3.00	2.50	3.00
	Dhenkanal	3.00	3.00	3.00	3.00
	Mahanadi WL	3.00	2.50	2.50	3.00
	Satkosia WL	2.50	2.50	2.00	2.00
Berhampur	Balliguda	3.00	3.00	3.00	3.00
	Boudh	3.00	3.00	2.00	2.00
	Ghumsur North	2.50	3.00	3.00	3.00
	Ghumsur South	3.00	3.00	3.00	2.50
	Parlakhemundi	2.50	2.70	3.00	2.80
	Phulbani	3.00	2.00	2.00	3.00
Bhawanipatna	Bolangir	3.00	2.67	2.83	2.50
	Kalahandi N	3.00	2.50	2.50	3.00
	Kalahandi S	3.00	3.00	3.00	3.00
	Khariar	3.00	3.00	2.33	2.67
	Sunabeda WL	3.00	3.00	3.00	2.50
Baripada	Balasore WL	3.00	3.00	3.00	3.00
	Baripada	3.00	3.00	3.00	3.00
	Karanjia	3.00	3.00	3.00	2.50
	Keonjhar WL	3.00	3.00	2.33	2.67
	Rairangpur	3.00	3.00	3.00	2.50
	STR South	3.00	3.00	3.00	2.50
Sambalpur	Bamra WL	3.00	3.00	2.33	2.67
	Bargarh	3.00	3.00	3.00	2.00
	Hirakud WL	3.00	3.00	3.00	1.50
	Jharsuguda	3.00	3.00	3.00	3.00
	Rairakhol	3.00	3.00	3.00	2.00
	Sambalpur	3.00	3.00	3.00	2.00
Bhubaneswar	Bhadrakh WL	1.50	3.00	3.00	2.00
	Chandaka WL	2.00	2.00	2.00	2.00
	Chilika WL	3.00	2.00	2.00	2.00
	City Forest	3.00	3.00	3.00	3.00
	Khurda	3.00	3.00	3.00	3.00

Circle	Division	Roads			
		General Condition	Utility of the road	Serving the intended purpose	Duration of usage in a year
	Nayagarh	2.00	3.00	3.00	2.00
	Puri WL	3.00	3.00	3.00	2.00
	Rajnagar WL	3.00	3.00	3.00	2.00
Rourkela	Bonai	2.50	3.00	2.50	2.00
	Deogarh	3.00	3.00	3.00	3.00
	Keonjhar	3.00	3.00	2.75	2.25
	Rourkela	3.00	3.00	3.00	3.00
	Sundargarh	3.00	3.00	3.00	3.00
Koraput	Jeypore	3.00	3.00	3.00	3.00
	Koraput	3.00	3.00	2.00	2.00
	Malkangiri	2.00	3.00	2.00	3.00
	Nabarangpur	3.00	3.00	3.00	1.00
	Rayagada	3.00	3.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.					

Water infrastructure

Waterbodies surveyed include tube wells and ponds. Majority of the sites were in good physical condition with minor repair needs in few divisions. The structures were built at strategic locations which have positively impacted ground water recharge. These structures are used by the local communities residing near the plantation sites. This analysis includes information of 19 waterbodies and 4 tube-wells.

Table 69: Water infrastructure works under NPV scheme (2019-20)

Circle	Division	Tube wells, Water Bodies				
		General Condition	Site Location	Serving the intended purpose	Extent of recharge of ground water	Changes in water level
Angul	Angul	2.67	3.00	3.00	3.00	2.33
	Athgarh	2.67	2.33	2.33	2.33	2.33
	Athmallik	3.00	3.00	3.00	3.00	3.00
	Cuttack	3.00	3.00	3.00	2.00	2.00
	Dhenkanal	3.00	3.00	3.00	3.00	3.00
	Mahanadi WL	3.00	3.00	3.00	2.50	2.50
	Satkosia WL	3.00	3.00	3.00	–	–
Berhampur	Balliguda	2.67	2.67	2.67	3.00	3.00

Circle	Division	Tube wells, Water Bodies				
		General Condition	Site Location	Serving the intended purpose	Extent of recharge of ground water	Changes in water level
	Boudh	3.00	3.00	3.00		
	Ghumsur North	2.80	2.80	2.80	2.50	2.80
	Ghumsur South	2.50	2.70	3.00	2.80	2.80
	Parlakhemundi	3.00	2.80	2.50	3.00	2.75
Bhawanipatna	Bolangir	2.55	2.85	2.70	3.00	2.80
	Kalahandi N	2.80	2.70	3.00	2.50	3.00
	Kalahandi S	3.00	3.00	3.00		
	Khariar	3.00	3.00	3.00		
	Sunabeda WL	3.00	3.00	3.00	2.50	2.50
Baripada	Balasore WL	3.00	3.00	3.00	2.00	2.00
	Baripada	2.80	2.80	2.80	2.50	2.80
	Karanjia	3.00	3.00	3.00		
	Keonjhar WL	3.00	3.00	3.00	2.50	2.50
	Rairangpur	2.80	2.80	2.80	2.50	2.80
	STR South					
Sambalpur	Bamra WL	2.80	2.80	2.80	2.50	2.80
	Bargarh	3.00	3.00	3.00	2.50	2.50
	Hirakud WL	3.00	3.00	3.00	2.00	2.00
	Jharsuguda	3.00	3.00	3.00		
	Rairakhol	3.00	3.00	3.00		
	Sambalpur	3.00	3.00	3.00	3.00	2.00
Bhubaneswar	Bhadrakh WL	3.00	3.00	3.00	2.50	2.50
	Chandaka WL	3.00	3.00	3.00	3.00	3.00
	Chilika WL	3.00	3.00	3.00	2.00	2.00
	City Forest	3.00	3.00	3.00		
	Khurda	3.00	3.00	3.00	2.00	2.00
	Nayagarh	3.00	3.00	3.00	2.50	2.50
	Puri WL	3.00	3.00	3.00	2.50	2.50
	Rajnagar WL	3.00	3.00	3.00	3.00	3.00
Rourkela	Bonai	3.00	3.00	3.00	2.50	2.50
	Deogarh	3.00	3.00	3.00	2.50	3.00
	Keonjhar	3.00	3.00	3.00	2.00	2.00
	Rourkela	3.00	3.00	3.00		
	Sundargarh	3.00	3.00	3.00		
Koraput	Jeypore	3.00	3.00	3.00	3.00	2.50

Circle	Division	Tube wells, Water Bodies				
		General Condition	Site Location	Serving the intended purpose	Extent of recharge of ground water	Changes in water level
	Koraput	3.00	3.00	3.00	2.50	2.50
	Malkangiri	3.00	3.00	3.00	3.00	2.00
	Nabarangpur	3.00	3.00	3.00		
	Rayagada	3.00	3.00	3.00	2.00	2.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.						

5.2.2.7. Soil and Moisture Conservation (SMC) under Wildlife Conservation

A total of 30 soil and moisture conservation sites (under Satkosia WL, Hirakud and Nayagarh division of Angul, Sambalpur, Bhubaneshwar Circle respectively) were visited under Wildlife conservation. The data collected during field visits indicate that the structures are strategically constructed on gently sloping terrain that allow maximum water retention and reduce runoff. The structures have proved to be useful in controlling soil erosion. Most of the structures are moderately stable in nature with minor repairing needs.

Apart from a few sites, the overall performance of SMC structures was found to be satisfactory when evaluated over parameters of erosion control, water impounding, structural stability and relevance of location and structure. There were few sites which needed minor repair. Performance across indicators is summarized below.

Table 70: SMC work under NPV scheme (2019-20)

Circle	Division	Type of Structure	Av. Measurements recorded in Journal (Length (M), Breadth (M), Height (M))	Av. Measurements observed (Length (M), Breadth (M), Height (M))
Angul	Satkosia WL	Staggered Trench (11)	1.50 x 0.90 x 0.25	1.60 x 0.70 x 0.30
Sambalpur	Hirakud WL	LBCD (4)	4.00 x 1.20 x 0.80	4.00 x 1.30x 0.75
	Rairakhol	LBCD (3)	3.60 x 1.20 x 0.30	3.50 x 0.90 x 0.30
Bhubaneshwar	Nayagarh	Staggered Trench (8)	1.55 x 0.50 x 0.25	1.55 x 0.50 x 0.25
Rourkela	Sundargarh	Check Dam(1)	1.92 x 1.53 x 0.47	1.80 x 1.32 x 0.45
Koraput	Jeypore	LBCD(3)	2.40 x 0.50 x 0.36	2.40 x 0.50 x 0.38

Note: Figures in parenthesis indicate numbers.

Table 71: Qualitative parameters for SMC work under NPV scheme (2019-20)

Circle	Division	Erosion	Impounding water	Stability	Location	Relevance of structure	Impact on vegetation
Angul	Satkosia WL	2.00	2.00	2.00	3.00	2.00	3.00
Sambalpur	Hirakud WL	3.00	3.00	3.00	3.00	2.00	3.00
Sambalpur	Rairakhol	3.00	3.00	3.00	3.00	3.00	3.00
Bhubaneshwar	Nayagarh	3.00	1.00	3.00	3.00	2.00	2.00
Rourkela	Sundargarh	3.00	3.00	3.00	3.00	3.00	3.00
Koraput	Jeypore	3.00	2.00	3.00	3.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.							

Photo 4. Field visit

5.3. Works implemented during APO (2020-21)

5.3.1. Compensatory Afforestation Scheme

5.3.1.1. Block plantation

For block plantation, total area treated under CA scheme for the year 2020-21 is 1487.13 ha across 44 sites in Angul, Berhampur, Bhawanipatna, Baripada, Bhubaneswar, Koraput and Rourkela circle and out of this 300.48 ha was surveyed by visiting 19 sites in total in the above-mentioned circles, division-wise breakdown is given in Table 72.

Table 72: Area and site coverage for block plantation under CA scheme (2020-21)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Angul	Angul	1.00	1	1.00	1
	Athgarh	10.00	1	10.00	1
	Cuttack	124.72	6	40.00	2
	Dhenkanal	0.82	1	0.82	1
Total		136.54	9	51.82	5
Berhampur	Berhampur	3.79	1	3.79	1
	Ghumsur North	1.00	1	1.00	1
	Ghumsur South	2.27	1	2.27	1
	Parlakhemundi	70.00	3	20.00	1
Total		77.06	6	27.06	4
Bhawanipatna	Bolangir	887.54	7	75.00	1
	Subarnapur	220.00	6	60.00	1
Total		1107.54	13	135.00	2
Baripada	Balasore WL	60.00	4	28.00	2
Total		60.00	4	28.00	2
Bhubaneshwar	Nayagarh	1.42	1	1.42	1
Total		1.42	1	1.42	1
Rourkela	Bonai	5.228	2	1.228	1
	Keonjhar	42.00	5	6.00	2
	Rourkela	37.67	2	33.57	1
Total		84.89	9	40.80	4
Koraput	Rayagada	19.67	2	16.39	1
Total		19.67	2	16.39	1
Grand Total		1487.12	44	300.48	19

Artificial regeneration

It is observed that most of the divisions have recorded a survival rate 81 – 100 %, whereas Athgarh and Ghumsur North division have recorded 79% & 73% survival respectively.

Table 73: Survival status for block plantation (Planted) under CA scheme (2020-21)

Circle	Division	No of sites studied	Survival %		
			Avg.	Min.	Max.
Angul	Angul	1	94.00	94.00	94.00
	Athgarh	1	79.00	79.00	79.00
	Cuttack	2	82.00	79.00	85.00
	Dhenkanal	1	81.00	81.00	81.00
Berhampur	Berhampur	1	91.00	91.00	91.00
	Ghumsur North	1	73.00	73.00	73.00
	Ghumsur South	1	90.00	90.00	90.00
	Parlakhemundi	1	91.00	91.00	91.00
Bhawanipatna	Bolangir	1	89.00	89.00	89.00
	Subarnapur	1	93.00	93.00	93.00
Baripada	Balasore WL	2	100.00	100.00	100.00
Bhubaneshwar	Nayagarh	1	85.00	85.00	85.00
Rourkela	Bonai	1	99.00	99.00	99.00
	Keonjhar	2	93.00	91.00	95.00
	Rourkela	1	95.00	95.00	95.00
Koraput	Rayagada	1	98.00	98.00	98.00

Plantations in Bonai Division performed the best on growth parameters of average height (2.13 m) and average collar girth (16.57 cm), which was followed by other divisions as reflected in Table 74.

Table 74: Growth status for block plantation (Planted) under CA scheme (2020-21): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M)			Collar Girth (Cm)		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	1.07	0.10	8.89	5.67	2.54	86.87
	Athgarh	1	0.93	0.20	4.57	4.71	2.54	53.34
	Cuttack	2	0.79	0.02	3.81	8.59	5.01	61.47
	Dhenkanal	1	0.73	0.05	1.65	16.87	8.27	71.12
Berhampur	Berhampur	1	1.85	0.30	5.59	12.04	2.79	31.49
	Ghumsur North	1	0.81	0.50	1.07	4.50	2.54	5.08
	Ghumsur South	1	1.05	0.11	4.06	10.53	2.54	91.44
	Parlakhemundi	1	1.27	0.32	5.33	6.92	2.79	43.69

Circle	Division	No of sites studied	Height (M)			Collar Girth (Cm)		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Bhawanipatna	Bolangir	1	0.88	0.30	1.66	8.08	3.04	30.73
	Subarnapur	1	1.48	0.84	2.99	10.23	5.59	14.22
Baripada	Balasore WL	2	1.52	0.56	2.54	14.77	2.79	83.12
Bhubaneshwar	Nayagarh	1	0.96	0.53	1.65	5.63	2.54	12.70
Rourkela	Bonai	1	2.13	1.35	2.79	16.57	9.65	19.30
	Keonjhar	2	1.52	0.71	2.54	8.40	2.54	17.27
	Rourkela	1	1.18	0.58	1.96	6.87	3.81	11.94
Koraput	Rayagada	1	0.70	0.33	2.92	5.41	3.05	14.48

Qualitative parameters

Overall, the surveyed plantation sites have performed well across all quality parameters. Most of the divisions did not display any signs of grazing and fire. Treatment maps must be updated/completed in divisions. Minor updates are required in the plantation map of Subarnapur division. The sites are properly demarcated with boundary pillars and display board except Ghumsur North.

Table 75: Qualitative Parameters for Block Plantation (Planted) under CA scheme (2020-21)

Circle	Division	Grazing	Fire	Coppice	Soil Work	Journal	Plantation Map	Treatment Map	Display Board	Boundary Pillars
Angul	Angul	3.00	3.00	3.00	2.00	3.00	3.00	2.00	3.00	3.00
	Athgarh	3.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00
	Cuttack	2.50	3.00	2.50	2.00	3.00	3.00	1.50	3.00	2.00
	Dhenkanal	2.00	3.00	2.00	2.00	2.00	3.00	1.00	3.00	3.00
Berhampur	Berhampur	3.00	3.00	3.00	3.00	3.00	3.00	2.00	3.00	3.00
	Ghumsur North	2.00	3.00	2.00	2.00	3.00	1.00	1.00	3.00	1.00
	Ghumsur South	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Parlakhemundi	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Bhawanipatna	Bolangir	3.00	3.00	1.00	2.00	3.00	3.00	2.00	3.00	3.00
	Subarnapur	3.00	3.00	2.00	2.00	3.00	2.00	1.00	3.00	3.00
Baripada	Balasore WL	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Bhubaneswar	Nayagarh	2.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00

Rourkela	Bonai	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	Keonjhar	3.00	3.00	2.50	2.50	3.00	3.00	2.50	3.00	2.50
	Rourkela	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Koraput	Rayagada	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.										

5.3.1.2. ANR with GAP

For ANR (with GAP) under CA scheme, total treated area in Angul, Berhampur, Bhawanipatna, Baripada, Sambalpur, Bhubaneswar and Rourkela Circle's 2162.41 ha which was spread across 44 sites and out of these 15 sites were surveyed which covering 781.22 ha of treated area, division-wise details are given in Table 76.

Table 76: Area Coverage for ANR with GAP under CA scheme (2020-21)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Angul	Angul	100.00	1	100.00	1
	Athgarh	600.00	7	100.00	1
	Cuttack	5.49	1	5.49	1
	Dhenkanal	6.43	1	6.43	1
Total		711.92	10	211.92	4
Berhampur	Parlakhemundi	200.00	4	50.00	1
Total		200.00	4	50.00	1
Bhawanipatna	Kalahandi S	200.00	2	100.00	1
	Subarnapur	140.00	3	60.00	1
Total		340.00	5	160.00	2
Baripada	Balasore WL	70.00	2	20.00	1
Baripada	Keonjhar WL	1.98	2	1.1	1
Total		71.98	4	21.1	2
Sambalpur	Bargarh	48.85	1	48.85	1
Total		48.85	1	48.85	1
Bhubaneshwar	Khurda	24.28	1	24.28	1
Bhubaneshwar	Nayagarh	208	2	197	1
Total		232.28	3	221.28	2
Rourkela	Bonai	354.31	4	35	1
Rourkela	Keonjhar	183	12	13	1
Rourkela	Sundargarh	20.07	1	20.07	1
Total		557.38	17	68.07	3
Grand Total		2162.41	44	781.22	15

Regeneration status

The surveyed plantation sites have recorded good survival rates ranging between 77-98%. Subarnapur and Athgarh has recorded the lowest survival rate at 74% and 77%, while Dhenkanal recorded the highest survival rate followed by Cuttack (87%), Parlakhemundi and Kalahandi S (86%), and Angul (81%).

Table 77: Survival status for ANR with GAP under CA scheme (2020-21): Survival Rate

Circle	Division	No of sites studied	Survival % in GP		
			Avg.	Min.	Max.
Angul	Angul	1	81.00	81.00	81.00
	Athgarh	1	77.00	77.00	77.00
	Cuttack	1	87.00	87.00	87.00
	Dhenkanal	1	98.00	98.00	98.00
Berhampur	Parlakhemundi	1	86.00	86.00	86.00
Bhawanipatna	Kalahandi S	1	86.00	86.00	86.00
	Subarnapur	1	74.00	74.00	74.00
Baripada	Balasore WL	1	87.00	87.00	87.00
	Keonjhar WL	1	78.00	78.00	78.00
Sambalpur	Bargarh	1	76.00	76.00	76.00
Bhubaneshwar	Khurda	1	95.00	95.00	95.00
	Nayagarh	1	98.00	98.00	98.00
Rourkela	Bonai	1	83.00	83.00	83.00
	Keonjhar	1	87.00	87.00	87.00
	Sundargarh	1	99.00	99.00	99.00

The performance of surveyed plantation sites on growth parameters was observed to be satisfactory. The average height of surveyed plants range between 0.54-1.81 and the average collar girth is between 6.68 cm to 31.39 cm. Dhenkanal was the highest growth kin plants at an avg. height (1.81 m) and avg. collar girth (12.08 cm).

Table 78: Growth status for ANR With GAP under CA scheme (2020-21): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M) in GP			Collar Girth (Cm) in GP		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	1.30	0.23	7.62	20.96	6.51	106.68
	Athgarh	1	1.12	0.76	1.53	8.93	5.34	11.68
	Cuttack	1	0.85	0.25	1.50	9.06	3.04	13.70
	Dhenkanal	1	1.81	0.15	3.18	12.08	2.79	152.40
Berhampur	Parlakhemundi	1	1.64	0.38	5.59	10.89	2.54	68.58

Bhawanipatna	Kalahandi S	1	0.99	0.10	1.78	6.68	1.27	25.40
	Subarnapur	1	0.54	0.02	16.13	31.39	3.05	76.20
Baripada	Balasore WL	1	1.27	0.64	1.83	3.01	3.05	12.70
	Keonjhar WL	1	1.29	0.81	2.11	4.66	5.08	15.75
Sambalpur	Bargarh	1	1.03	0.30	3.05	3.18	3.05	45.72
Bhubaneshwar	Khurda	1	2.55	0.19	4.06	6.91	12.95	26.16
Bhubaneshwar	Nayagarh	1	1.62	0.74	2.54	3.82	3.05	20.83
Rourkela	Bonai	1	1.17	0.71	1.68	2.54	3.30	9.40
	Keonjhar	1	1.62	0.97	2.54	4.28	8.13	15.24
	Sundargarh	1	1.54	0.81	2.24	5.83	5.33	22.10

It is observed that seedlings form the highest proportion of all plants in all the surveyed divisions, indicating that plantation activities carried out had a positive impact on natural regeneration in the sites.

Table 79: Regeneration Status of ANR (with GAP) under CA scheme (2020-21)

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Angul	Angul	1	61.00	17.00	22.00
	Athgarh	1	51.00	30.00	19.00
	Cuttack	1	49.00	22.00	29.00
	Dhenkanal	1	40.00	22.00	38.00
Berhampur	Parlakhemundi	1	42.00	40.00	18.00
Bhawanipatna	Kalahandi S	1	54.00	30.00	16.00
	Subarnapur	1	67.00	23.00	10.00
Baripada	Balasore WL	1	68.00	27.00	5.00
Baripada	Keonjhar WL	1	72.00	19.00	9.00
Sambalpur	Bargarh	1	63.00	22.00	15.00
Bhubaneshwar	Khurda	1	54.00	32.00	14.00
Bhubaneshwar	Nayagarh	1	49.00	36.00	15.00
Rourkela	Bonai	1	73.00	15.00	12.00
Rourkela	Keonjhar	1	77.00	16.00	7.00
Rourkela	Sundargarh	1	55.00	29.00	16.00

Qualitative parameters

The data indicates good performance of the surveyed sites across qualitative parameters. The sites did not display any significant signs of grazing and fire incidences. Other than a few minor incidences of sheet erosion observed in few sites, the overall quality of silvicultural operations had a positive impact on soil erosion. Density of recruits was moderate.

The official documents of the plantation sites were found to be well maintained and updated with the exception of few divisions where the treatment maps were not made available during the field visit.

Table 80: Qualitative parameters for ANR (with GAP) under CA scheme (2020-21)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion	Soil Work	Journal	Plantation Map	Treatment Map	Display Board	Boundary Pillars
Angul	Angul	2.00	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Athgarh	3.00	2.00	2.00	2.00	3.00	2.00	3.00	3.00	2.00	3.00	3.00
	Cuttack	3.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00
	Dhenkanal	3.00	3.00	2.00	2.00	3.00	2.00	3.00	3.00	2.00	3.00	3.00
Berhampur	Parlakhemundi	2.00	3.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
Bhawanipatna	Kalahandi S	2.00	3.00	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Subarnapur	3.00	3.00	2.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	2.00
Baripada	Balasore WL	3.00	3.00	2.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	2.00
	Keonjhar WL	3.00	2.00	2.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
Sambalpur	Bargarh	2.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Bhubaneswar	Khurda	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	Nayagarh	3.00	3.00	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	2.00
Rourkela	Bonai	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00
	Keonjhar	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00
	Sundargarh	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00

Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.

5.3.1.3. ANR Without GAP

For plantation under CA scheme in 2020-21, total treated area in Berhampur Circle was 30.00 ha, spread across 1 site. The survey was carried out in 1 site, equating to 30 ha. In Bhawanipatna Circle, total treated area was 449.00 ha, spread across 2 sites. Of these, 1 site with an area of 129.00 ha was surveyed.

Table 81: Area and site coverage for ANR Without GAP under CA scheme (2020-21)

Circle	Division	Total Area treated		Area Studied	
		Area	No of sites	Area	No of sites
Berhampur	Parlakhemundi	30.00	1	30.00	1
Bhawanipatna	Kalahandi S	449.00	2	129.00	1
Total		479.00	3	159.00	2

Regeneration status

Majority of the plants found during the survey of NPV scheme in 2020-21, accounted for seedlings, followed by saplings and poles.

Table 82: Regeneration Status of ANR (without GAP) under CA scheme (2020-21): Regeneration Survey percentage

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Berhampur	Parlakhemundi	1	63.00	25.00	12.00
Bhawanipatna	Kalahandi S	1	54.00	26.00	20.00

Qualitative parameters

The performance of the sites surveyed was observed to be good across quality parameters. No signs of grazing and fire were observed in Bhawanipatna while, some cases of grazing were recorded in Parlakhemundi division during the field survey. Density of recruits was moderate to dense sites and plantation works were effective in controlling erosion. The official documents were made available to the enumeration team during the survey and were found to be in order, treatment map was unavailable in some recorded cases in Berhampur.

Table 83: Qualitative parameters for ANR without GAP under CA scheme (2020-21)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion Control	Soil Work	Journal	Plantation Map	Treatment map	Display Board	Boundary pillars
Berhampur	Parlakhemundi	2.00	3.00	3.00	3.00	2.00	2.00	2.00	2.00	1.00	3.00	2.00
Bhawanipatna	Kalahandi S	3.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

5.3.2. Net Present Value Scheme

5.3.2.1. Block Plantation

For block plantation, total area treated under NPV scheme for the year 2020-21, 2911.32 ha was covered with 187 sites in total for Angul, Berhampur, Bhawanipatna, Sambalpur, Bhubaneswar, Rourkela and Koraput circle, out of these sites 49 sites were surveyed which covered an area of 678 ha, the division-wise break down in mentioned in Table 84.

Table 84: Area and site coverage for block plantation and bamboo plantation under NPV scheme (2020-21)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Angul	Athgarh	20.00	1	20.00	1
	Cuttack	20.00	1	20.00	1
Total		40.00	2	40.00	2
Berhampur	Balliguda	80.00	10	10.00	2
	Berhampur	40.00	4	10.00	2
	Boudh	23.00	2	12.00	1
	Ghumsur North	30.00	1	30.00	1
	Ghumsur South	20.00	4	5.00	1
	Parlakhemundi	210.00	14	20.00	2
	Phulbani	30.00	2	10.00	2
Total		433.00	37	97.00	11
Bhawanipatna	Bolangir	220.00	14	25.00	3
	Kalahandi N	165.00	8	20.00	2
	Kalahandi S	190.00	7	20.00	2
	Khariar	115.00	11	20.00	3
	Subarnapur	215.00	7	20.00	2
Total		905.00	47	105.00	12
Sambalpur	Bargarh	50.00	1	50.00	1
Total		50.00	1	50.00	1
Bhubaneshwar	Bhadrakh WL	27.00	9	1.00	1
	Khurda	100.00	4	25.00	1
	Nayagarh	136.00	9	35.00	2
Total		263.00	22	61.00	4
Rourkela	Keonjhar	10.00	1	10.00	1
	Rourkela	158.00	9	75.00	3
	Sundargarh	17.32	3	10.00	1
Total		185.32	13	95.00	5

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Koraput	Jeypore	165.00	11	40.00	3
	Koraput	390.00	20	80.00	3
	Malkangiri	115.00	7	35.00	2
	Nabarangpur	200.00	16	10.00	1
	Rayagada	105.00	8	15.00	2
Total		975.00	62	180.00	11
Grand Total		2911.32	187	678.00	49

Artificial regeneration

The performance of surveyed plantations in all divisions is excellent with survival ranging from 81-98 %. The growth of plants in the plantations is observed to be healthy with average height ranging between 0.8-2.4 m and average collar girth between 4.69 to 20.05 cm. Division wise details are presented in the tables below:

Table 85: Survival status for block plantation (Planted) under NPV scheme (2020-21)

Circle	Division	No of sites studied	Survival %		
			Average	Minimum	Maximum
Angul	Angul	1	94.00	94.00	94.00
	Athgarh	1	92.00	92.00	92.00
	Athmallik	1	91.00	91.00	91.00
	Cuttack	1	96.00	96.00	96.00
Berhampur	Balliguda	2	82.50	82.00	83.00
	Berhampur	2	88.00	82.00	94.00
	Boudh	1	93.00	93.00	93.00
	Ghumsur North	1	91.00	91.00	91.00
	Ghumsur South	1	90.00	90.00	90.00
	Parlakhemundi	2	90.00	89.00	91.00
	Phulbani	2	96.00	96.00	96.00
Bhawanipatna	Bolangir	3	81.00	73.00	89.00
	Kalahandi N	2	92.00	87.00	96.00
	Kalahandi S	2	87.00	84.00	90.00
	Khariar	3	93.00	90.00	97.00
	Subarnapur	2	90.00	87.00	93.00
Sambalpur	Bargarh	1	87.00	87.00	87.00
Bhubaneshwar	Bhadrakh WL	1	90.00	90.00	90.00
	Khurda	1	98.00	98.00	98.00
	Nayagarh	2	88.50	87.00	90.00

Circle	Division	No of sites studied	Survival %		
			Average	Minimum	Maximum
Rourkela	Keonjhar	1	97.00	97.00	97.00
	Rourkela	3	94.50	94.00	95.00
	Sundargarh	1	97.00	97.00	97.00
Koraput	Jeypore	3	98.00	97.00	99.00
	Koraput	3	92.00	90.00	100.00
	Malkangiri	2	94.00	94.00	94.00
	Nabarangpur	1	98.00	98.00	98.00
	Rayagada	2	96.50	96.00	97.00

Table 86: Growth status for block plantation (Planted) under NPV scheme (2020-21): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M)			Collar Girth (Cm)		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	1.46	0.56	4.43	6.45	2.54	34.21
	Athgarh	1	1.72	0.43	2.67	7.33	2.89	45.12
	Athmallik	1	1.32	0.37	3.80	4.69	2.29	29.70
	Cuttack	1	1.55	0.29	5.89	5.65	3.81	34.22
Berhampur	Balliguda	2	1.56	0.64	11.43	11.14	3.30	92.46
	Berhampur	2	1.37	0.37	3.43	7.78	2.03	28.19
	Boudh	1	2.40	0.61	3.30	17.47	8.13	21.84
	Ghumsur North	1	1.86	0.30	5.59	12.05	2.79	31.50
	Ghumsur South	1	1.71	0.40	4.70	12.40	4.06	30.48
	Parlakhemundi	2	1.28	0.31	5.33	6.92	2.79	43.69
	Phulbani	2	1.99	0.18	6.60	17.74	4.32	30.48
Bhawanipatna	Bolangir	3	0.88	0.30	1.66	8.08	3.05	30.73
	Kalahandi N	2	1.10	0.30	2.16	10.22	2.29	58.90
	Kalahandi S	2	1.48	0.51	3.56	13.59	3.30	47.34
	Khariar	3	1.44	0.15	3.81	7.70	2.54	36.00
	Subarnapur	2	1.66	0.84	13.46	7.99	3.81	16.26
Bhubaneshwar	Bhadrakh WL	1	1.12	0.38	2.29	8.40	2.29	23.11
	Khurda	1	0.94	0.43	1.47	5.53	2.54	8.89
	Nayagarh	2	1.08	0.56	2.03	7.54	4.57	14.22
Rourkela	Keonjhar	1	1.94	0.64	3.68	13.44	5.08	21.59
	Rourkela	3	1.40	0.64	2.24	10.77	3.81	46.99
	Sundargarh	1	1.04	0.69	1.47	5.99	2.54	30.48
Koraput	Jeypore	3	2.18	0.48	4.83	20.05	2.79	88.90
	Koraput	3	1.01	0.27	3.05	7.04	2.54	58.42

Circle	Division	No of sites studied	Height (M)			Collar Girth (Cm)		
			Avg.	Min.	Max.	Avg.	Min.	Max.
	Malkangiri	2	0.91	0.30	1.85	5.53	2.54	13.46
	Nabarangpur	1	1.41	0.15	4.83	7.15	1.27	22.35
	Rayagada	2	1.08	0.19	1.83	8.40	3.81	17.78

5.3.2.2. Bamboo Plantation

Table 87: Area Coverage under Bamboo Plantation under NPV scheme (2020-21)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Angul	Angul	30.00	1	30.00	1
	Athmallik	30.00	1	30.00	1
Total		60.00	2	60.00	2
Berhampur	Balliguda	20.00	2	10.00	1
	Ghumsur North	30.00	1	30.00	1
	Parlakhemundi	210.00	14	20.00	2
	Phulbani	30.00	2	10.00	1
Total		290.00	19	70.00	5
Bhawanipatna	Bolangir	30.00	1	30.00	1
	Kalahandi N	100.00	4	20.00	1
	Khariar	40.00	2	20.00	1
Total		170.00	7	70.00	3
Sambalpur	Bargarh	50.00	1	50.00	1
Total		50.00	1	50.00	1
Bhubaneswar	Nayagarh	30.00	4	10.00	1
Total		30.00	4	10.00	1
Rourkela	Sundargarh	20.00	1	20.00	1
Total		20.00	1	20.00	1
Koraput	Jeypore	50.00	4	20.00	1
	Malkangiri	30.00	3	10.00	1
Total		80.00	7	30.00	2
Grand Total		700.00	41	310.00	15

Table 88: Survival Status of Bamboo Plantation under NPV Scheme (2020-21)

Circle	Division	No of sites studied	Survival %		
			Average	Minimum	Maximum
Angul	Angul	1	94.00	94.00	94.00
	Athmallik	1	91.00	91.00	91.00
Berhampur	Balliguda	2	82.50	82.00	83.00

Circle	Division	No of sites studied	Survival %		
			Average	Minimum	Maximum
	Ghumsur North	1	91.00	91.00	91.00
	Parlakhemundi	2	90.00	89.00	91.00
	Phulbani	2	96.00	96.00	96.00
Bhawanipatna	Bolangir	3	81.00	73.00	89.00
	Kalahandi N	2	92.00	87.00	96.00
	Khariar	3	93.00	90.00	97.00
Sambalpur	Bargarh	1	87.00	87.00	87.00
Bhubaneswar	Nayagarh	2	88.50	87.00	90.00
Rourkela	Sundargarh	1	97.00	97.00	97.00
Koraput	Jeypore	3	98.00	97.00	99.00
	Malkangiri	2	94.00	94.00	94.00

Table 89: Growth status for bamboo plantation (Planted) under NPV scheme (2020-21): Clump girth and no. of culms

Circle	Division	No of Sites Studied	Clump Girth (Cm)			No. Of Culms		
			Avg.	Min.	Max.	Avg.	Min.	Max.
Angul	Angul	1	14.51	7.21	27.89	4.34	1.00	11.00
	Athmallik	1	11.60	2.00	26.40	3.32	1.00	6.00
Berhampur	Balliguda	2	31.59	2.54	48.26	8.73	3.00	15.00
	Gh North	2	16.79	0.51	50.8	4.13	1.00	17.00
	Parlakhemundi	2	9.88	3.10	18.40	4.18	2.00	7.00
	Phulbani	2	67.39	30.48	279.4	7.34	4.00	14.00
Bhawanipatna	Kalahandi N	2	41.01	18.13	142.24	4.19	1.00	13.00
	Bolangir	2	31.76	16.00	100.00	21.22	6.00	54.00
	Khariar	3	13.51	6.00	26.30	4.05	2.00	8.00
Sambalpur	Bargarh	1	40.78	16.00	87.00	20.43	8.00	34.00
Bhubaneshwar	Nayagarh	2	34.76	16.00	110.00	20.22	4.00	67.00
Koraput	Jeypore	3	32.35	12.30	43.20	4.21	3.00	6.00
	Malkangiri	2	11.60	2.00	26.40	3.32	1.00	6.00

Qualitative parameters

Performance of majority of the Divisions across all the quality parameters is good. No grazing signs were observed in the plantations, expect minor incidences. Similarly, fire incidences were not found during the survey. Soil working has a positive impact on erosion have recorded minor grazing and fire incidences. Weeding in this region was found to be relatively effective with few exceptions of patches that had weed.

Soil work was done but the quality could have been improved. Boundary pillars and display board was available in the sites, and it was properly demarcated.

Table 90: Qualitative Parameters for bamboo plantation (Planted) under NPV scheme (2020-21)

Circle	Division	Grazing	Fire	Coppice	Soil Working	Journal	Plantation Map	Treatment Map	Display Board	Boundary Pillars
Angul	Angul	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
	Athgarh	3.00	3.00	3.00	3.00	3.00	3.00	2.00	3.00	3.00
	Athmallik	3.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00
	Cuttack	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Berhampur	Balliguda	2.50	3.00	3.00	2.00	3.00	3.00	2.00	3.00	3.00
	Berhampur	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Boudh	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Ghumsur North	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Ghumsur South	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Parlakhemundi	2.50	3.00	3.00	3.00	3.00	3.00	2.00	3.00	3.00
	Phulbani	3.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00
Bhawanipatna	Bolangir	2.70	3.00	2.00	2.50	3.00	3.00	2.70	3.00	2.70
	Kalahandi N	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Kalahandi S	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Khariar	2.70	3.00	2.00	2.50	3.00	3.00	2.70	3.00	2.70
	Subarnapur	2.50	3.00	2.00	2.00	3.00	2.50	2.50	3.00	3.00
Sambalpur	Bargarh	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
Bhubaneshwar	Bhadrakh WL	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Khurda	3.00	3.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Nayagarh	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
Rourkela	Keonjhar	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Rourkela	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Sundargarh	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
Koraput	Jeypore	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Koraput	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Malkangiri	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Nabarangpur	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Rayagada	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.										

5.3.2.2. ANR With GAP

Under NPV scheme of 2020-21, ANR (with gap) were undertaken in 37580 ha which covered 562 sites in total across Angul, Berhampur, Bhawanipatna, Baripada, Sambalpur, Rourkela, Bhubaneswar and Koraput circle. A total of 68 sites were surveyed covering 4225 ha, the division wise break down is mentioned in Table 91.

Table 91: Area Coverage for ANR with GAP under NPV scheme (2020-21)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Angul	Angul	600.00	10	55.00	1
	Athgarh	480.00	7	50.00	1
	Athmallik	150.00	2	70.00	1
	Cuttack	500.00	10	50.00	1
	Dhenkanal	1000.00	9	100.00	2
Total		2730.00	38	325.00	6
Berhampur	Balliguda	1500.00	26	150.00	3
	Berhampur	1000.00	22	150.00	3
	Boudh	1000.00	15	150.00	3
	Ghumsur North	700.00	11	100.00	1
	Ghumsur South	900.00	20	130.00	2
	Parlakhemundi	1200.00	24	150.00	2
	Phulbani	2500.00	29	200.00	4
Total		8800.00	147	1030.00	18
Bhawanipatna	Bolangir	2000.00	30	200.00	3
	Kalahandi N	2500.00	30	220.00	3
	Kalahandi S	2815.00	24	180.00	3
	Khariar	1050.00	20	130.00	2
	Subarnapur	1000.00	15	100.00	2
Total		9365.00	119	830.00	13
Baripada	Karanjia	750.00	14	100.00	2
	Keonjhar WL	1500.00	12	75.00	1
Total		2250.00	26	175.00	3
Sambalpur	Bargarh	1000.00	9	100.00	1
	Jharsuguda	650.00	14	75.00	2
	Rairakhol	600.00	7	50.00	1
Total		2250.00	30	225.00	4
Bhubaneshwar	Chilika WL	135.00	2	100.00	1
	Khurda	300.00	5	50.00	1
	Nayagarh	1000.00	13	150.00	2

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Total		1435.00	20	300.00	4
Rourkela	Bonai	600.00	6	50.00	1
	Deogarh	600.00	11	50.00	1
	Keonjhar	600.00	11	50.00	1
	Rourkela	730.00	8	100.00	1
	Sundargarh	1000.00	14	170.00	2
Total		3530.00	50	420.00	6
Koraput	Jeypore	400.00	13	50.00	1
	Koraput	1000.00	17	100.00	2
	Malkangiri	800.00	24	60.00	2
	Nabarangpur	2000.00	30	200.00	3
	Rayagada	3020.00	48	510.00	6
Total		7220.00	132	920.00	14
Grand Total		37580.00	562	4225.00	68

Regeneration status

Majority of the plantations have performed well having a survival rate ranging from 79 – 100%, baring a few which have lower survival rates in the range of 67-68%. It shows overall that the plantation is in good condition on an average.

Table 92: Survival status for ANR with GAP under NPV scheme (2020-21): Survival Rate

Circle	Division	No of sites studied	Survival % in GP		
			Avg.	Min.	Max.
Angul	Angul	1	80.00	80.00	80.00
	Athgarh	1	79.00	79.00	79.00
	Athmallik	1	84.00	84.00	84.00
	Cuttack	1	87.00	87.00	87.00
	Dhenkanal	2	98.00	98.00	99.00
Berhampur	Balliguda	3	68.00	61.00	80.00
	Berhampur	3	94.00	89.00	99.00
	Boudh	3	84.00	72.00	92.00
	Ghumsur North	1	87.00	87.00	87.00
	Ghumsur South	2	96.00	92.00	100.00
	Parlakhemundi	2	85.00	84.00	86.00
	Phulbani	4	90.00	89.00	92.00
Bhawanipatna	Bolangir	3	92.00	88.00	97.00
	Kalahandi N	3	86.00	84.00	89.00

Circle	Division	No of sites studied	Survival % in GP		
			Avg.	Min.	Max.
	Kalahandi S	3	97.00	96.00	99.00
	Khariar	2	95.00	91.00	99.00
	Subarnapur	2	90.00	89.00	91.00
Baripada	Karanjia	2	82.00	72.00	92.00
	Keonjhar WL	1	100.00	100.00	100.00
	Bargarh	1	81.00	81.00	81.00
Sambalpur	Jharsuguda	2	83.00	65.00	100.00
	Rairakhol	1	67.00	81.00	67.00
	Chilika WL	1	96.00	96.00	96.00
Bhubaneshwar	Khurda	1	93.00	93.00	93.00
	Nayagarh	2	94.00	96.00	98.00
	Bonai	1	96.00	96.00	96.00
	Deogarh	1	87.00	87.00	87.00
Rourkela	Keonjhar	1	95.00	95.00	95.00
	Rourkela	1	91.00	91.00	91.00
	Sundargarh	2	88.00	82.00	94.00
	Jeypore	1	87.00	87.00	87.00
	Koraput	2	85.00	82.00	88.00
Koraput	Malkangiri	2	81.00	75.00	87.00
	Nabarangpur	3	87.00	83.00	92.00
	Rayagada	6	86.00	76.00	99.00

Table 93: Growth status for ANR With GAP under NPV scheme (2020-21): Average Height and Collar Girth

Circle	Division	No of sites studied	Height (M) in GP			Collar Girth (Cm) in GP		
			Avg.	Min.	Max.	Avg.	Min.	Max.
	Angul	1	1.54	0.66	3.02	13.45	3.05	180.35
	Athgarh	1	1.04	0.67	10.69	8.01	3.81	27.10
Angul	Athmallik	1	1.67	0.43	4.38	12.43	3.23	89.97
	Cuttack	1	0.86	0.25	1.51	9.06	3.05	14.73
	Dhenkanal	2	1.66	0.12	3.18	10.64	2.67	152.40
	Balliguda	3	1.42	0.72	2.57	9.13	4.23	14.23
	Berhampur	3	2.18	0.47	11.54	12.99	2.79	177.80
Berhampur	Boudh	3	2.05	0.46	4.75	13.94	3.81	210.82
	Ghumsur North	1	1.25	0.89	28.71	11.34	2.21	228.60
	Ghumsur South	2	1.43	0.91	4.82	9.90	2.54	35.81

Circle	Division	No of sites studied	Height (M) in GP			Collar Girth (Cm) in GP		
			Avg.	Min.	Max.	Avg.	Min.	Max.
	Parlakhemundi	2	0.94	0.38	5.58	8.55	2.54	65.88
	Phulbani	4	1.55	0.38	6.61	15.09	2.54	203.32
Bhawanipatna	Bolangir	3	1.48	0.23	8.89	15.70	3.81	165.13
	Kalahandi N	3	1.37	0.47	2.49	8.53	3.31	106.68
	Kalahandi S	3	1.27	0.56	3.08	12.01	7.62	139.71
	Khariar	2	1.31	0.15	6.35	12.71	2.54	96.52
	Subarnapur	2	0.92	0.38	3.30	6.52	2.54	36.32
Baripada	Karanjia	2	2.58	0.23	3.30	7.69	10.16	79.40
	Keonjhar WL	1	1.91	1.14	3.18	6.50	7.87	25.91
Sambalpur	Bargarh	1	1.12	0.23	2.44	2.13	1.51	17.27
	Jharsuguda	2	0.79	1.14	2.03	1.85	1.51	30.48
	Rairakhol	1	0.91	0.25	2.11	3.06	2.51	35.56
Bhubaneshwar	Chilika WL	1	1.73	0.25	3.30	5.03	2.54	31.50
	Khurda	1	1.24	0.25	2.41	2.95	2.54	14.22
	Nayagarh	2	1.22	0.30	2.21	2.86	1.76	31.60
Rourkela	Bonai	1	1.69	0.46	2.18	4.11	6.60	14.48
	Deogarh	1	1.31	0.25	1.93	7.50	4.32	76.20
	Keonjhar	1	1.68	0.18	2.59	2.98	2.54	38.10
	Rourkela	1	1.51	0.86	2.29	3.38	3.81	13.46
	Sundargarh	2	2.75	0.84	4.06	6.19	8.89	29.21
Koraput	Jeypore	1	1.02	0.89	2.08	2.16	2.54	11.43
	Koraput	2	2.23	1.27	10.16	4.62	4.83	88.39
	Malkangiri	2	1.53	0.15	3.81	3.37	2.54	19.56
	Nabarangpur	3	1.49	0.86	3.56	3.58	2.29	78.74
	Rayagada	6	1.59	0.36	4.57	5.01	5.33	43.69

Table 94: Regeneration Status of ANR (with GAP) under NPV scheme (2020-21)

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Angul	Angul	1	37.00	33.00	30.00
	Athgarh	1	45.00	20.00	35.00
	Athmallik	1	56.00	25.00	19.00
	Cuttack	1	49.00	22.00	29.00
	Dhenkanal	2	35.00	25.00	40.00
Berhampur	Balliguda	3	63.00	21.00	16.00
	Berhampur	3	36.00	32.00	32.00

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
	Boudh	3	43.00	36.00	21.00
	Ghumsur North	1	62.00	27.00	11.00
	Ghumsur South	2	41.00	37.00	22.00
	Parlakhemundi	2	58.00	26.00	16.00
	Phulbani	4	61.00	25.00	14.00
Bhawanipatna	Bolangir	3	50.00	30.00	20.00
	Kalahandi N	3	57.00	21.00	22.00
	Kalahandi S	3	63.00	23.00	14.00
	Khariar	2	53.00	25.00	22.00
	Subarnapur	2	59.00	17.00	23.00
Sambalpur	Bargarh	1	25.00	61.00	14.00
	Jharsuguda	2	56.00	38.00	6.00
	Rairakhol	1	62.00	23.00	15.00
Bhubaneshwar	Chilika WL	1	51.00	27.00	22.00
	Khurda	1	55.00	23.00	22.00
	Nayagarh	2	62.00	24.00	14.00
Rourkela	Bonai	1	73.00	15.00	12.00
	Deogarh	1	56.00	33.00	11.00
	Keonjhar	1	54.00	33.00	13.00
	Rourkela	1	55.00	29.00	16.00
	Sundargarh	2	38.00	34.00	28.00
Koraput	Jeypore	1	45.00	39.00	16.00
	Koraput	2	60.00	29.00	11.00
	Malkangiri	2	63.00	17.00	20.00
	Nabarangpur	3	63.00	21.00	16.00
	Rayagada	6	58.00	21.00	21.00

Qualitative parameters

The data indicates good performance of the surveyed sites across qualitative parameters. The sites did not display any significant signs of grazing and fire incidences. Other than a few incidences of sheet erosion observed in few sites, the overall quality of silvicultural operations had a positive impact on soil erosion. Density of recruits was moderate to dense.

The official documents of the plantation sites were found to be well maintained and updated except for a few divisions where the treatment maps were not made available during the field visit.

Table 95: Qualitative parameters for ANR (with gap) under NPV scheme (2020-21)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion	Journal	Plantation MAP	Treatment Map	Display Board	Boundary Pillars
Angul	Angul	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Athgarh	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Athmallik	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Cuttack	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.50	3.00	3.00
	Dhenkanal	3.00	3.00	2.50	2.00	2.00	3.00	3.00	2.50	3.00	2.00
Berhampur	Balliguda	2.00	3.00	2.50	2.00	2.00	3.00	3.00	2.50	3.00	2.70
	Berhampur	2.80	3.00	2.70	2.00	2.00	3.00	3.00	2.70	3.00	2.70
	Boudh	2.70	2.80	2.70	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Ghumsur North	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Ghumsur South	3.00	2.50	2.50	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Parlakhemundi	2.50	2.50	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
	Phulbani	3.00	2.80	2.80	2.00	2.00	3.00	3.00	2.70	3.00	3.00
Bhawanipatna	Bolangir	3.00	2.80	2.70	2.00	2.00	3.00	3.00	2.70	3.00	3.00
	Kalahandi N	2.70	2.80	2.70	2.00	2.00	3.00	3.00	3.00	3.00	2.00
	Kalahandi S	3.00	2.70	2.70	2.00	2.00	3.00	3.00	3.00	3.00	2.00
	Khariar	3.00	3.00	2.50	2.00	2.00	3.00	3.00	3.00	3.00	2.00
	Subarnapur	3.00	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00
Sambalpur	Bargarh	3.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Jharsuguda	2.00	2.50	2.00	2.00	2.50	3.00	3.00	2.50	2.50	2.00
	Rairakhol	2.00	2.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00
Bhubaneshwar	Chilika WL	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
	Khurda	3.00	3.00	2.00	3.00	3.00	3.00	3.00	2.00	3.00	2.00
	Nayagarh	3.00	3.00	3.00	2.50	2.50	3.00	3.00	2.50	3.00	2.50
Rourkela	Bonai	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
	Deogarh	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
	Keonjhar	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
	Rourkela	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00

Circle	Division	Grazing	Fire	Coppice	Density	Erosion	Journal	Plantation MAP	Treatment Map	Display Board	Boundary Pillars
	Sundargarh	3.00	3.00	2.50	2.50	2.50	3.00	3.00	2.50	3.00	2.50
Koraput	Jeypore	3.00	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
	Koraput	3.00	3.00	2.50	2.50	2.50	3.00	3.00	2.50	3.00	2.50
	Malkangiri	3.00	3.00	2.50	2.50	2.50	3.00	3.00	2.50	3.00	2.50
	Nabarangpur	2.67	3.00	2.67	2.33	2.33	3.00	3.00	2.33	3.00	2.33
	Rayagada	2.67	2.67	2.33	2.33	2.33	3.00	3.00	2.33	2.67	2.33
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.											

5.3.2.3. ANR Without GAP

For plantation under Ama Jangal Yojana (AJY) scheme in 2020-21, total treated area is 12540 ha across 251 sites in Angul, Berhampur, Bhawanipatna, Sambalpur, Rourkela and Koraput circle. The team has surveyed 1760 ha by visiting 29 sites across these circles mentioned above. Division – wise breakdown is mentioned in Table 101.

Table 96: Area and site coverage for ANR Without GAP under AJY scheme (2020-21)

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
Angul	Angul	1000.00	20	100.00	2
Total		1000.00	20	100.00	2
Berhampur	Balliguda	1000.00	20	150.00	3
	Ghumsur South	100.00	3	50.00	1
	Parlakhemundi	200.00	3	50.00	1
Total		1300.00	26	230.00	5
Bhawanipatna	Bolangir	2000.00	40	200.00	4
Total		2000.00	40	200.00	4
Baripada	Balasore WL	750.00	15	120.00	2
Total		750.00	15	120.00	2
Sambalpur	Bamra WL	1000.00	20	100.00	2
	Rairakhol	1000.00	20	150.00	3
Total		2000.00	40	250.00	5
Rourkela	Rourkela	490.00	10	40.00	1
Total		490.00	10	40.00	1
Koraput	Malkangiri	2000.00	40	500.00	4

Circle	Division	Total Area treated		Area Studied	
		Area (ha)	No of sites	Area (ha)	No of sites
	Nabarangpur	3000.00	60	300.00	6
Total		5000.00	100	800.00	10
Grand Total		12540.00	251	1760.00	29

Regeneration status

Majority of the plants found during the survey of NPV scheme in 2020-21, accounted for seedlings, followed by saplings and poles.

Table 97: Regeneration Status of ANR (without GAP) under AJY scheme (2020-21): Regeneration Survey percentage

Circle	Division	No of sites studied	Regeneration Survey %		
			Seedlings	Saplings	Poles
Angul	Angul	2	41.00	52.00	7.00
Berhampur	Balliguda	3	65.00	24.00	12.00
	Ghumsur South	1	63.00	26.00	11.00
	Parlakhemundi	1	52.00	27.00	21.00
Bhawanipatna	Bolangir	4	50.00	29.00	21.00
Baripada	Balasore WL	2	57.00	30.00	13.00
Sambalpur	Bamra WL	2	56.00	28.00	16.00
	Rairakhol	3	46.00	37.00	17.00
Rourkela	Rourkela	1	49.00	28.00	22.00
Koraput	Malkangiri	4	59.00	24.00	17.00
	Nabarangpur	6	54.00	30.00	16.00

Qualitative parameters

The performance of the surveyed was observed to be good across quality parameters. Minor Incidence of grazing and fire were observed during the field survey. Density of plant was moderate, and plantation works need to be improved in higher slopes in controlling erosion. The official documents were made available to the enumeration team during the survey and were found to be in order. There were incidences of unavailability of treatment map of the sites.

Table 98: Qualitative parameters for ANR without GAP under AJY scheme (2020-21)

Circle	Division	Grazing	Fire	Coppice	Density	Erosion	Soil Work	Journal	Plantation Map	Treatment Map	Display Board	Boundary Pillar
Angul	Angul	2.50	3.00	2.00	2.00	2.00	2.50	3.00	2.50	2.00	3.00	2.50
Berhampur	Balliguda	2.70	2.70	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.70
	Ghumsur South	3.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00
	Parlakhemundi	3.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.00
Bhawanipatna	Bolangir	2.50	3.00	2.00	2.00	2.00	2.00	3.00	2.50	2.50	2.50	2.50
Baripada	Balasore WL	3.00	3.00	2.50	2.50	3.00	2.50	3.00	3.00	2.50	3.00	2.50
Sambalpur	Bamra WL	3.00	3.00	2.50	2.50	3.00	2.50	3.00	3.00	2.50	3.00	2.50
	Rairakhol	2.67	3.00	2.50	2.67	2.67	2.50	3.00	3.00	2.33	3.00	2.67
Rourkela	Rourkela	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	2.00	3.00	2.00
Koraput	Malkangiri	2.75	3.00	2.75	2.75	3.00	3.00	3.00	3.00	2.5	3.00	2.50
	Nabarangpur	2.67	3	2.83	2.83	2.67	2.83	3.00	3.00	2.67	2.83	2.67
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

5.3.2.4. Bamboo SSO (2020-21)

Table 99: Bamboo SSO under NPV Scheme (2020-21)

Circle	Division	No of sites studied	Average Clusters	No. of Clusters studied
Angul	Angul	1	110	11
	Athgarh	1	90	9
Berhampur	Phulbani	1	150	15
Sambalpur	Bargarh	1	30	3
	Rairakhol	1	100	10
	Sambalpur	1	30	3
Bhubaneshwar	Khurda	1	30	3
	Nayagarh	2	50	5
Bhawanipatna	Kalahandi N	2	60	6
Rourkela	Sundargarh	2	45	4
Koraput	Koraput	1	100	10
	Rayagada	2	40	4

Note: Each Cluster consists of 40 clumps on an average.

Table 100: Growth Status of Bamboo SSO work under NPV Scheme (2020-21)

Circle	Division	Clump girth			Regeneration of new shoots
		Average	Minimum	Maximum	Average
Angul	Angul	105.41	35.56	213.8	4
	Athgarh	114.98	17.272	233.68	4
Berhampur	Phulbani	151.05	114.3	193.04	5
Sambalpur	Bargarh	87.56	34.41	147.32	3
	Rairakhol	88.22	22.86	203.2	3
	Sambalpur	84.23	33.67	114.3	3
Bhubaneshwar	Khurda	269.43	91.44	462.28	6
	Nayagarh	387.87	269.24	538.48	6
Bhawanipatna	Kalahandi N	138.16	78.74	213.36	4
Rourkela	Sundargarh	198.12	172.72	226.06	5
Koraput	Koraput	381.71	134.62	975.36	6
	Rayagada	202.90	175.26	248.92	5

Table 101: Qualitative Parameters for Bamboo SSO under NPV Scheme (2020-21)

Circle	Division	Grazing	Fire	Coppice	Erosion	Shrubs	Decongestion	Mounding	Plantation Journal	Treatment Register	Display Board	boundary pillars
Angul	Angul	2.00	3.00	1.00	3.00	2.00	1.00	1.00	3.00	1.00	1.00	1.00
	Athgarh	2.49	2.00	3.00	2.51	3.00	3.00	2.51	1.00	1.00	1.00	1.00
Berhampur	Phulbani	3.00	3.00	1.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	1.00
Sambalpur	Bargarh	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	3.00
	Rairakhol	2.54	2.33	2.77	2.67	2.89	3.00	2.67	1.44	1.44	1.54	1.00
	Sambalpur	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	3.00
Bhubaneshwar	Khurda	2.54	2.33	2.77	2.67	2.89	3.00	2.67	1.44	1.44	1.54	1.00
	Nayagarh	2.49	2.00	3.00	2.51	3.00	3.00	2.51	1.00	1.00	1.00	1.00
Bhawanipatna	Kalahandi N	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	3.00
Rourkela	Sundargarh	3.00	3.00	1.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	1.00
Koraput	Koraput	3.00	3.00	1.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	1.00
	Rayagada	3.00	2.00	1.00	3.00	2.00	2.00	2.00	3.00	3.00	1.00	3.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.												

5.3.2.5. Infrastructure

Infrastructure works covered in the survey included buildings, roads and waterbodies. Performance of these structures are as follows:

Building infrastructure

Majority of the structures were found to be in use, ideally located and structurally stable as indicated in the table below. A few structures needed minor repairing; this analysis includes information collected from 112 buildings across the 51 divisions.

Table 102: Building infrastructure works under NPV scheme (2020-21) NPV

Circle	Division	General Condition	Site Location	Serving the intended purpose	Structural stability	Present use Free of dampness and leakage
Angul	Angul	2.75	2.75	2.50	2.50	3.00
	Athgarh	3.00	3.00	3.00	3.00	3.00
	Athmallik	3.00	2.80	2.70	3.00	3.00
	Cuttack	2.50	2.50	2.50	3.00	2.50
	Dhenkanal	3.00	3.00	2.75	3.00	2.88
	Mahanadi WL	2.86	3.00	2.86	3.00	2.71
	Satkosia WL	3.00	2.80	2.72	2.75	2.70
Berhampur	Balliguda	3.00	3.00	3.00	2.75	3.00
	Boudh	2.80	3.00	2.80	3.00	3.00
	Ghumsur North	3.00	2.50	2.50	3.00	3.00
	Ghumsur South	3.00	2.80	2.80	3.00	2.80
	Parlakhemundi	3.00	3.00	2.75	3.00	2.80
	Phulbani	3.00	3.00	2.50	3.00	3.00
Bhawanipatna	Bolangir	2.80	3.00	2.80	3.00	2.75
	Kalahandi N	2.67	3.00	3.00	2.67	2.83
	Kalahandi S	3.00	3.00	3.00	3.00	3.00
	Khariar	3.00	3.00	3.00	3.00	3.00
Baripada	Balasore WL	3.00	3.00	3.00	3.00	3.00
	Baripada	3.00	3.00	2.92	3.00	3.00
	Karanjia	3.00	3.00	3.00	3.00	3.00
	Keonjhar WL	3.00	3.00	3.00	3.00	3.00
	Rairangpur	3.00	3.00	3.00	3.00	3.00
	STR North	3.00	3.00	3.00	3.00	3.00
	STR South	3.00	3.00	3.00	3.00	3.00

Circle	Division	General Condition	Site Location	Serving the intended purpose	Structural stability	Present use Free of dampness and leakage
Sambalpur	Bamra WL	3.00	3.00	2.75	3.00	2.75
	Bargarh	3.00	3.00	3.00	3.00	3.00
	Hirakud WL	3.00	3.00	3.00	3.00	3.00
	Jharsuguda	3.00	3.00	3.00	3.00	3.00
	Rairakhol	3.00	3.00	2.50	2.50	2.75
	Sambalpur	3.00	3.00	3.00	3.00	3.00
Bhubaneswar	Bhadrakh WL					
	Chandaka WL	3.00	3.00	3.00	3.00	3.00
	Chilika WL	3.00	3.00	3.00	3.00	3.00
	City Forest	3.00	3.00	3.00	3.00	2.00
	Khurda	3.00	3.00	3.00	3.00	3.00
	Nayagarh	3.00	3.00	3.00	3.00	3.00
	Puri WL					
	Rajnagar WL	3.00	3.00	2.67	2.33	3.00
Rourkela	Bonai	3.00	3.00	3.00	3.00	3.00
	Deogarh	3.00	3.00	3.00	3.00	3.00
	Keonjhar					
	Rourkela	3.00	3.00	3.00	3.00	3.00
	Sundargarh	3.00	3.00	3.00	3.00	3.00
Koraput	Jeypore	3.00	3.00	2.83	3.00	2.33
	Koraput	3.00	3.00	3.00	3.00	2.75
	Malkangiri	3.00	3.00	3.00	3.00	2.67
	Nabarangpur	3.00	2.80	3.00	2.80	3.00
	Rayagada	3.00	3.00	3.00	3.00	2.25
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.						

Road infrastructure

The surveyed road sites were in good condition with two sites in need for minor repair. The location of the roads was appropriately selected. They are used frequently and have improved connectivity, particularly to remote locations. This analysis includes information of 3 causeways, 3 culverts and 4 forest roads.

Table 103: Road infrastructure works under NPV scheme (2020-21)

Circle	Division	Road Infrastructure			
		General Condition	Utility of the road	Serving the intended purpose	Duration of usage in a year
Angul	Angul	3.00	2.00	2.00	3.00
	Athgarh	3.00	2.67	2.83	2.50
	Athmallik	3.00	2.50	2.50	3.00
	Cuttack	3.00	3.00	3.00	3.00
	Dhenkanal	3.00	3.00	2.33	2.67
	Mahanadi WL	3.00	2.00	2.00	3.00
	Satkosia WL	3.00	3.00	3.00	3.00
Berhampur	Balliguda	3.00	2.25	2.75	3.00
	Boudh	3.00	3.00	3.00	2.50
	Ghumsur North	3.00	3.00	2.50	3.00
	Ghumsur South	3.00	3.00	3.00	3.00
	Parlakhemundi	3.00	2.50	2.50	3.00
	Phulbani	2.50	2.50	2.00	2.00
Bhawanipatna	Bolangir	3.00	2.50	2.50	3.00
	Kalahandi N	3.00	2.80	2.80	3.00
	Kalahandi S	3.00	3.00	2.75	3.00
	Khariar	3.00	3.00	2.50	3.00
Baripada	Balasore WL	3.00	3.00	3.00	3.00
	Baripada	3.00	3.00	3.00	3.00
	Karanjia	2.00	3.00	3.00	3.00
	Keonjhar WL	3.00	3.00	3.00	3.00
	Rairangpur	3.00	3.00	3.00	3.00
	STR North	2.00	3.00	3.00	3.00
	STR South	3.00	3.00	3.00	3.00
Sambalpur	Bamra WL	3.00	3.00	3.00	3.00
	Bargarh	3.00	3.00	3.00	1.67
	Hirakud WL	2.50	3.00	2.00	2.00
	Jharsuguda	3.00	3.00	3.00	3.00
	Rairakhol	3.00	3.00	3.00	3.00
	Sambalpur	3.00	3.00	3.00	3.00
Bhubaneswar	Bhadrakh WL	3.00	3.00	3.00	3.00
	Chandaka WL	2.80	2.80	2.8	2.50
	Chilika WL	2.00	3.00	3.00	3.00
	City Forest	3.00	3.00	3.00	3.00
	Khurda	3.00	3.00	3.00	3.00

Circle	Division	Road Infrastructure			
		General Condition	Utility of the road	Serving the intended purpose	Duration of usage in a year
	Nayagarh	2.00	3.00	3.00	3.00
	Puri WL	2.50	3.00	2.00	2.00
	Rajnagar WL	2.50	2.75	2.75	2.50
Rourkela	Bonai	2.80	2.80	2.8	2.50
	Deogarh	3.00	3.00	3.00	3.00
	Keonjhar	3.00	3.00	3.00	3.00
	Rourkela	3.00	3.00	3.00	3.00
	Sundargarh	3.00	3.00	3.00	3.00
Koraput	Jeypore	3.00	3.00	3.00	3.00
	Koraput	3.00	3.00	2.00	3.00
	Malkangiri	3.00	3.00	3.00	3.00
	Nabarangpur	3.00	3.00	3.00	3.00
	Rayagada	3.00	3.00	3.00	1.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.					

Water infrastructure

Waterbodies surveyed include tube-wells and ponds. Majority of the sites were in good physical condition with minor repair needs in few divisions. The structures were built at strategic locations which have positively impacted ground water recharge. These structures are used by the local communities residing near the plantation sites. The analysis below includes information from 17 waterbodies, 4 tube-wells and 1 percolation tank.

Table 104: Water infrastructure works under NPV scheme (2020-21)

Circle	Division	Water infrastructure		
		General Condition	Site Location	Serving the intended purpose
Angul	Angul	2.80	2.80	2.80
	Athgarh	2.50	2.70	3.00
	Athmallik	3.00	2.80	2.50
	Cuttack	2.55	2.67	2.83
	Dhenkanal	2.55	2.85	2.70
	Mahanadi WL	2.50	3.00	3.00
	Satkosia WL	3.00	3.00	3.00
Berhampur	Balliguda	2.67	3.00	3.00
	Berhampur	3.00	3.00	3.00

Circle	Division	Water infrastructure		
		General Condition	Site Location	Serving the intended purpose
	Boudh	3.00	3.00	2.75
	Ghumsur North	2.86	3.00	2.86
	Ghumsur South	3.00	2.80	2.72
	Parlakhemundi	2.75	2.75	2.50
	Phulbani	3.00	3.00	3.00
Bhawanipatna	Bolangir	3.00	2.80	2.70
	Kalahandi N	2.50	2.50	2.50
	Kalahandi S	3.00	3.00	2.75
	Khariar	2.86	3.00	2.86
	Subarnapur	3.00	3.00	2.00
Baripada	Balasore WL	3.00	3.00	3.00
	Baripada	3.00	3.00	3.00
	Karanjia	3.00	3.00	3.00
	Keonjhar WL	3.00	3.00	3.00
	Rairangpur	2.00	2.00	2.00
	STR North	3.00	3.00	3.00
	STR South	3.00	3.00	3.00
Sambalpur	Bamra WL	3.00	3.00	3.00
	Bargarh	2.67	3.00	3.00
	Hirakud WL	2.33	3.00	3.00
	Jharsuguda	3.00	3.00	2.00
	Rairakhol	3.00	3.00	3.00
	Sambalpur	3.00	3.00	3.00
Bhubaneswar	Bhadrakh WL	3.00	3.00	3.00
	Chandaka WL	2.00	2.00	2.00
	Chilika WL	3.00	3.00	3.00
	City Forest	3.00	3.00	3.00
	Khurda	3.00	3.00	3.00
	Nayagarh	2.50	3.00	2.00
	Puri WL	3.00	3.00	3.00
	Rajnagar WL	3.00	3.00	2.00
Rourkela	Bonai	3.00	3.00	3.00
	Deogarh	3.00	3.00	3.00
	Keonjhar	3.00	3.00	3.00
	Rourkela	3.00	3.00	3.00
	Sundargarh	3.00	3.00	3.00
Koraput	Jeypore	3.00	3.00	3.00

Circle	Division	Water infrastructure		
		General Condition	Site Location	Serving the intended purpose
	Koraput	3.00	3.00	3.00
	Malkangiri	3.00	3.00	3.00
	Nabarangpur	3.00	3.00	3.00
	Rayagada	3.00	3.00	2.00
Score: > 2.50 = Good, 1.50 - 2.50 = Moderate/ Average, < 1.50 = Poor.				

5.3.2.6. Soil and Moisture Conservation (SMC)

A total of 64 soil and moisture conservation sites were visited. The data collected during field visits indicate that the structures are strategically constructed on gently sloping terrain that allow maximum water retention and reduce runoff. The structures have proved to be useful in controlling soil erosion. Most of the structures are moderately stable in nature with minor repairing needs.

Table 105: SMC works under NPV Scheme (2020-21)

Circle	Division	Type of Structure	Av. Measurements recorded in journal (Length (M), Breadth (M), Height (M))	Av. Measurements observed (Length (M), Breadth (M), Height (M))
Angul	Angul	LBCD (11)	1.20 x 0.45 x 0.20	1.20 x 0.40 x 0.25
	Athgarh	LBCD(7)	1.28 x 0.20 x 0.50	1.35 x 0.20 x 0.60
	Athmallik	LBCD(3)	2.36 x 1.90 x 0.35	2.48 x 2.10 x 0.42
	Dhenkanal	LBCD(12)	2.52 x 0.56 x 0.20	2.50 x 0.52 x 0.20
Berhampur	Phulbani	LBCD(10)	1.44 x 0.24 x 0.36	1.44 x 0.22 x 0.36
Baripada	Karanjia	LBCD (3)	1.30 x 0.75 x 0.45	1.20 x 0.55 x 0.43
Sambalpur	Hirakud WL	LBCD(3)	1.20 x 0.66 x 0.32	1.20 x 0.65 x 0.28
	Jharsuguda	LBCD(5)	2.40 x 0.95 x 0.24	2.20 x 1.00 x 0.24
Bhubaneshwar	Khurda	Staggered Trench (5)	1.20 x 0.20 x 0.20	1.20 x 0.20 x 0.16
Koraput	Malkangiri	Staggered Trench (5)	1.20 x 0.20 x 0.20	1.10 x 0.20 x 0.16

Note: Figures in parenthesis indicate numbers.

Table 106: Qualitative parameters for SMC works under NPV Scheme (2020-21)

Circle	Division	Erosion	Impounding water	Stability	Location	Relevance of structure	Impact on vegetation
Angul	Angul	3.00	3.00	3.00	3.00	3.00	3.00
	Athgarh	3.00	3.00	3.00	3.00	3.00	3.00

Circle	Division	Erosion	Impounding water	Stability	Location	Relevance of structure	Impact on vegetation
	Athmallik	3.00	2.00	3.00	3.00	3.00	2.00
	Dhenkanal	2.00	1.00	1.00	2.00	2.00	2.00
Berhampur	Phulbani	3.00	3.00	3.00	3.00	3.00	3.00
Baripada	Karanjia	2.00	1.00	1.00	2.00	2.00	3.00
Sambalpur	Hirakud WL	2.00	2.00	2.00	2.00	2.00	3.00
	Jharsuguda	3.00	3.00	3.00	3.00	3.00	3.00
Bhubaneshwar	Khurda	3.00	3.00	3.00	3.00	3.00	3.00
Koraput	Malkangiri	3.00	3.00	3.00	3.00	3.00	3.00

6. Breakdown of Infrastructure work evaluated

Table 107: Buildings

Buildings	Total Sites			Sites Visited		
	2017	2019	2020	2017	2019	2020
RO Residence	19	16	31	10	8	25
Forester Qtr.	82	67	91	24	28	38
FG Qtr.	160	176	175	44	54	60
Common Toilet	67	8	6	14	3	1
Anti - poaching Barrack	2	10	4	2	8	4
Watch Tower	1	4	3	1	3	3
Beer Hideout	1	1	0	1	1	0
Animal Rescue Center	1	3	2	1	3	2
RO Office	0	3	5	0	2	5
Search Seizure Yard	0	2	2	0	2	2
Total	333	290	319	97	112	140

Table 108: Water Infrastructure

Infrastructure	Total Sites			Sites Visited		
Structure Type	2017	2019	2020	2017	2019	2020
WHS	5	5	4	3	3	1
Waterbody (40 x 30 x 3)	71	78	101	31	46	39
Tube well	63	9	113	23	4	18
Total	139	92	218	57	53	58

7. Performance of Forest Protection Initiatives

During 2017-18 32 Forest Protection Squads were engaged with an expenditure of Rs. 376.56 Lakh and 216 Fire Protection Squads were engaged with an expenditure of Rs. 895.87 Lakh. Similar number of squads both for forest protection and fire protection were engaged during 2019-20 also with an expenditure of Rs. 557.29 Lakh and Rs. 1156.47 Lakh respectively. However, during 2020-21 35 Forest Protection Squads and 251 Fire Protection Squads were engaged with an expenditure of Rs. 619.72 Lakh and Rs. 1414.59 Lakh respectively. As per data maintained and provided by the Odisha Forest Department, during 2017-18, out of 4639 incidents of forest fires reported, 1352 were detected by the Officers and Staff of Forest Department with the assistance of Forest and Fire Protection Squads. This number for 2019-20 was 1838. It was however noticed that there are possible duplicate entries in this database (OFMS Portal) and this needs to be reconciled and rectified. (e.g., There are three entries attributed to K. Sudarshan Patnaik on 30.03.2020, One at 18.27.39 hours, second at 18.23.01 hours and at 18.18.25 hours with details of Latitude of 19.17775333, 19.17772833 and 19.7773667 and Longitude of 83.39055833, 83.39062333 and 83.390445 respectively. On the face of it, these appear to be entries for same location and fire would have been relatively widespread. Such data needs to be verified and cleaned if required.

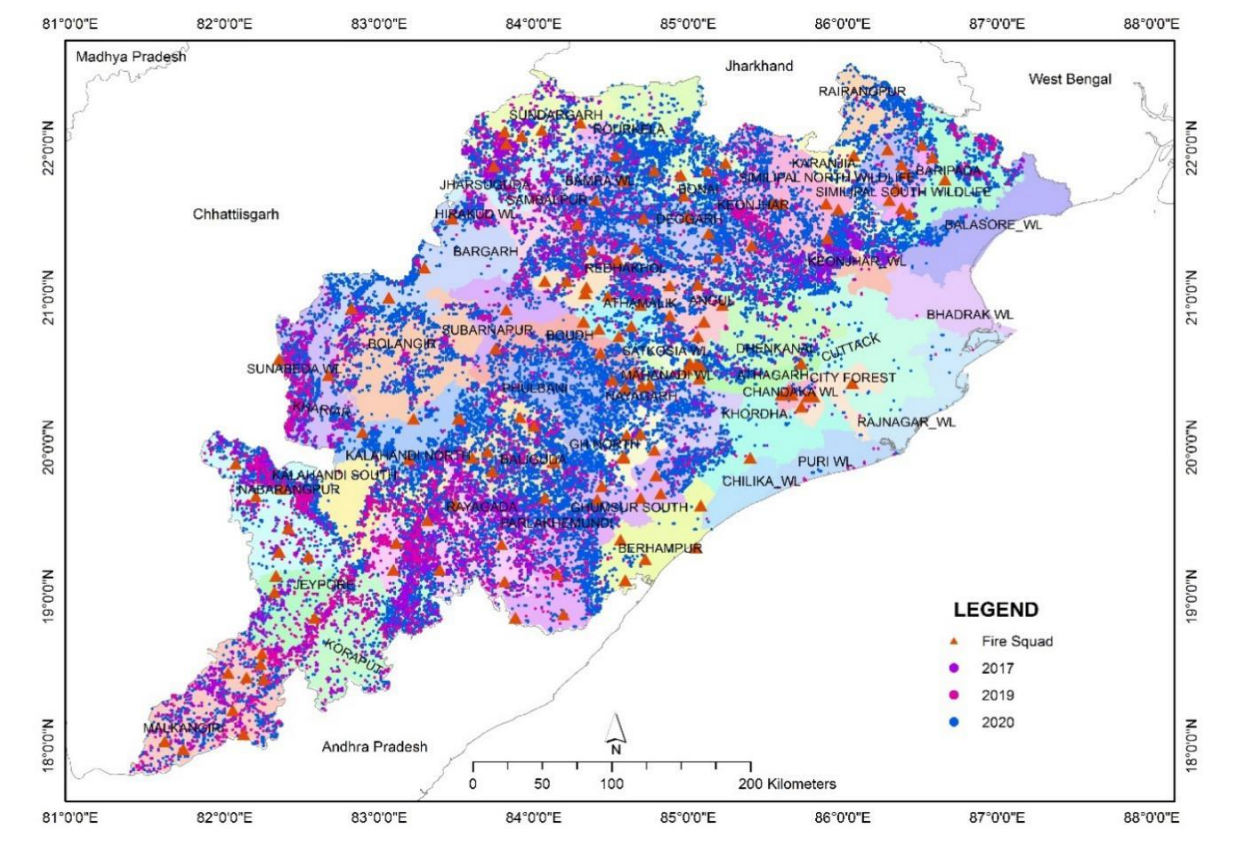


Figure 8. Incidence of fire across the three years and placement of fire squads (Source: OFMS)

While the average annual expenditure on Protection Squads was Rs. 11.77 Lakhs, Rs. 17.41 Lakh and Rs. 17.70 Lakh for these three years, the same was Rs. 4.15 Lakhs, Rs. 5.35 Lakh and Rs. 5.64 Lakh respectively for Fire Protection Squads (that were engaged only during critical period of fire vulnerability i.e., winter and summer months).

In addition to these squads, Para Protection Squads 1950 (during 2017-18), 1860 (during 2019-20) and 1920 (during 2020-21) were supported. These squads provided support to the front-line staff of the Forest Department by way of foot patrolling.

Further as against a target of maintaining 18,500 Km of Fire lines, 17,714 Km were maintained with an average expenditure of 0.02 Lakh per Km. During 2019-20, as against target of 8000 Km, 7940 Km of fire lines were maintained with an average expenditure of Rs. 0.028 Lakh per Km and during 2020-21, 18,530 Km of fore lines were maintained as against target of 19,500 Km at an average expenditure of Rs. 0.031 Lakh per Km.

Support was also provided to front line staff including Forest Range Officers for better mobility and communication by way of hiring vehicles for mobility in addition to maintaining coordination cells at Divisional, Regional and state level.

Since this activity was undertaken almost two to four years prior to this report, no study was practically possible on the performance of these squads and on the fire line maintenance work. However, since this study was conducted during relatively dry months of 2022 and since no significant occurrence of forest fires were noticed, it is to be inferred that these squads had performed well. Further the state of Odisha has a significant problem of Human Wildlife (particularly Elephant) conflicts and as such services of personnel engaged in these squads would be helpful in addressing this issue.

Extracts of registers maintained during the period of this study were verified and some personnel who are still continued who had worked during the period of this study were interviewed. Details of registers verified are given under the Annexure and result of interview as above are given below.

A total of 55 squads were interviewed, 29 Forest Protection Squads and 28 Fire Protection Squads. The survey focused on broad aspects like record keeping of the squad members and movement tracking mechanism, capacity building of the squad member, remuneration pattern, span of service; whether in the last three years they have come across any incident related to their work and further what course of action was taken from the squad members' end. Out of the 55 responses recorded, below given is their analysis:

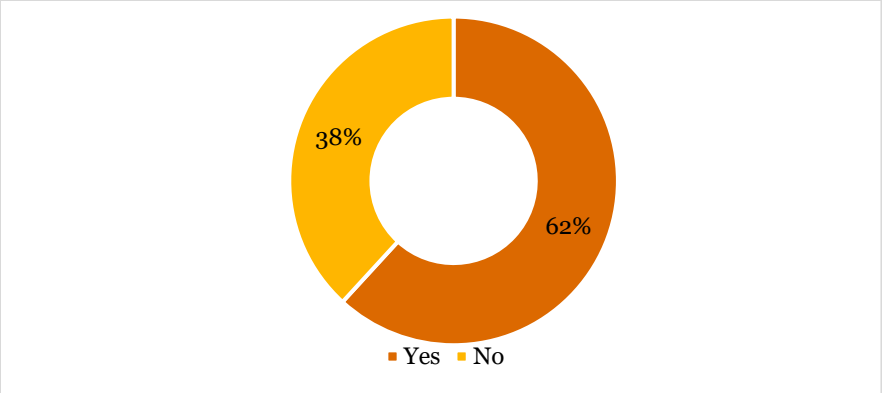


Figure 9. Squad movement register maintained

Out of 55 responses, 34 responses said yes that the register is maintained, and 21 responses denied maintaining any register. The squad movement register was available in 23 instances, and it was not made available in 32 instances.

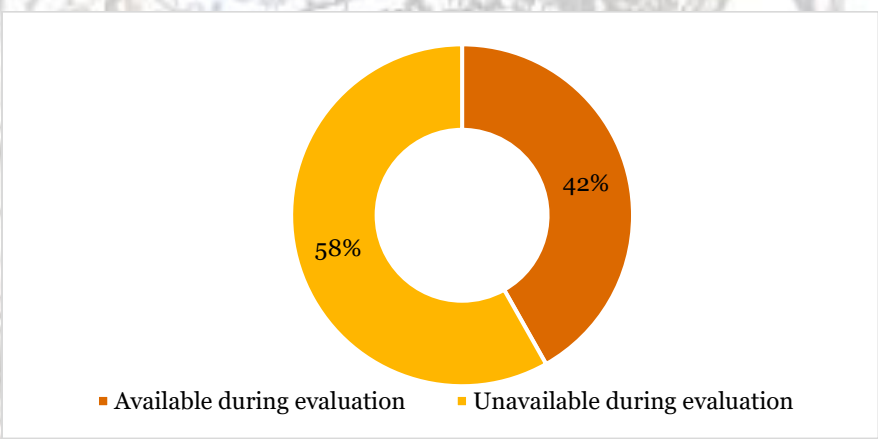


Figure 10. Squad movement register's availability

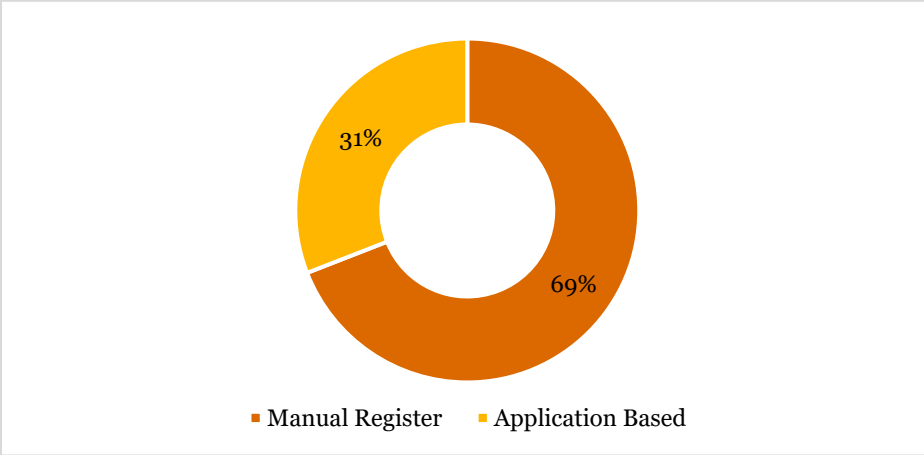


Figure 11. Method of monitoring

38 respondents said their movement register is maintained manually whereas the rest 17 respondents maintain their movement record through some Mobile based application.

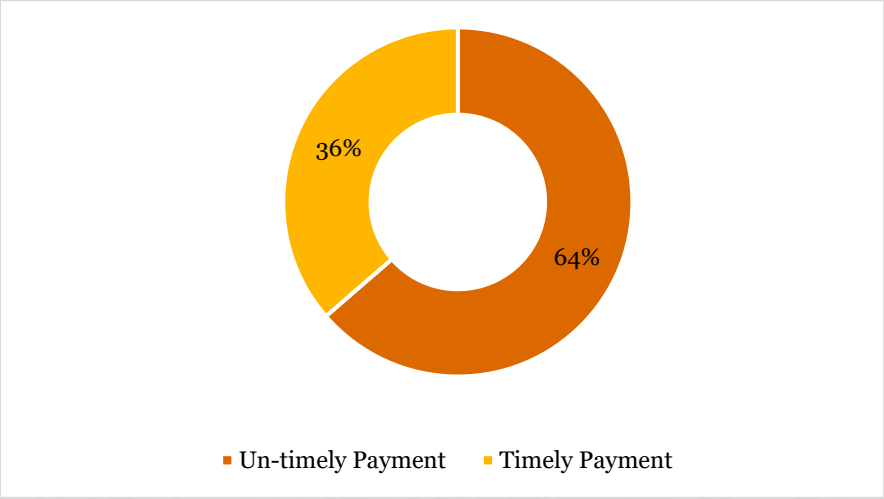


Figure 12. Remuneration

35 respondents replied that they have received their remuneration on time till date, whereas there were 20 respondents who have received delayed payment, primarily the agency which deployed them have delayed their payment.

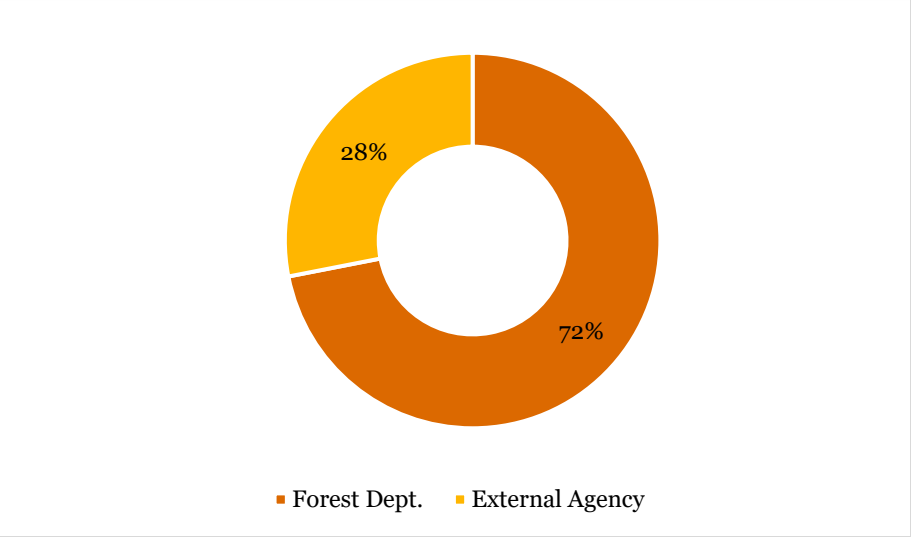


Figure 13. Deployed By

41 respondents were directly deployed by Forest Dept, and 17 were deployed by some external agency and mostly they were from the forest protection squad.

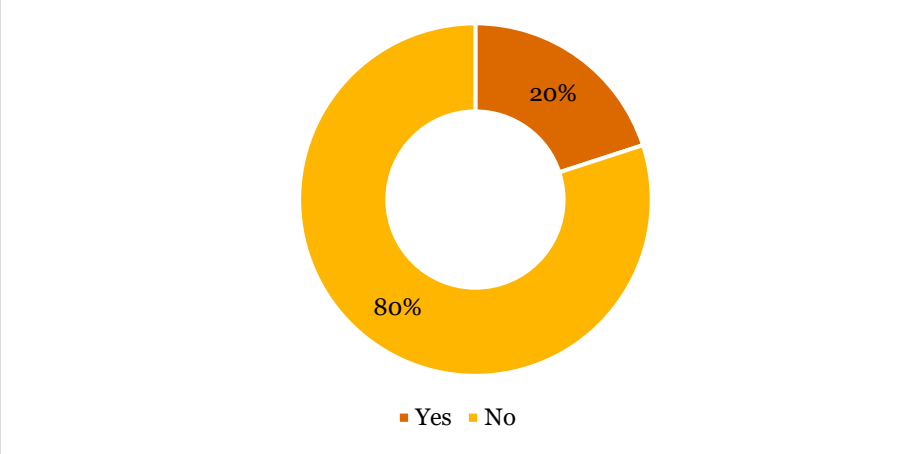


Figure 14. Incidence of Fire or Encroachment in the last three years

44 respondents said they hadn't faced any incidence of fire or encroachment during their tenure in the last three years, but 11 respondents had faced some type of fire incident or encroachment cases.

The primary action carried out by fire protection squad was to reach the fire points and extinguish the fire as much as possible with help of fire blowers. Whereas forest protection squad members carry out frequent patrolling to keep an eye of any encroachments or inform the authorities about any wildlife movements in their area.

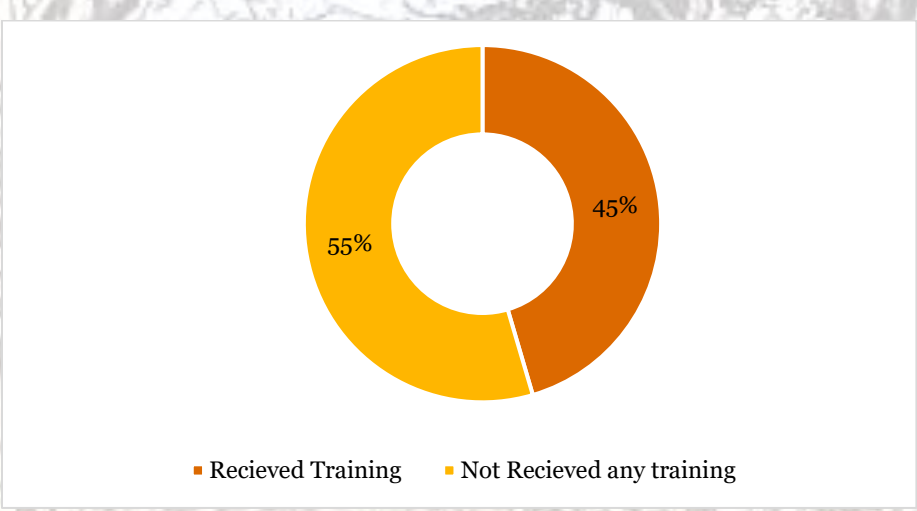


Figure 15. Capacity Building / Training

30 respondents were of the view that they have not received any trainings around their work, and 25 respondents have received training for carrying out their day-to-day work.

The record keeping and register maintenance were in good condition and majority of the squad members have been provided with basic gears for carrying out their daily work, but there have been several cases of untimely remuneration payment and hence it discourages the squad members to continue their work efficiently.

8. Wildlife Conservation initiatives

Summary of achievements:

Nearly 5.30 % of geographical area and 10.37 % of notified forests in Odisha are under Protected Area management (www.odishaforest.in). These biodiversity hotspots are rich in floral and faunal diversity. Faunal diversity includes Elephants, Tigers, Leopards, Fishing Cats, Crocodiles (Gharial, Fresh water and Salt water). The state is known widely for a safe nesting place for Olive Ridley Turtles (Gahirmatha Sanctuary). The floral diversity is equally rich. Certain areas in Simlipal Tiger Reserve support wide range of Orchids like Dendrobium, Rhynchostulus, Bulbophyllum etc. Wonderful initiative taken for conservation of orchids was visited in Simlipal TR. Apart from ex situ conservation in an Orchidarium in Gurguria, conservation and propagation of native orchids was seen in Simlipal South Division.

Efforts under CAMPA match the concern for conservation and management of this rich biodiversity. Following are the highlights

2017-18

In the total approved outlay for this year, an amount of Rs.95.43 Crore was earmarked for wildlife conservation (16.85 % of APO). As against this, an amount of Rs. 76.58 Crore has been utilised. Highlights of this achievement is utilization of Rs. 3754.04 Lakh (35.24%) towards protection and anti-depredation works (175 protection and antipoaching squads and 90 elephant trackers were engaged) 41 fire protection squads were engaged and 11250 Km of fire lines were maintained) and Rs.1012.10 Lakh (9.50%) towards habitat improvement that include activities like removal of invasive and obnoxious weeds (2806 ha), development of meadows (567 ha), construction and maintenance of water holes (50 new structure were constructed and 98 old structures were maintained). Rs. 1157.22 Lakh (10.86%) and Rs.907.24 Lakh (8.52%) were utilized towards development of infrastructure and communication facilities respectively. An amount of Rs. 2145.89 Lakh was utilised for implementation of site-specific initiatives in various Divisions. An amount of Rs. 750 lakhs was utilized towards village relocation. A detailed note is given in subsequent chapters on quality and efficacy of these interventions.

2019-20

Out of the total approved outlay for this year, an amount of Rs.118.11 Crore was earmarked for wildlife conservation (19.35% % of APO). As against this, an amount of Rs. 109.77 Crore has been utilised. Highlights of this achievement is utilization of Rs. 5135.59 Lakh (36.74 %) towards protection and anti-depredation works (174 protection and antipoaching squads and 90 elephant trackers were engaged) 41 fire protection squads were engaged and 7125 Km of fire lines were maintained) and Rs.1951.17 Lakh (13.96 %) towards habitat improvement that include activities like removal of invasive and obnoxious weeds (3516 ha), development of meadows (602 ha), construction and maintenance of water holes (81 new structure were constructed and 182 old structures were maintained), 2575 Loose Boulder Check Dams

were constructed as a measure to arrest soil erosion. Rs. 838.65 Lakh (6.00 %) and Rs.1033.67 Lakh (7.39 %) were utilized towards development of infrastructure and communication facilities respectively. An amount to Rs. 3000.80 Lakh was utilised for implementation of site-specific initiatives in various Divisions. An amount of Rs. 1371.00 Lakhs was utilized towards Village relocation. A detailed note is given in subsequent chapters on quality and efficacy of these interventions.

2020-21

An amount of Rs.117.25 Crore was earmarked for wildlife conservation in the approved APO for this year (15.16 % of APO). As against this, an amount of Rs. 116.09Crore has been utilised during this year in financial terms. Highlights of this achievement is utilization of Rs. 5356.67 Lakh (36.82 %) towards protection and anti-depredation works (174 protection and antipoaching squads and 90 elephant trackers were engaged) 48 fire protection squads were engaged and 6840 Km of fire lines were maintained) and Rs.2447.67 Lakh (16.82 %) towards habitat improvement that include activities like removal of invasive and obnoxious weeds (806 ha), development of meadows (342.50 ha), construction and maintenance of water holes (177 new structure were constructed and 149 old structures were maintained). Rs. 1092.15 Lakh (7.510 %) and Rs.506.09 Lakh (3.48 %) was utilized towards development of infrastructure and communication facilities respectively. An amount of Rs. 2941.03 Lakh was utilised for implementation of site-specific initiatives in various Divisions. An amount of Rs. 10000 Lakhs was utilized towards Village relocation. A detailed note is given in subsequent chapters on quality and efficacy of these interventions.

Table 109: Summary of equipment's across three years of evaluation

Equipment	2017	2019	2020
Fire Fighting (mainly Fire blowers)	372	162	136
Anti-depredation	180	131	49
Total	552	293	185

The Forest department has decided to use mechanized blowers to reduce the cases of forest fires in the possible areas of different divisions during summer. As per the record, in 2017-18, 2019-20, 2020-21, the department has bought 372, 162, 136 blowers respectively by which the department has reduce the massive fire mishaps of several forest divisions in the state.

As per the record, in 2017-18, 2019-20, 2020-21 the department has deployed 180, 131, 49 Anti-depredation squads to reduce the man-animal conflict which reduces the loss of life and property due to wildlife. These squads are helping in driving out elephants and other wild animals from human-inhabited areas to forest areas.

Village Relocation

In order to ensure that the habitat of Tigers particularly in Tiger Reserve remains inviolate, the National Tiger Conservation Authority of the Ministry for Environment, Forests and Climate Change, Government of India have issued guidelines during 2010 on relocation of villages in Tiger Reserves in India. These guidelines spell out the policy for such relocation and prescribe the quantum of assistance to be provided to the villagers who opt to move out of the Core areas of Tiger Reserves and the procedure to be followed in such an eventuality. The Government of Odisha vide Memo No. 8F (WL) -67/2016 12000 F&E Dated 29.06.2016 have issued additional guidelines to supplement the assistance in these cases. While the assistance by the Government of India is confined to villages in notified core areas of Tiger Reserves, the guidelines of the Government of Odisha apply to all Sanctuaries or National Parks or Tiger Reserves in Odisha state. The central Assistance envisages an assistance of Rs. 10 Lakh (which has since been enhanced to Rs. 15 Lakh) per family where in the family head can either receive the entire amount (and additional amount of Rs. 5.00 Lakh as incentive as approved by the Government of Odisha in Memo No. FE- WLF 0021 -2016 / 12390/ F&E Dt. 19.07.2021) and move out voluntarily without any other assistance for rehabilitation or relocation (Option I) or opt for a rehabilitation package which includes providing Agricultural Land and its development, settlement of rights, homestead land and house construction and provision of common amenities like water supply, sanitation etc., in addition to incentive for opting to move out (Option II). The additional assistance being provided as per the policy o Government of Odisha includes providing land (10 decimals) to each family for homestead purpose, one house under the State Government's housing scheme (Biju Pucca Ghar or Indira Awas Yojana), Electricity to the relocation colony, drinking water facility, handholding support for two years through a local NGO to build capacity to ensure sustainable livelihood, benefits under National Social Security Scheme, education to eligible children by enrolling them in Government Residential Schools, Masonry training and hand holding support during the course of constructing their houses. Financial assistance for this is being provided from CAMPA funds and Odisha Environmental Management Fund if needed.

During the period of this study Rs. 1371.00 Lakh have been utilised for voluntary relocation of villages from CAMPA Funds. Rs. 7.20 Crores and Rs. 0.30 Crores in Karanjia and Bamra WL Divisions respectively, during 2017-18, 8.71 Crores and Rs. 5.00 Crores in Keonjhar WL Division and Simlipal Tiger Reserve respectively during 2019-20 and Rs. 10.00 Crores in Satkosia WL Division during 2020-21. These details are obtained from State level report. However, Division level reports with location wise details that were obtained for the purpose of sampling and detailed study do not have details of utilization (with the exception of Satkosia WL Division). Upon discrete enquiry, it was observed that the process of relocation and utilization is still under progress.

Relocation works undertaken and consequent development of forests (habitat thus released) were studied in Satkosia WL Division, Keonjhar WL Division and in Simlipal Tiger Reserve during this study. Following are the observations:

Efforts are on for relocation of Asanbahal (V), a Forest Village located over 31.73 ha in Kuru Forest Block in the buffer area of Satkosia Tiger Reserve and inhabited by 89 families (170 individuals) with a livestock population of 222. All, except 2 families belong to Scheduled Tribe (Kondho) are non-tribals. Rights of these 2 Tribal families have been settled under the Forest Rights Act and they are now being compensated as part of village relocation. 93.361 ha of Revenue land of Forest Kissam (chhota jungle) has been identified near Dhauragoth Village of Tainsi Panchayat to create a land bank of which 16.40 Acre will be utilised for relocation of Asanbahal (V). Proposals for diversion of this extent of 93.361 Acres is currently under consideration of Government of India (as it attracts the Indian Forest (Conservation) Act 1980) and as informed, orders are expected shortly (status at the time of visit).

No formal plan for relocation has been prepared so far (as on the date of visit). However, the villagers are entitled for Rs. 15.00 Lakh per family as relocation package (As per the guidelines of State Government in Forest & Environment Department Letter No. FE-WL-WLF-0021-2016/ 12390 Dt. 19.07.2021). So far, an amount of Rs. 10,00 Lakhs have been deposited with the District Collector Angul from CAMPA (APO of 2020-21).

During interaction with the villagers of Asanbahal (V), it was learnt that this village was established more than 100 years back basically to provide work force for forestry operations. At present the third generation of original inhabitants are residing here and they are keen to move out and relocate. In fact, the elders and the women folk in the village enumerated a number of reasons for their eagerness to move out. The PwC team interacted with Sri Chabi Sahu and Sri Pandu Pradhan, the village elders. Villagers are of the view that being a Forest Village, and with very few households, civic amenities are limited. There is a primary school upto Class 3, a single teacher school nearby and for further education, children have to move out. The market and hospital are miles away in Jagannathapur and Angul. One has to walk more than 10 km to avail public transport facilities. Other than wage employment in forestry operations there are no viable and better livelihood options. Added to this, increasing Elephant menace and other human wildlife issues are not making things easy for the villagers.

After visiting Asanbahal (V), the team visited Raigod (V) that was already relocated. 78 families of Raigod (V) have since been relocated during 2017. The land so vacated has been included in the Tiger Reserve but still to be notified under Forest Act. The village location (the one that has been vacated) is a sprawling valley surrounded by woody hills rich in diverse flora. It was a happy site to see quite a few *Cycas orixensis* a rare species. A few prominent tree species noticed were *Terminalia alata, Madhuca indica* and *Anigeissus latifolia*. While driving to this site, en route we noticed large herds of *Axis* commonly called Chital or Spotted Deer. Barking Deer (*Muntiacus muntjak),* generally a shy animal, was spotted multiple times. The area vacated by the village has now developed into a rich grass land and is providing excellent foraging ground for herbivora. The team could spot quite a few herds of Spotted Deer though it was a very hot day (time of this visit was around 2 PM). Efforts are now being made to harvest water and this will certainly provide a fillip to the faunal diversity.

The visit to the relocated village of Raigod and interaction with the villagers there was quite an education. 78 families have moved out of the forests on a promise of a better life. They were compensated for the the land they surrendered (which is now an excellent habitat for wildlife as described above), they have been provided 0.40 cents of land (per family) for construction of dwelling units and funds for the same have been provided by the Government of Odisha as additional incentive in addition to the relocation package provided by the Government of India in terms of NTCA guidelines. The point to be noted here is that the State has compensated the loss of Agricultural land by paying land value.

Compensation of the dwelling units is in the form of land (0.40 cents per family) and money to construct houses from a State Government Housing scheme. In terms of guidelines of NTCA part of the relocation package has been paid to these families and the remaining money is in a joint account held jointly by the family head and the District Collector. It was noticed during interaction with the villagers and visit to the village (relocated), that many families have spent money that they received as land value towards house construction as they have constructed much bigger units than what the Housing Scheme envisaged on the sentiment that "one builds a house once in a lifetime." They could not purchase Agricultural land as no land was available near the relocated village site and Government did not provide any Government land for Agriculture. Thus, they are now landless and as such an element of unrest was noticed among them. Had the Government compensated land for land and had built houses and provided to these families, these problems would not have arisen. Expecting these semi-literate poor to manage such huge financial resources and take such important financial decisions, was probably expecting too much from them. This is where the district administration should have stepped in and ensured proper hand holding. These are beyond the mandate and capacity of Forest Department managing Wildlife Sanctuaries, Tiger Reserves etc., Though relocation of Raigod (V) was not done using CAMPA funds, this visit was taken as a learning exercise as CAMPA funds are now being used for relocation of Asanbahal (V).

During visit to Simlipal Tiger Reserve and Keonjhar WL division it was learnt that in Simlipal, generally villages that had illegally occupied forest land (included in Tiger Reserve) have been relocated. Villages such as Kabatghai, Jamunagarh, Jenabil, Barakamuda and Bahaghara fall in this category. The lands thus vacated are now being developed as meadows and are rich habitats for herbivora. Another village Jhanjhana in Keonjhar WL Division was visited where 94 families of Pittanav (V) of Hathgarh WL Sanctuary have been relocated. During interaction, these villagers (Scheduled Tribes belonging to Bathodi tribe) revealed that their original village being in interior forests is devoid of better civic amenities and employment opportunities. It was a happy sight to see these villagers actively participating and constructing their own dwelling units (with support of local Mason and with some training in Masonry). Some of these villagers, in their homesteads, were cultivating vegetables. Being located in the vicinity of urban agglomeration, the relocated village site, according to them has better livelihood opportunities. Though they have not been able to purchase any Agricultural land (such land being relatively costly), some of the villagers have been taking Agricultural lands on lease and cultivating. With better livelihood options

and better educational opportunities for their children and more accessible healthcare facilities, they now see a bright future. This relocation was also facilitated by an NGO. The State Government's policy on Village relocation from Protected Areas was in full display in this village.

Photo 5. Visit to Simlipal Tiger Reserve

From these visits and interactions, it is observed that the efforts for relocation though are quite sincere and the State's policy, quite exhaustive, lot of care needs to be exercised. Though the objective is to avoid or atleast minimize human wildlife conflicts and ensure that wildlife habitat is inviolate, the human angle and village dynamics need to be factored in. If land owning people are turning out to be landless, it is certainly a matter of concern. On the contrary, if people can be assured of better life, with good civic amenities and better livelihood options, efforts will bring out satisfying results. The bottom line is that core competence of forestry personnel lies in forestry, and they are weak in dealing with humanitarian and social issues. It is here that District administration supplements their efforts. There is certainly a role for a Social Development Specialist or a committed NGO to assist the Forest Department in their efforts.

Habitat improvement including Meadow development

Maintenance of fire lines, fire protection, augmenting water resources by way of water conservation and construction and maintenance of waterholes and development of meadows are important initiatives implemented during the period of this study.

41 fire protection squads were engaged during 2017-18 and 2019-20 and their number increased to 48 during 2020-21. 11250 Km, 7125 Km and 6840 Km of fire lines were maintained respectively during these years. Special interventions for development of meadows were undertaken over 567 ha, 602 ha and 342.50

ha and removal of invasive weeds was done over 2806 ha, 3516 ha and 806 ha respectively during these years. Further 429 old water holes were maintained, and 308 new ones were constructed during the period of this study (50, 81 and 177 new structures and 98, 182 and 149 old structures respectively during 2017-18, 2019-20 and 2020-21). The water holes constructed and maintained in Ghumsur North Division, Kotgarh WL Sanctuary, Satkosia Tiger Reserve and Simlipal Tiger Reserve were inspected as a part of this study. The water holes inspected in Ghumsur North Division are used exhaustively by Black Bucks and are serving the purpose for which they were constructed. It was an interesting sight to see buckets made of cement concrete served the purpose of augmenting water supply to the Balk Bucks with the anti-poaching squads performing additional duty of filling these buckets as and when needed. The water holes in Kotgarh are strategically located but may need desilting. The Water holes in Satkosia and Simlipal are also strategically located and well maintained. Since Antipoaching Squads are stationed nearby, there is good protection to the Wildlife that visit these water bodies. In fact, hoof marks of Gaurs were noticed near a Water hole near Kabatghai in Simlipal and quite a few Barking Deer were sighted near the same water hole. Near Devasthali, another strategic location where water holes, Salt patches and a Watch tower have been constructed, large number of Sambar Deer were sighted. In fact, with sun set, these Sambar Deer were congregating as though they were returning home after a daylong foraging expedition. All these indicate that these waterholes have been constructed at strategic places and are used by wildlife. This also casts additional responsibility of foolproof protection measures, and it is in this regard, the antipoaching squads need to be further strengthened.

Photo 6. Water hole

Meadow development is another work where results are visible. This work is taken up in areas where invasive weeds have been removed and also in areas where villages have been relocated. Very few natural meadows were noticed and as such development of meadows either by removing obnoxious and invasive weeds and in areas vacated by villager's consequent to their relocation, have proved beneficial. Large number of Spotted Deer were sighted in area vacated by Raigodu village in Satkosia Tiger Reserve and in Kabatghai, Jamunagarh, Jenabil, Barakamuda and Bahaghara in Simlipal Tiger Reserve. All these villages in Simlipal Tiger Reserve, which were illegal occupants of forest land were relocated and, in the land, that was thus vacated, beautiful grass land has come up. Though the plans for introducing nutritionally rich grass species could not succeed as nurseries of these species were damaged by wild elephants, mere protection has resulted in gregarious local grass growth and moderate to large herds of Spotted Deer savior them. These massive grass lands though are not natural meadows, in course of time are likely to be host spots for sighting wildlife and they also may pose challenges for protection from poaching.

Photo 7. Meadow development

Meadow development works taken up fall broadly in four categories. The first category is introduction of palatable grass in areas devoid of them like the one noticed near Jagannathapur in Ghumsur North Division. Here lands are ploughed in strips and broadcast sowing of grass seeds is resorted to when adequate moisture is available to ensure their germination. This grass regeneration is then expected to act as source for further spread in the remaining areas.

The second category is removal of invasive and obnoxious weeds, slightly manipulating tree canopy to ensure sufficient sunlight and sowing and encouraging regeneration of palatable grass. This was seen in Satkosia WL Division in the Tiger Reserve. These are not typical grass lands but support good woody vegetation. Grass is introduced by scooping and sowing in small patches of natural openings or blanks and minor canopy manipulation is done to ensure adequate sunlight to the grass regeneration. Since these are necessarily woody areas, such meadows though have come up nicely, will not extend to other areas with wind pollination etc., but will certainly provide support to herbivora. However, since canopy manipulation is involved, it is suggested to include this operation in Tiger Conservation Plans and monitor the same closely. This type of meadow development was also seen in Simlipal Tiger Reserve in Simlipal North Division near Jodadiha Antipoaching squad. While the forests where such meadows were being developed in Satkosia WL Division supported mostly *Anoissus latifolia*, *Terminlia alata* and other species, the vegetation in Simlipal North Division was mostly of *Shorea robusta*.

The third category of meadows being developed are natural meadows like the one near Chahal in Simlipal North Division. However, such natural meadows are small in extent and very rare. The intervention here is to ensure that weeds are frequently removed before they flower. An elaborate calendar of operations prepared for these meadow development works were shown and they are closely monitored.

The fourth category is development of meadows in areas where villages existed in the past but have since been relocated. Since these lands were under agriculture in the past, they support grass growth very well. Since these are large clearances (sometimes even upto 200 ha), and are generally devoid of tree growth, they have been providing very good succor to the herbivora, especially Spotted Deer and Sambar Deer. Though there were plans to introduce palatable grass in strips by ploughing or scooping soil and broadcasting seeds and expecting the grass regeneration to spread to remaining areas through wind pollination, the efforts have not succeeded as the palatable grass grown in strips were trampled by wild Elephants and the efforts could not be repeated. What is now seen is luxuriant growth of native grass species like *Panicum spp., Setaria spp*., *Sachharum spp*. etc., These also were seen being relished by large herds of Spotted Deer. The meadows in Kiajhari, Kabatghai, Jamunagarh, Jenabil, Barakamuda and Bahaghara in Simlipal Tiger Reserve are of this category.

Functioning of Antipoaching Squads

The team interviewed a total of 24 respondents, 12 wildlife trackers and 12 anti – poaching squads. The analysis of the same is given below:

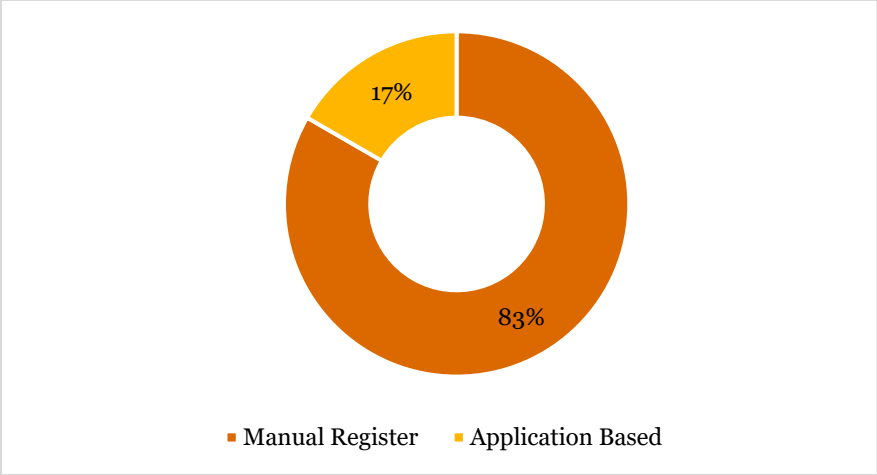


Figure 16. Tracking mechanism

20 respondents replied that they follow manual method of writing/updating register, and 4 respondents maintain a mobile based application to maintain their movement records.

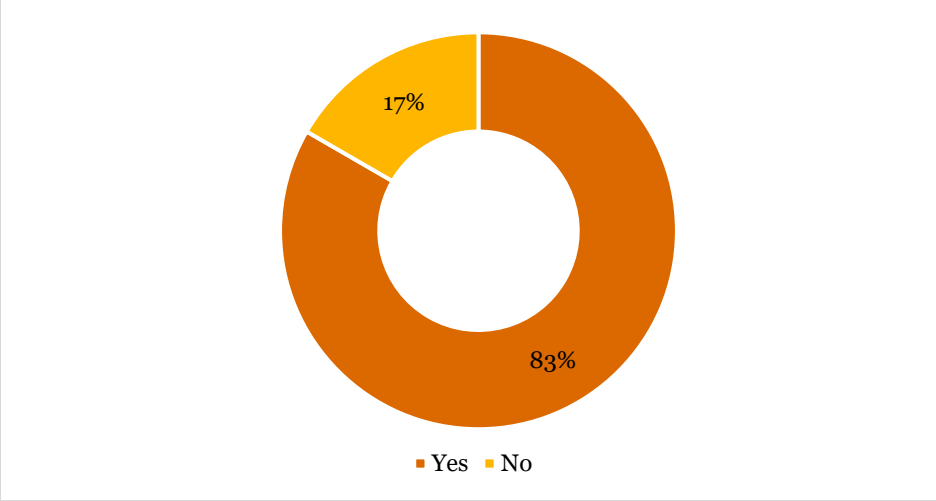


Figure 17. Squad movement register maintained

20 respondents replied that they were regularly maintaining the movement register whereas 4 respondents replied that the frequency of maintaining the register was low.

8 respondents have received their remuneration on time and 16 respondents have received un-timely payments. 15 respondents have been deployed by Forest Department directly and 9 were deployed through some external agencies.

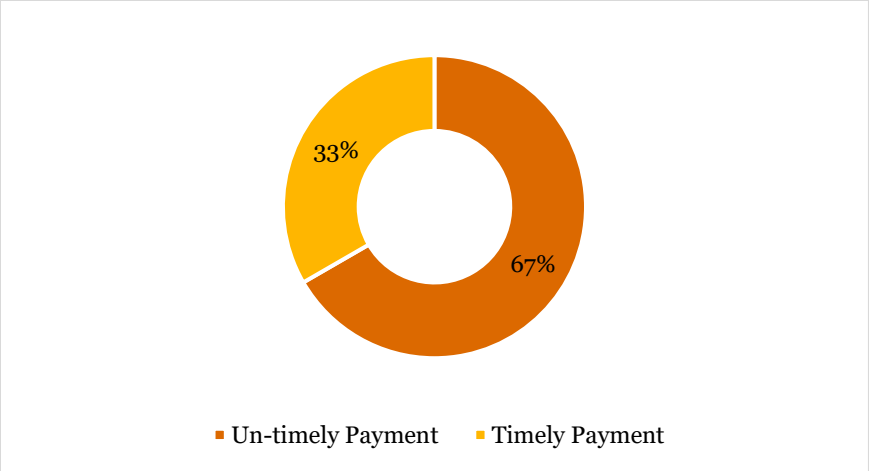


Figure 18. Remuneration

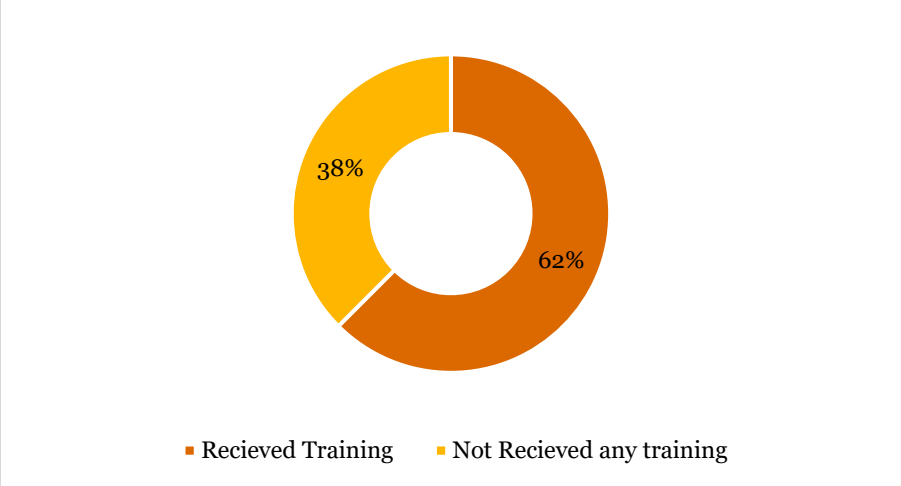


Figure 19. Capacity Building / Training

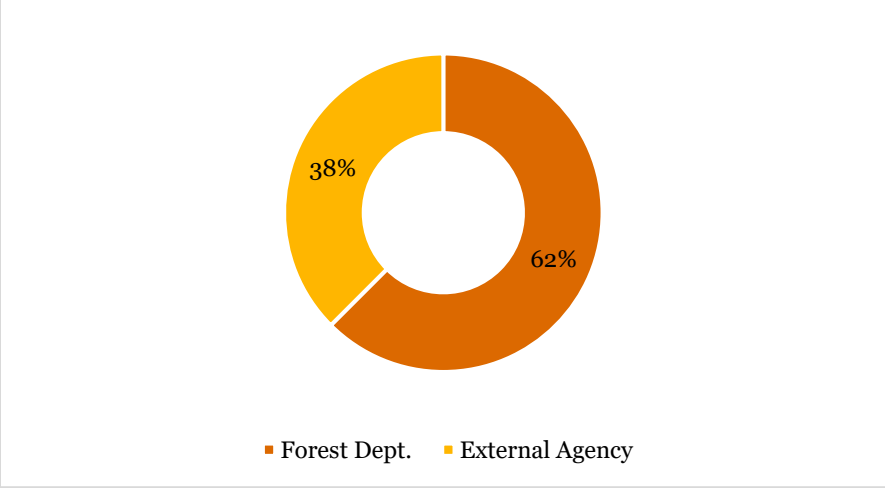


Figure 20. Deployed By

15 respondents said they have received training around their work, but 9 respondents stated they had not received any type of formal training around their work. 14 respondents denied coming across any poaching incidents in the last three years, whereas 9 respondents did mention about coming across unwanted incidents in the forest.

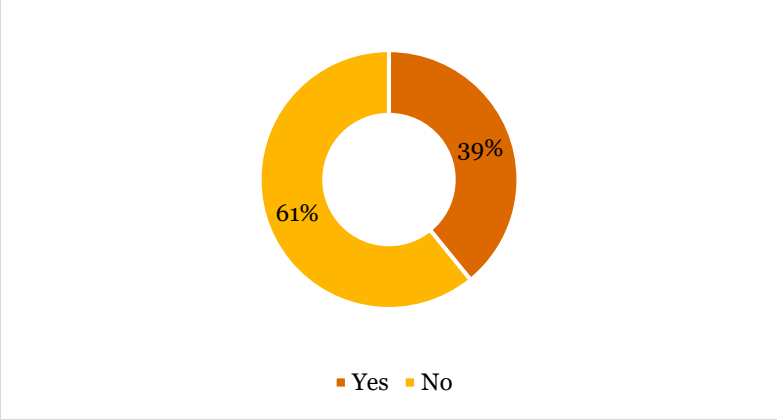


Figure 21. Incidence of poaching in the last three years

Most of the cases were forwarded to court and UD cases were booked, there even cases of smuggling in the forest which were reported to the higher authorities. They said that they have made many enemies around the area through anti-poaching activities. If they are taken out from the department there are many chances of getting attacked or harmed by poachers.

Photo 8. Interactions with antipoaching squads

On an average two to three persons are deployed in these antipoaching squads (Simlipal Tiger Reserve) which is grossly inadequate. If one falls ill or has to take leave for some personal purpose, the squad becomes redundant. This is because as against sanctioned number, more stations or squads are located thereby distributing the manpower. This is done to ensure wider area coverage, but squads are quite vulnerable due to depleted number. During interaction with staff and personnel of these squads in Simlipal Tiger Reserve, what came out is that there is tremendous biotic pressure from the northern boundary due to location of large number of villages in that area and to have better information network and wider presence, personnel have been located in larger number of spots by redistributing the sanctioned number. But such depleted and thin presence of squads make them inherently vulnerable. Further as local people are likely to develop vested interests and leak information about movement of forest personnel to poachers, non-locals are being engaged in these squads. With lack of knowledge about local area and dynamics these personnel also are felt ineffective (version gathered during interaction). Further such non-locals develop homesickness and there is frequent attrition. There is need to study these issues in further details and develop adequate strategies to recruit personnel having interest and commitment towards wildlife conservation and recruit them in adequate numbers and suitably strengthen these squads.

Photo 9. Discussion with staff on squad movement register

The movement registers, data in M-Stripes etc., maintained by these antipoaching squads was verified. In the Tiger Reserves, data is captured in M- Stripes App which is very exhaustive and captures every detail of wildlife sighting, ecological observations about habitat and patrolling details. However, manual registers are also maintained in addition to M-Stripe as some of the members of antipoaching squads are not competent enough to handle M Stripes. With regard to other Protected Areas, manual registers are

maintained to capture attendance, movement details, sighting of carnivora, herbivora, elephant movement and habitat conditions. There are mobile Apps developed by the Odisha Forest Department which are linked to OFMS Portal, and which capture data on offenses (both forest and wildlife), sightings, forest fire etc., This is in addition to manual registers. There is need to study the efficacy of multiplicity of registers and records and mobile apps and simplify them to reduce workload of record keeping by antipoaching squads so that they can concentrate and utilise their time on patrolling and other protection works. Details of records and registers maintained by these squads that were gathered during the study are given under the Annexure.

Table 110: Summary of Anti-poaching and Anti Depredation Squads

Circle	2017	2019	2020
Angul	12	9	9
Baripada	34	27	17
Bhubaneswar	38	26	21
Sambalpur	13	9	9
Berhampur	13	11	10
Koraput	13	11	11
Rourkela	11	10	10
Bhawanipatna	14	11	9
Total	148	114	96

9. Carbon Sequestration and Carbon Capture

During the years of this study (2017-18, 2019-20, 2020-21) a total of 10650.02 ha of plantations under the AR model have been raised and 140826.98 ha of area under the ANR model with GAP planting have been treated. Details are as below:

Table 111: Total area treated and studied under the AR

AR						
Year	Total Area Treated (ha)			Total Area Studied (ha)		
	CA	NPV	Total	CA	NPV	Total
2017-18	163.84	1745	1908.84	112.6	334.77	447.37
2019-20	638.64	3704	4342.64	207.86	1142	1349.86
2020-21	1487.22	2911.32	4398.54	300.48	678	978.48
Total	2289.70	8360.32	10650.02	620.94	2154.77	2775.71

Table 112: Total area treated and studied under the ANR with GAP

ANR With GAP						
Year	Total Area Treated (ha)			Total Area Studied (ha)		
	CA	NPV	Total	CA	NPV	Total
2017-18	4808.7	72516.95	77325.65	922.97	9143.7	10066.67
2019-20	5328.92	18430	23758.92	808.76	2790	3598.76
2020-21	2162.41	37580	39742.41	781.22	4225	5006.22
Total	12300.03	128526.95	140826.98	2512.95	16158.70	18671.65

As per the norms adopted for computation of costs (Plantation Cost Norms - 2019), 1600 plants/ha have been taken for block plantations to compute area statement for the purpose of assessing carbon capture. Further, under the ANR model with GAP planting, as per the same norms, 200 plants/ha are generally planted. Thus, the total area computed for the purpose of assessing carbon capture from the area treated under the ANR with GAP planting model will be 1/8th of the total area treated under this model. The

assessment of carbon capture has been done following the methodology developed by Sudha, . et al., 2007. This methodology is applicable for the plantation crops. As such the assessment is made only for plantations raised under the AR model and GAP planting done under the ANR model. Details of this assessment are given below.

Methodology

The plantation area is computed based on number of plants and divided with 1600 plants/ha at 2.5 x 2.5 m spacing (OFD, 2019). The carbon pools selected are Above Ground Biomass (AGB) and Below Ground Biomass (BGB). For AGB, the tree height and girth are used for estimation of volume of wood for bole or Trunk based on Quarter girth formula (Chaturvedi and Khanna, 1982). The trunk or bole volume is then converted to weight using the ratio of 1 cum: 0.8 tons. Thus, arrived tonnage is then added with the biomass expansion factor of 0.71 (BGB – Root biomass at 0.26 + Branches, Leaf, Leaf litter, Bark at 0.45 = 0.71) to get the total biomass which is in green tonnage. The moisture is reduced from the total green biomass by 50 % to get dry woody biomass. As the wood contains 50% carbon, the dry woody biomass is reduced by half to get carbon in the woody biomass. The carbon in the woody biomass is then multiplied by 44/12 to get the carbon capture or CO_2 removal from atmosphere. Soil organic carbon pool however is not considered in this estimation method. This estimation is also not done for carbon stock change or carbon flux as it is not in the scope.

Carbon sequestration and Carbon capture

The estimation for carbon sequestration and carbon capture as on 2022 year is attempted for plantations of 2017-18, 2019-20 and 2020-21 years. The total number of species planted / represented on an average are 124 with 39495 trees spread over an area of 24.69 ha (sample size, computed assuming 1600 plants/ ha). The estimated carbon sequestration and carbon capture figures are given as follows:

Table 113: Carbon sequestration and Carbon capture

Parameter	Year			Total
	2017-18	2019-20	2020-21	
No of species	99	135	138	124 (Average)
Total area (ha)	7.45	9.36	7.88	24.69
No of trees	11920	14969	12606	39495
Total volume (Green m^3)	52.91	58.83	20.70	132.44
Total tons (Green tons)	42.33	47.07	16.56	105.96
Total wood tons/ha/yr.	1.14	1.68	1.05	1.29 (Average)
Total Biomass (Green tons) (With Biomass Expansion factor)	72.38	80.48	28.32	181.18
Total Biomass/ha/yr.	1.94	2.87	1.80	2.20 (Average)
Total Dry Biomass (tons)	36.19	40.24	14.16	90.59
Carbon sequestration	18.09	20.12	7.08	45.30
CO_2 capture / removal (tons)	66.35	73.78	25.96	166.09

CO_2 capture / removal (tons)/ha/yr	1.78	2.63	1.65	2.02 (Average)

All the plantations raised are derived from seedling base, their productivity obviously will be lower compared to improved seed source or clonal plantations.

1). From the table is can be inferred that the 39495 plants in 24.69 ha area have sequestered 45.30 tons carbon (stored carbon) in woody biomass and removed / captured 166.09 tCO_{2e} in an average age of 3.3 years (2017 to 2020) in the assessment year 2022.

2). The total area treated under AR model for all the three years under CA & NPV is 10650.02 ha. As per the assessment made above, the total CO_2 captured for the AR plantations thus works out to 21513 tCO_{2e}/ha/yr.

3). The total area treated under ANR model with GAP planting (200 plants/ha) is 140826.98 ha for all three years and both under CA & NPV. Considering plant population of 1600 plants/ha, in order to bring parity with AR model plantations, the notional area that would have been covered with these plantations works out to 17603.37 ha. Thus, the total CO_2 captured by the plantations raised in the gaps under the ANR model works out 35558.81 tCO_{2e}/ha/yr.

Thus, from the initiative of CAMPA through raising plantations during these three years, the total CO_2 captured is 57071.90 tCO_{2e}/ha/yr.

This initiative also meets one of the Sustainable Development Goals viz. SDG 13.

10. Ama Jangala Yojana (AJY)

The tradition of conserving forests through informal village level institutions exists in many forests fringe villages of the state of Odisha. In fact, Odisha is one of the pioneering states in India where participatory forest management was initiated (in addition to West Bengal) much before other states. There was also a massive social movement of Community Forest Management initiated by Tribal Communities with assistance by some Non-Governmental Organizations in addition to the Government led movement of Participatory (Joint) Forest Management. In the recent past significant efforts have been made by the State Forest Department, more particularly, through the Odisha Forestry Sector Development Project (OFSDP) for strengthening and supporting such community-based initiatives. This Project, apart from focusing on improvement of forest administration and management also invested in promoting better livelihoods for the forest dependent communities. The support provided by the Government for capacity up-gradation and forest improvement has further improved conservation regime and livelihoods of forest dependent communities.

Ama Jangala Yojana is an initiative of the Government of Odisha to continue the efforts of engaging communities in forest management. Each community identified is allotted certain forest area near about their village/hamlet and assistance is provided for planning and implementation of forest improvement activities focusing on improvement of natural regeneration. Communities participating in this activity are organised as Vana Samrakshyana Samitis and are assisted in micro planning and in further forest management. The Policy of the Government of Odisha notified in its Gazette in Resolution No. 16524-IF-Affn. 17/2011/F7E Dt. 19.11.2011 of Forest and Environment Department is very comprehensive and details the procedure for constitution of such committees, their duties, rights and responsibilities. It also ensures adherence to regulations under Panchayat Extension to Scheduled Areas and the Forest Rights Act.

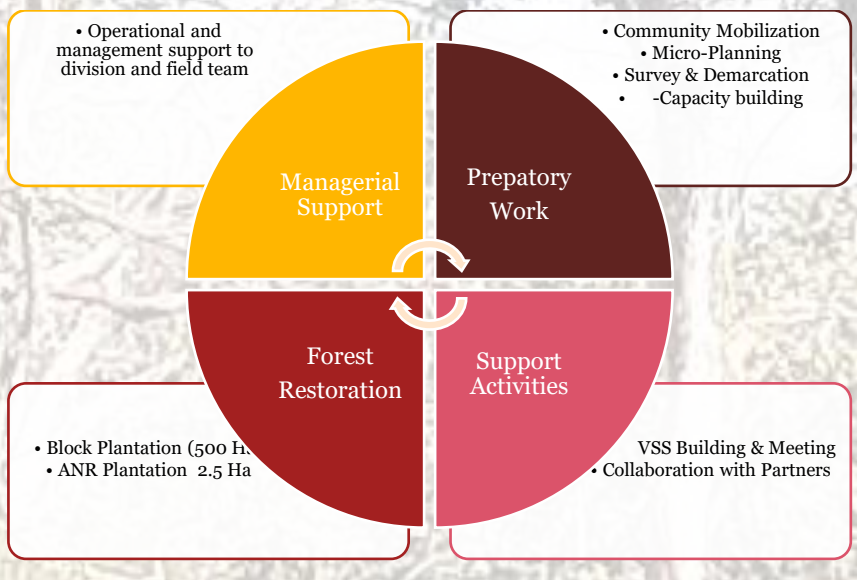


Figure 22. Project components of Ama Jangal Yojana

This scheme has promoted active participation of community institutions in protection of forest and regeneration through awareness building and training to families nearby forest fringe dependent on forest for their livelihoods. Support however is limited to forest management by way of assisting rejuvenation of natural regeneration in the forests managed by these communities (VSSs). Each VSS is assigned certain chunk of forest land and all forestry operations are implemented by them with financial support under CAMPA and under technical supervision of the forest department.

In the three years of evaluation period financial year 2017-18, 2019-20 and 2020-21, total 33,498 hectares has been covered under ANR without GAP.

Table 114: ANR without GAP under AJY

Financial Year	ANR without GAP (in ha.)	No. of VSS Participated
2017-18	18950	540
2019-20	5558	540
2020-21	12540	886

As per the utilization of fund under Ama Jangala Yojana, in three financial years, average utilization is approximately 87.74 % of total targets in 2017-18, 2019-20 and 2020-21.

Table 115: Financial target and achievement under AJY

Financial year	Financial Target (in Cr.)	Financial Achievement (in Cr.)	% Of Utilization
2017-18	85.87	82.76	96.37 %
2019-20	81.57	62.47	76.58 %
2020-21	72.00	65.33	90.27%

VSS- Focus Group Discussion Summary

Under the Ama Jungle Yojana (AJY) scheme, we studied the functioning of 78 VSS's and our method of interaction with the VSS members was through a Focused Group Discussion (FGD). The major highlights of this discussion were around record keeping & maintenance, awareness about the scheme and it's benefits, capacity building of VSS, participation of the VSS in protection and conservation of the forest areas and how do they resolve conflicts if any within the VSS.

a)VSS documentation and Participation

During the study it was found that 68% of the VSS's have maintained their accounts register and stock register as well, these registers were also shown to our team, but there were also instances where the VSS couldn't furnish the registers to the team visiting as they were unavailable at that point of time due to various reasons. 48% of the VSS's have knowledge around Microplanning exercise and it has been prepared for their VSS with help of NGOs, but there was a sizeable no. of VSS's whose Micro plan hasn't

been prepared or they are not aware about it being prepared as well. The VSS's conduct monthly meetings and more than 85% of them are following the practice of monthly meetings and conducting AGM's timely as well. About 85% of the VSS's with whom the team interacted had been formed in the last 3-4 years.

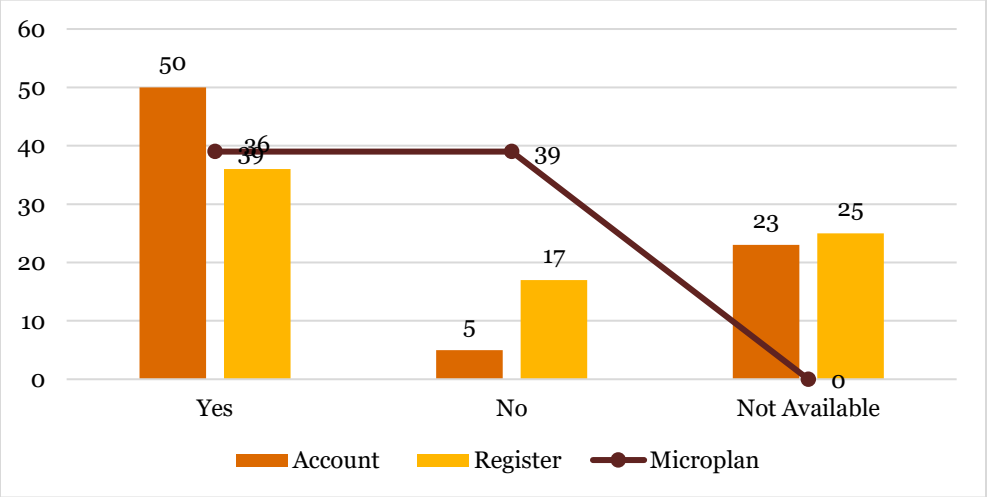


Figure 23. VSS Book-keeping Status

b) VSS Fund Management Status

Fund Management and awareness is foremost important and critical component of any running institution, The VSS member were not very much aware about the funds received from dept. for any works to be caried out and only 20% of the VSS's studies had awareness around fund availability and its utilization. Whereas when asked about employment generated from the scheme running in there VSS, the no. of people who get employed in any particular work being carried out ranges from 25 – 45 people on an average and the payment for these works is timely received as shared by the VSS's studied. Mostly the VSS President and treasurer were the ones who were completely aware of the fund's available with VSS.

c) VSS participation in conservation and protection mechanism and training received

All the VSS's studied were involved in Forest protection works and were actively involved in conservation/afforestation activities, they had a visible ownership for the forest areas and shared that they have been actively taking part in the trainings provided by the dept. around plantation work, SMC work, fire protection and forest protection work. The VSS members also mentioned the silvicultural operations carried by them in the forest area and the changes they are able to see after preserving & protecting the forest and its resources. Apart from learning about forest conservation, the VSS members have also taken part in other livelihood centric trainings, mainly around mushroom cultivation.

d) Employment, and payment system

Out of all the people employed under the works carried out by VSS's, 49% women got employment and 51% of men were employed in the schemes. So, this shows sizeable amount of women participation in the works done under AJY with help of VSS's around Odisha. The members also shared those services like temporary tents and reading material for small children were provided at few sites of work, this along-with

timely payment encourages them to work in the VSS and not migrate frequently in search of work. As mentioned earlier, the livelihood trainings also help the VSS members to earn some extra money and sustain their living.

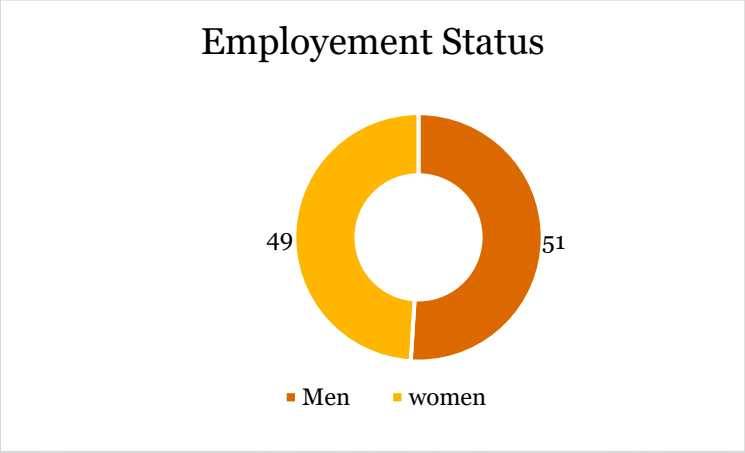


Figure 24. Employment status

e) Inclusiveness

The dept. also has made visible efforts to train and groom the VSS members to spread awareness around the need of forest conservation and to avoid exploitation of forest resources. In all the sites visited, the members didn't share any complaints as regards to the dept. and were in all praise about the support received from concerned officials who work with the particular VSS.

During interaction with VSS members and forest officials assisting these VSSs, it was revealed that more than 80% funds under ANR have been utilized in creating wage employment (for the VSS members). During this study it was generally seen that involvement of VSSs is mostly in forest regeneration works. The communities also have shown interest in forest protection. Since investments are mostly in creation of wage employment and area allotted is also limited, sustainability of interest among communities would depend on usufruct sharing. Though the VSSs are entitled to Minor Forest Products and intermediate yield coming out of silvicultural operations in the course of forest improvement works, in the long run, much would depend on sharing benefits coming out of harvest of forest produce. Since investments are mostly on rejuvenation of natural regeneration, such harvests may not be adequate enough to sustain the interest of the communities. There is need to explore possibilities of augmenting these initiatives and investments with livelihood enhancement activities (both forest based and non-forest) by providing for skill upgradation, value addition, market support along with required institution development.

Financial support for this may be linked with any ongoing Government programme or from reinvestment of funds coming out of sale of forest products coming out of areas under management by these communities with appropriate institutional arrangements and safeguards. Since these livelihood options

are likely to be viable only when aggregated following cluster approach, institution of Forest Development Agency (FDA) can play important role in this regard.

Photo 10. Interaction with VSS members

11. Efforts to supplement regeneration in forests

Major objective of CAMPA is to ensure that loss of forest vegetation and diversity are adequately compensated. In terms geographical area diverted for non-forestry use, compensatory land for afforestation is taken over and afforestation over such land is ensured and ecological value of forests lost during such diversion is compensated by enriching natural forests. While Compensatory afforestation, which is a project specific activity is done mostly through artificial regeneration of lands taken over, most of the activities for enriching biodiversity .are accomplished through rejuvenating degraded forests that have viable root stock by assisting natural regeneration with required supplementary plantations either in existing gaps or over relatively larger blocks through artificial regeneration if such areas are devoid of root stock and natural regeneration of viable species that can be rejuvenated. While the former is commonly called ANR or Assisted Natural Regeneration, the latter is Artificial Regeneration of AR.

Photo 11. Reviewing documents

Under the ANR model, treatment was done during the period of this study in certain area with supplementary GAP planting and in some other area without any gap planting. The silvicultural operation here included removal of unwanted and invasive weeds, grazing and fire control, tending viable root stock through coppicing and singling operations, shrub cutting and soil and moisture conservation (SMC) initiatives. In all three years put together 180,314.98 ha area has been treated which includes 140,826.98 ha with GAP planting and 39,488 ha without GAP planting. Some of the areas of ANR without GAP planting were managed by VSS's as part Ama Jungle Yojana (AJY).

An assessment of impact of these initiatives (ANR) was made as a part of this study in all three years. The recruitment/regeneration was measured in three broad categories *viz*. seedlings, saplings and poles. While seedlings are herbaceous in nature and are young recruits, saplings are slightly woody and on the way of establishment and poles are fully established regeneration. Density of recruits in terms of Number of Seedlings, Saplings and Poles per hectare were worked out from the data collected in the sample plots surveyed. Their distribution across divisions and years is given under Annexure A_04. Details given under Annexure A_04-a give detailed account of frequency of occurrence of various species observed during the regeneration survey.

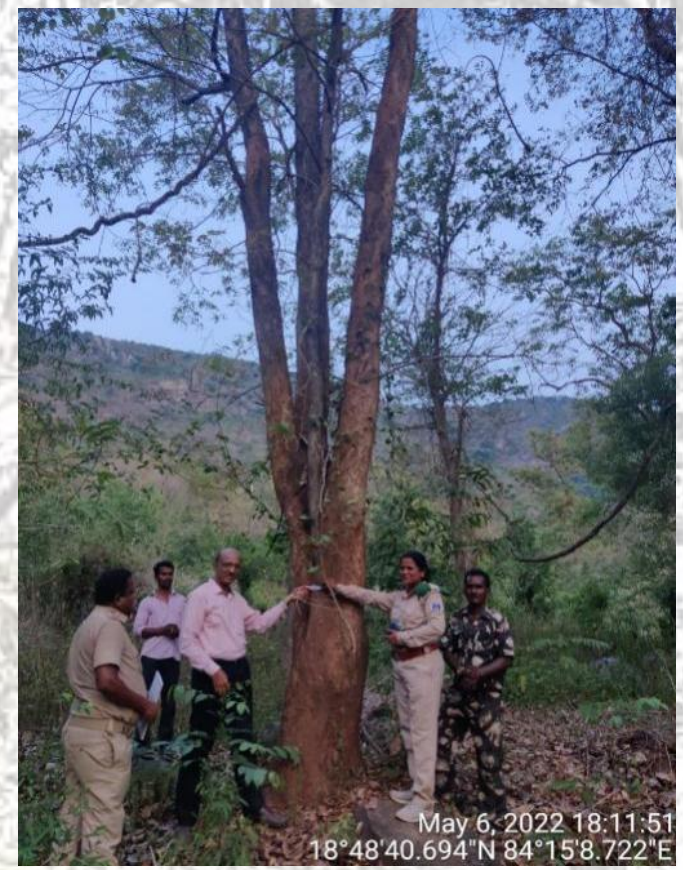


Photo 12. Visit to ANR site

In the areas treated during 2017-18, a total of 13,118 seedlings, 7294 saplings and 4024 poles were enumerated. The density of seedlings varies from 144/ha in Cuttack and Bonai divisions to 538/ha in Bamra WL division, while a density of saplings ranges from 44/ha as seen in Cuttack division to 346/ha as seen in Nayagarh division. Similarly, density of poles ranges from 23/ha in Baripada division to 179/ha in Sambalpur division.

Table under Annexure A_4a deals with frequency of occurrence of species enumerated during the survey of ANR sites (both with and without gap planting). Across all categories of regeneration viz., Seedlings, Saplings and Poles, it is seen that Sal constitutes major component of species mix. Nearly 20% of regeneration is of Sal. Species like Mahula, Kendu and Amla were also encountered though their

occurrence is not so profuse. Regeneration of many Sal associates like Asan and Bhija were found to be inadequate.

Among Seedling regeneration, in terms of frequency of occurrence of species, 19.69% are of Sal, 9.11% is of Teak and 7.78% is of Mahula, while Kendu a major NTFP constitutes 5.24% of regeneration. On a similar note, 19.43% of Saplings are of Sal. While Teak and Mahula constitute 9.95% and 7.96 % respectively, Amla a major NTFP constitutes 4.7% of sapling regeneration and Kendu which has tremendous economic value constitutes 4.3% of Sapling regeneration. As regards poles, again Sal is a predominant species which makes up 20.69% of the total population of poles enumerated, whereas Mahula and Teak constitute 11.76 % and 11.42 % respectively. Kusum and Amla which are excellent resources of NTFP constitute 5.39 % and 3.53 % and Kendu leaves constitute of 3.77% pole regeneration.

In the areas treated during 2019-20, 12,042 seedlings, 6567 saplings and 3340 poles were enumerated, through grid survey in the identified sample plots. The density of seedlings/ha ranges from 93/ha as seen in Balasore WL and Bolangir divisions to 661/ha as seen in Dhenkanal division. Similarly, the density of saplings ranges from 48/ha (Balasore WL) to 632/ha as seen in Rairakhol division. Density of poles varied from 21/ha as seen in Balasore WL division to 188/ha in Rairakhol division. The diversity of species studies in the areas treated during this year reveal that 17.99% of the regeneration is of Sal whereas 7.77% is constituted by Mahula. Kendu leaves constitute 4.69% of regeneration in these areas. 19.05 % of sapling regeneration is also of Sal while Mahula and Teak constitute 8.85 % 4.87 % respectively. Kusum and Kendu which are major NTFP species makeup 4.68 % and 4.64% of sapling regeneration. In the established regeneration i.e., poles 24% is of Sal, whereas Mahula and Teak are 10.83 % and 6.25 % respectively, Kendu leaves constitutes 3.47% of the pole regeneration whereas Amla constitutes 3.07%.

In the areas treated during 2020-21, a total of 8688 seedlings, 4702 saplings and 2719 poles were enumerated in the sampled areas. Density of seedling regeneration ranges from 83/ha in Ghumsur South division to 538/ha in Nayagarh. Sapling regeneration varies from 66/ha in Cuttack and Berhampur divisions to 339/ha in Bargarh division. Regeneration of poles ranges from 31/ha in Raygada and Sambalpur divisions to 309/ha for Dhenkanal division. The frequency of regeneration studied for this year reveals that 20.18% of regeneration is of Sal, 10.53% is of Teak. 20.81% of Sapling regeneration is of Sal and 11.72% of Teak, 5.33% is of Kendu leaves and 23.63% of Pole regeneration is of Sal whereas Teak and Mahua constitute 13.52 % and 7.03% respectively.

It is generally seen that regeneration of Sal is pretty good and is well-established. The concern is of other timber bearing species like Asan and Bija, regeneration which is quite meagre. While typically, the forests of Odisha are Sal forests, but in the interest of promoting better biodiversity there is need to introduce non-sal species in gap planting wherever it is taken up.

The performance of plants raised as part of block planting in naturally occurring gaps in ANR sites and in AR sites is given below:

Artificial Regeneration – Species performance for plantation series 2017-18, 2019-20 and 2020-21:

Nearly 159 sites were surveyed for the assessment of species performance for AR (CA + NPV). Block plantations belonging to 8 Forest Circles (Angul, Baripada, BBSR, Berhampur, Bhawanipatna, Koraput, Rourkela, Sambalpur) and 51 Divisions of the Odisha state for survival and growth characteristics.

Table 116: Scheme-wise and year-wise visited sites under AR

Schemes	Year			Total
	2017-18	2019-20	2020-21	
CA	9	10	19	38
NPV	18	54	49	121
Total	27	64	68	159

For the year 2017-18, 54 species with 11713 trees; for 2019-20, 55 species with 14598 trees and for 2020-21, 58 species with 12041 trees were recorded. Amongst them, top 5 species (in terms of number planted) were chosen and graded for their performance vis-à-vis height and Collar girth and the same is given for 2017-18, 2019-20 and 2020-21 years separately as follows:

Year - 2017-18

1) *Tectona grandis* (Sagwan, Teak)

- Assessment for Sagwan is done in all the 8 Circles and 28 out of 51 Divisions. Nearly 5184 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.97 m. Out of 28 divisions, 2 Divisions have shown excellent performance. Khordha (Bhubaneshwar Circle) Division showed excellent height of 3.20 m. The other 24 Divisions showed medium performance and the poorest performance is recorded for 2 Divisions viz., 0.96 m (Jharsuguda) and 0.95 m (Bargarh) of Sambalpur Circle for height.
- Girth: The state-wise average Collar girth (CG) recorded is 14.13 cm. Out of 28 Divisions, 3 Divisions showed good performance with respect of CG and the highest CG recorded is 23.56 cm for Khordha (Bhubaneshwar Circle) Division. The other 16 Divisions showed moderate girth ranging from 10 to 20 cms. The poorest performance of 6.11 cm for Bargarh and 6.69 cm for Jharsuguda Divisions of Sambalpur Circle is recorded.
- Hence, the Teak plantations of Khordha Division of Bhubaneshwar Circle performed exceedingly well while, Bargarh and Jharsuguda Divisions of Sambalpur Circle showed poor performance. Rest of the 23 Divisions showed satisfactory growth performance with respect to height and girth.

2) *Pongamia pinnata* (Karanja)

- Assessment for Karanja is done in all the 8 Circles and 23 out of 51 Divisions. Nearly 868 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.39 m. Out of 23 Divisions, 4 Divisions have shown excellent performance. Khordha (Bhubaneshwar Circle) Division showed excellent height of 2.39 m. The other 15 Divisions showed medium performance and the poorest performance of 0.62 m is recorded for Bargarh Division of Sambalpur Circle for height.
- Girth: The state-wise average Collar girth (CG) recorded is 10.21 cm. Out of 23 Divisions, 4 Divisions showed good performance with respect of CG and the highest CG recorded is 17.79 cm for Nabarangpur (Koraput Circle) Division. The other 17 Divisions showed moderate girth ranging from 5.14 to 9.0 cms. The poorest performance of 4.32 cm for Bargarh Divisions of Sambalpur Circle is recorded.
- Hence, the Karanja plantations of Khordha, Nabarangpur, Bonai and Baripada Divisions performed exceedingly well while, Bargarh and Nayagarh Divisions showed poor performance. Rest of the 17 Divisions showed satisfactory growth performance with respect to height and girth.

3) *Acacia auriculiformis* (Acacia)

- Assessment for Acacia is done in 5 Circles and 9 out of 51 Divisions. Nearly 609 trees occurred in these plantations.
- Height: The state-wise average height recorded is 2.66 m. Out of 9 Divisions, 3 Divisions have shown excellent performance. Nabarangpur (Koraput Circle) Division showed excellent height of 3.94 m. The other 7 Divisions showed medium performance and the poorest performance of 0.88 m is recorded for Dhenkanal Division for height.
- Girth: The state-wise average Collar girth (CG) recorded is 18.00 cm. Out of 9 Divisions, 2 Divisions showed good performance with respect of CG and the highest CG recorded is 26.19 cm for Ghumsur (S) Division. The other 7 Divisions showed moderate girth ranging from 15.16 to 20.28 cms. The poorest performance of 6.95 cm for Dhenkanal Divisions of Angul Circle is recorded.
- Hence, the Acacia plantations of Nabarangapur and Ghumsur (S) Division of Koraput and Berhampur Circle performed exceedingly well while, Dhenkanal Division of Angul Circle showed poor performance both in respect of height and girth. Rest of the 7 Divisions showed satisfactory growth performance with respect to height and girth.

4) *Azadirachta indica* (Neem)

- Assessment for Neem is done in 8 Circles and 24 out of 51 Divisions. Nearly 604 trees occurred in these plantations.

- Height: The state-wise average height recorded is 1.53 m. Out of 24 Divisions, 1 Divisions have shown excellent performance. Rairangapur (Baripada Circle) Division showed excellent height of 3.22 m. The other 19 Divisions showed medium performance with height ranging from 1.05 to 2.45 cm. The poorest performance is recorded for 8 Divisions viz., 0.40 and 0.44 m for Kalahandi (N); 0.88 m Khariar 0.95 m for Dhenkanal; 0.73 for Parlakhemundi; 0.99 m for Jharsuguda; 0.68 m for Sambalpur and 0.78 m for Bamra WL Divisions. The lowest height being 0.40 m recorded is for Kalahandi (N) Division.
- Girth: The state-wise average Collar girth (CG) recorded is 12.07 cm. Out of 24 Divisions, 1 Divisions showed good performance with respect of CG and the highest CG recorded is 58.42 cm for Cuttack (Angul Circle) Division. The other 12 Divisions showed moderate girth. While poorest performance is recorded for 11 Divisions and the lowest being 3.52 cm Kalahandi (N) of Bhawanipatna Circle.
- Hence, the Neem plantations of Cuttack Division of Angul Circle performed exceedingly well while, Kalahandi (N) of Bhawanipatna Circle showed very poor performance both in respect of height and girth for this species.

5) *Dalbergia sissoo* (Bali Sissoo)

- Assessment for Bali Sissoo is done in 8 Circles and 24 out of 51 Divisions. Nearly 505 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.49 m. Out of 24 Divisions, 1 Divisions have shown excellent performance. Rourkela Division and Circle showed excellent height of 3.05 m. The other 22 Divisions showed medium performance. The poorest performance of 0.13 m is recorded for Parlakhmundi (Berhampur Circle) Division.
- Girth: The state-wise average Collar girth (CG) recorded is 10.60 cm. Out of 24 Divisions, 1 Divisions showed good performance with respect of CG and the highest CG recorded is 23.38 cm for Angul Division and Circle. The other 22 Divisions showed moderate girth. While poorest performance is recorded for 1 Divisions and the lowest being 2.54 cm Parlakhemundi (Berhampur Circle) Division.
- Hence, the Bali Sissoo plantations of Rourkela Division and Circle performed exceedingly well while, Parlakhemundi Division of Berhampur Circle showed very poor performance both in respect of height and girth.

Amongst the 5 species, the top performer is Acacia followed by Teak, Neem, Sissoo and Karanj in respect of height and girth for the year 2017-18.

Year - 2019-20

1) *Tectona grandis* (Sagwan, Teak)

- Assessment for Sagwan is done in all the 8 Circles and 24 out of 51 Divisions. Nearly 3538 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.91 m. Out of 24 divisions, 2 Divisions have shown excellent performance. Berhampur Division and Circle showed excellent height of 4.9 m. The other 21 Divisions showed medium performance and the poorest performance is recorded for 1 Divisions viz., Dhenkanal Division (Angul Circle) of 0.88 m for height.
- Girth: The state-wise average Collar girth (CG) recorded is 12.63 cm. Out of 24 Divisions, 2 Divisions showed good performance with respect of CG and the highest CG recorded is 23.48 cm for Berhampur Circle and Division. The other 21 Divisions showed moderate girth. The poorest performance of 6.36 cm for Dhenkanal Division (Angul Circle) is recorded.
- Hence, the Teak plantations of Berhampur and Phulbani Divisions of Berhampur Circle performed exceedingly well while, Dhenkanal Division (Angul Circle) showed poor performance in respect of both height and girth. Rest of the 21 Divisions showed satisfactory growth performance.

2) *Dalbergia sissoo* (Bali Sissoo)

- Assessment for Bali Sissoo is done in all the 8 Circles and 29 out of 51 Divisions. Nearly 1757 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.54 m. Out of 29 Divisions, 2 Divisions (Nabarangapur and Boudh Divisions have shown excellent performance. Nabarangapur Division (Koraput Circle) showed excellent height of 2.88 m. The other 26 Divisions showed medium performance and the poorest performance of 0.13 m is recorded for Athmallik Division of Angul Circle for height.
- Girth: The state-wise average Collar girth (CG) recorded is 10.21 cm. Out of 29 Divisions, 2 Divisions showed good performance with respect of CG and the highest CG recorded is 19.63 cm for Nabarangapur Division (Koraput Circle). The other 26 Divisions showed moderate girth. The poorest performance of 6.35 cm for Athmallik Division of Angul Circle is recorded.
- Hence, the Bali Sisso plantations of Nabarangapur and Boudh Divisions performed exceedingly well while, Athmallik Division of Angul Circle showed poor performance both in respect of height and girth. Rest of the 26 Divisions showed satisfactory growth performance.

3) *Pongamia pinnata* (Karanja)

- Assessment for Karanja is done in 8 Circles and 32 out of 51 Divisions. Nearly 1515 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.40 m. Out of 32 Divisions, 3 Divisions (Phulbani, Paralakhemundi and Berhampur) have shown excellent performance. Phulbani (Berhampur Circle) Division showed excellent height of 2.63 m. The other 27 Divisions showed medium performance. The two Divisions showed poorest performance of 0.36 and 0.91 m for

Ghumsur (N) Berhampur Circle and Bargarh WL Division of Sambalpur Circle respectively for height.

- Girth: The state-wise average Collar girth (CG) recorded is 10.21 cm. Out of 32 Divisions, 3 Divisions showed good performance with respect of CG and the highest CG recorded is 22.18 cm for Berhampur Division and Circle. The other 27 Divisions showed moderate girth. The poorest performance of 4.32 and 6.17 cm for Bargarh WL Divisions of Sambalpur Circle and Ghumsur (N) Division Berhampur Circle is recorded.
- Hence, the Karanja plantations of Berhampur Circle performed exceedingly well while, Ghumsur (N) and Bargarh Divisions showed poor performance both in respect of height and girth. Rest of the 27 Divisions showed satisfactory growth performance with respect to height and girth.

4) *Azadirachta indica* (Neem)

- Assessment for Neem is done in 8 Circles and 24 out of 51 Divisions. Nearly 1089 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.52 m. Out of 24 Divisions, 3 Divisions (Berhampur Sundergarh and Bolangir Divisions of Berhampur, Rourkela and Bhawanipatna Circles) have shown excellent performance. Berhampur Division showed excellent height of 3.09 m. The other 18 Divisions showed medium performance. The poorest performance is recorded for 3 Divisions viz., 0.34, 0.51 and 0.76 m for Dhenkanal, Bargarh and Jharsuguda Divisions respectively. The lowest height however recorded is 0.34 m for Dhenkanal Division Angul Circle.
- Girth: The state-wise average Collar girth (CG) recorded is 10.04 cm. Out of 24 Divisions, 3 Divisions showed good performance with respect of CG and the highest CG recorded is 16.98 cm for Bolangir Division of Bhawanipatna Circle. The other 18 Divisions showed moderate girth. While, poorest performance is recorded for 2 Divisions (Dhenkanal and Jeypore) and the lowest being 2.29 cm for Dhenkanal Division Angul Circle.
- Hence, the Neem plantations of Berhampur and Bolangir Divisions performed exceedingly well while, Dhenkanal Division Angul Circle showed very poor performance both in respect of height (0.34 m) and girth (2.29 cm) for this species.

5) *Simarouba glauca* (Simarouba)

- Assessment for Simarouba is done in 8 Circles and 19 out of 51 Divisions. Nearly 883 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.61 m. Out of 19 Divisions, 3 Divisions (Berhampur, Nabarangpur, Athmallik) have shown excellent performance. Berhampur Division and Circle showed excellent height of 3.63 m. The other 13 Divisions showed medium performance. The poorest performance of 0.38, 0.63 and 0.51 m is recorded for Jharsuguda, Dhenkanal and Angul Division. The lowest being 0.38 m for Jharsuguda Division of Angul Circle.

- Girth: The state-wise average Collar girth (CG) recorded is 11.41 cm. Out of 19 Divisions, 2 Divisions Berhampur and Nabarangpur showed good performance with respect of CG and the highest CG recorded is 19.00 cm for Angul Division and Circle. The other 14 Divisions showed moderate girth. While, poorest performance is recorded for 3 Divisions (4.4 cm for Jharsuguda, 3.22 for Dhenkanal and 7.62 forAngul) and the lowest being 3.22 cm Dhenkanal (Angul Circle) Division.
- Hence, the Simarouba plantations of Berhampur, Nabrangapur and Athmallik Divisions performed exceedingly well while, Jharsuguda, Dhenkanal and Angul Divisions showed very poor performance both in respect of height and girth.

Amongst the 5 species, the top performer is Teak followed by Simarouba, Sissoo, Neem and Karanj in respect of height and girth for the year 2019-20.

Year - 2020-21

1) *Pongamia pinnata* (Karanja)

- Assessment for Karanja is done in all the 8 Circles and 32 out of 51 Divisions. Nearly 1709 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.26 m. Out of 32 divisions, 3 Divisions have shown excellent performance. Berhampur Division and Circle showed excellent height of 1.93 m. The other 28 Divisions showed medium performance and the poorest performance is recorded for 1 Divisions viz., Bolangir Division (Bhawanipatna) Circle of 0.45 m for height.
- Girth: The state-wise average Collar girth (CG) recorded is 8.32 cm. Out of 32 Divisions, 3 Divisions showed good performance with respect of CG and the highest CG recorded is 14.23 cm for Berhampur Division and Circle. The other 28 Divisions showed moderate girth. The poorest performance of 3.44 cm for Bolangir Division (Bhawanipatna Circle) is recorded.
- Hence, the Karanja plantations of Berhampur, Karanjia and Sundergarh Divisions performed exceedingly well while, Bolangir Division (Bhawanipatna Circle) showed poor performance in respect of both height and girth. Rest of the 28 Divisions showed satisfactory growth performance.

2) *Azadirachta indica* (Neem)

- Assessment for Neem is done in all the 8 Circles and 29 out of 51 Divisions. Nearly 1581 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.55 m. Out of 29 Divisions, 4 Divisions (Berhampur, Karanjia, Sundernagar, Paralakhmedi) have shown excellent performance. Berhampur Division and Circle showed excellent height of 2.73 m. The other 23 Divisions showed medium performance and the poorest performance of 0.51 and 0.69 m for Ghumsur and Sambalpur Divisions is for height.

- Girth: The state-wise average Collar girth (CG) recorded is 9.11 cm. Out of 29 Divisions, 4 Divisions showed good performance with respect of CG and the highest CG recorded is 14.88 cm for Sundernagar Division of Rourkela Circle. The other 29 Divisions showed moderate girth. The poorest performance of 3.81 and 4.19 cm for Ghumsur and Sambalpur Divisions is recorded.
- Hence, the Neem plantations of Parlakhemundi, Karanjia and Berhampur Divisions performed exceedingly well while, Ghumsur and Sambalpur Division showed poor performance both in respect of height and girth. Rest of the 29 Divisions showed satisfactory growth performance.

3) *Dalbergia sissoo* (Bali Sissoo)

- Assessment for Bali Sisso is done in 8 Circles and 30 out of 51 Divisions. Nearly 1461 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.38 m. Out of 30 Divisions, 3 Divisions (Berhampur, Karanjia and Subnabeda WL) have shown excellent performance. Subnabeda WL Division (Bhawanipatna Circle) showed excellent height of 2.39 m. The other 20 Divisions showed medium performance. The seven Divisions viz., Sambalpur, Rairakhol, Bargarh, Khariar, Athagarh, Cuttack and Angul showed poorest performance of 0.65, 0.83, 0.86, 0.91, 0.92, 0.97, and 0.98 cms respectively.
- Girth: The state-wise average Collar girth (CG) recorded is 8.70 cm. Out of 30 Divisions, 3 Divisions showed good performance with respect of CG and the highest CG recorded is 18.60 cm for Subnabeda WL Division (Bhawanipetna Circle). The other 20 Divisions showed moderate girth. The poorest performance of3.28, 4.60, 6.09, 6.14, 6.52, and 9.13 cms is recorded for Sambalpur, Rairakhol, Bargarh, Khariar, Athagarh, Cuttack and Angul Divisions respectively.
- Hence, the Bali Sisso plantations of Subnabeda WL performed exceedingly well while, Sambalpur, Rairakhol, Bargarh, Khariar, Athagarh, Cuttack and Angul Divisions showed poor performance both in respect of height and girth. Rest of the 20 Divisions showed satisfactory growth performance with respect to height and girth.

4) *Emblica officinalis* (Amla)

- Assessment for Amla is done in 8 Circles and 28 out of 51 Divisions. Nearly 953 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.00 m. Out of 28 Divisions, 2 Divisions (Chilika WL Division, BBSR Circle and Rairangapur Division, Baripada Circle) have shown excellent performance. Chilika WL Division showed excellent height of 1.68 m. The other 15 Divisions showed medium performance. The poorest performance is recorded for 11 Divisions with range of 0.41 to 0.86 m for Sambalpur, Bargarh, Nabarangapur, Malkangiri, Sunabeda WL, Subarnapur, Khariar, Phulbani, Cuttack, Athagarh and Angul Divisions. The lowest height however recorded is 0.41 m for Sambalpur Division.

- Girth: The state-wise average Collar girth (CG) recorded is 7.46 cm. Out of 28 Divisions, 3 Divisions showed good performance with respect of CG and the highest CG recorded is 30.70 cm for Subarnapur Division of Bhawanipatna Circle. The other 15 Divisions showed moderate girth. While, poorest performance is recorded for 11 Divisions with measurements ranging from 3.12 to 6.19 cms for Sambalpur, Bargarh, Nabarangapur, Malkangiri, Sunabeda WL, Subarnapur, Khariar, Phulbani, Cuttack, Athagarh and Angul Divisions.
- Hence, the Amla plantations of Chilika WL and Rairangapur Divisions performed exceedingly well while, Sambalpur, Bargarh, Nabarangapur, Malkangiri, Sunabeda WL, Subarnapur, Khariar, Phulbani, Cuttack, Athagarh and Angul Divisions showed very poor performance both in respect of height and girth for this species.

5) *Gmelinia arborea* (Gambharia, Gambhari, Gombhari)

- Assessment for Gambhari is done in 8 Circles and 26 out of 51 Divisions. Nearly 711 trees occurred in these plantations.
- Height: The state-wise average height recorded is 1.55 m. Out of 26 Divisions, 3 Divisions (Sundargarh, Nabrangpur and Berhampur) have shown excellent performance. Sundargarh Division showed excellent height of 3.66 m. The other 20 Divisions showed medium performance. The poorest performance of 0.51 and 0.79 m is recorded for Subarnapur, Sambalpur and Bargarh Divisions. The lowest being 0.51 m for Subarnapur Division of Bhawanipatna Circle.
- Girth: The state-wise average Collar girth (CG) recorded is 10.35 cm. Out of 26 Divisions, 3 Divisions (Sundargarh, Nabrangpur and Berhampur) showed good performance with respect of CG and the highest CG recorded is 22.02 cm for Nabarangpur Division (koraput Circle). The other 20 Divisions showed moderate girth. While, poorest performance is recorded for 3 Divisions (3.30 cm for Subaranapur, 4.06 for Sambalpur and 5.83 cm for Bargarh Divisions. The lowest being 3.30 cm for Subarnapur Division Bhawanipatnam Circle.
- Hence, the Gambhari plantations of Sundargarh, Nabarangapur and Berhampur Divisions performed exceedingly well while, Subarnapur, Sambalpur and Bargarh Divisions showed very poor performance both in respect of height and girth.

Amongst the 5 species, the top performer is Gambhari followed by Neem, Sissoo, Karanj and Amla in respect of height and girth for the year 2020-21.

Table 117: Year-wise and growth-wise grading of species performance for 8 Forest Circles under AR

Year	Grading of species performance
Year - 2017-18	Amongst the 5 species, the top performer is Acacia followed by Teak, Neem, Sissoo and Karanj in respect of height and girth.
Year - 2019-20	Amongst the 5 species, the top performer is Teak followed by Simarouba, Sissoo, Neem and Karanj in respect of height and girth.
Year - 2019-20	Amongst the 5 species, the top performer is Gambhari followed by Neem, Sissoo, Karanj and Amla in respect of height and girth.

The species performance on a given site is the outcome of species and site interactions, variation in cultural factors and biotic interference. The analysis shows that Amla and Karanj are low performers compared to high performers like Acacia, Gambhari and Teak. Neem and Sissoo are medium performers. Further, the highest growth is obtained in the year 2019-20 compared to 2017-18 and 2020-21 years. Furthermore, plantations of Sambalpur and Angul Circles have shown lower growth potential compared to other 6 Circles and this may be due to site characteristics and other factors impacting the growth.

General comments:

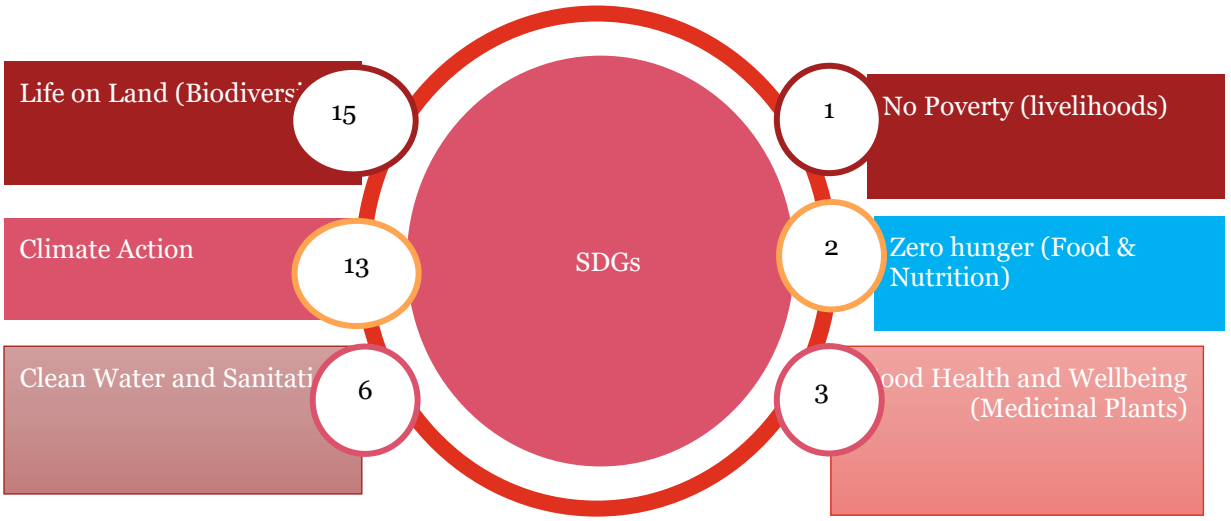
It is observed that the Nursery Stock had invariably 1 to 3 m tall seedlings which were sent to field for transplantation and therefore, the survival and growth rate of trees is very high in the plantations. The plantations were well stocked and tended. The growth of trees was healthy, and no diseases and pests were found. The survival rate was as high as 98% and lowest survival rate of 60% was recorded. Hence, it is inferred that the plantations under CAMPA have succeeded, and the performance is very good.

In most of the plantations, the ground cover was with multiple species of herbs and shrubs apart from the regenerated left out root stock of trees and shrubs in the field. This is a desirable sign of returning the area to natural forest features which is one of the aim of CAMPA i.e. to restore Biodiversity. Furthermore, nearly 58 indigenous tree species were planted under AR bringing in good amount of tree biodiversity. However, in some plantations, weeds like Lantana, Eupatorium etc., were observed and measures to cull out such invasive weeds are required to pave the way for natural succession of native flora.

10% of boundary pillars in the plantations sampled were studied. It was generally observed that the details in the KML files prepared on GIS platform which gives digitised maps and entries of geo coordinates made in the plantation journals did not match with the field measurement of geo coordinates taken during survey. Due to passage of time and damage by wildlife, particularly Elephants, some of the boundary pillars could not be physically traced. Details of discrepancies noticed are given under the Annexure.

12. Impact in terms of SDG Indicators

Protecting forests and environment is key to better quality of life. Though there is no specific Sustainable Development Goal (SDG) titled "Forests", a number of SDGs refer to forests and environment in one way or the other. SDGs 1 dealing with poverty, SDG 2 dealing with food and nutrition, SDG 3 dealing with health, SDG 6 dealing with water security, SDG 13 dealing with Climate action plan and SDG 15 dealing with Biodiversity, are all impacted by forestry sector. Whatever may be the nature of forest dependence, forests do play a major role in defining living conditions of mankind.



Forests are an important source of livelihoods for communities living in its vicinity in the form of employment generation (forestry operations, potential tourism and recreational activities, indirect influence on agriculture etc.,), food security, recreational value, conservation of soil and moisture that is so essential for sustainable agriculture and livestock management. Medicinal plants and diverse Non-Timber Forest Products impact Food and Nutrition of these communities. Water harvesting and its conservation are equally important in ensuring availability of clean water. Forests, being an excellent sink, are critical resources in Carbon capture and in combating Climate Change. Biodiversity and its conservation play multiple roles in enabling sustainable livelihoods.

Concept of 'Sustainability' is embedded in scientific forestry in India and elsewhere. Being a major player in ensuring sustainable forest management, CAMPA has a key role to play in this regard. Contribution of activities implemented under CAMPA during the period of this study in achieving these SDGs is enumerated in the matrix below:

Table 118: Impact in terms of SDG Indicators

S.no	Sustainable Development Goals	Indicators	Coverage Under CAMPA
1	SDG-1 Poverty Reduction	Eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day	CAMPA scheme implemented in challenging locations both in geographic and ecological terms provides employment in the form of wage employment during critical months to the forest dependent communities. In particular, investments in Ama Jangala Yojna in addition to other AR and ANR acclivities and SMC works, have provided employment opportunities thereby enabling achievement of this indicator. Works under CAMPA such as ANR and AR works have generated more than 190 lakhs man-days providing livelihoods to estimated 50,000 households belonging mostly to tribal communities.
		Reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	
2	SDG-2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	The forest conservation enabled through better protection and management contribute towards conservation of genetic resources and biodiversity. While forest protection and conservation is ensured through a number of initiatives such as better surveillance through forest protection squads and anti-poaching squads, fire control through maintenance of fire lines and fire watchers, promotion of regeneration and conservation of native species is ensured through the concept of ANR. Even in AR only local species are planted with seeds obtained from locally available better trees of corresponding species. No exotics are introduced here. In the Odisha state more than 1000 active VSS are working on sustainable forest management with the support of forest department.
3	SDG-3	Essential health-care services and access to safe, effective, quality and affordable essential	Forest is the source of many medicines used for the critical treatment of human and animal life. There are many plants and herbs naturally grown in the forests used for treatment of a number of ailments.

S.no	Sustainable Development Goals	Indicators	Coverage Under CAMPA
	Ensure healthy lives and promote well-being for all at all ages	medicines and vaccines for all.	In Odisha forests, a number of medicinal plants have available including trees, herbs, shrubs and climbers like Satavari, Tulsi, Ashwagandha (Withania somnifera), Sarpagandh (Rvolfia serpentina), Neem, Amla, Harida etc. All these species are conserved through ANR activities.
4	SDG-6 Ensure availability and sustainable management of water and sanitation for all	Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.	Water related ecosystems are changing in extent over time. However, Forests are the best bet to preserving water sources - both seasonal and permanent as they form a substantial portion of catchment areas of river systems, and their health is also very critical in maintaining drainage lines Under CAMPA activities in three financial years 2017-18, 2019-20, & 2020-21 many activities have been taken up in this direction. In addition to improvement of vegetation through AR and ANT investments, works for conservation of soil and moisture such as Gully plugging through Loose boulder check dams (LBCD), Staggered trenches, Percolation pits will help in achieving this goal.
5	SDG-13 Take urgent action to combat climate change and its impacts	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters	Forests are an excellent Carbon Sink. Through initiatives of Artificial Regeneration alone, 2.02 tonnes of CO_2 eq has been created. Details are available in the paras above.
6	SDG-15	Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in	Important sites of terrestrial and aquatic ecosystems have been included in Protected Area network with 19 Sanctuaries and 2 National Parks covering 5.30 % of State's geographical area. About 20 to 25 % of investments made annually under CAMP during the period of this study are for wildlife and biodiversity

S.no	Sustainable Development Goals	Indicators	Coverage Under CAMPA
		line with obligations under international agreement	conservation. Details have been elaborated in foregoing chapter.
		Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	The objective of CAMPA is conservation and restoration of forests, wetlands, water bodies and promote sustainable management of forest, ensuring better forest protection from illegal logging, fire and biotic pressure. These are achieved through improved forest management in the form of AR and ANR model treatments, SMC works, Fire control, Forest Protection Squads, addressing human wildlife conflicts, anti depradation measures and awareness building among others.

13. Ecosystem Services

The forests of Odisha are a source of fruits, seeds and medicinal plants for the local population. The main resources collected include teak, neem, mahua, saal, beedi leaves and grass. Fruits and medicinal herbs are also sourced from the forest. Because of the newly planted forest, the availability of NTFPs in the forest is very Low in AR. Beedi leaf (used for wrapping traditional cigarettes), Mahua flower and seed, etc. are the important NTFPs available in the Odisha Forest. Both men and women collect these NTFPs from forest and sell them in the local market. Beedi leaf is sold to the Forest Department. No value addition is done for NTFPs like Mahua flower, is generally sold by the women in the retail market. Some of the medicinal plants are also extracted from the forest and sold to traders in Ranchi and other places.

A section of the local population depends on the forest for their livelihood via the extraction of fiber and fuels. However, availability of alternatives to fuelwood and fibers has brought down the collection. The local populations, especially the indigenous population, rely on the site derived biochemicals, natural medicines and pharmaceuticals for their livelihood, health, as well as the prevention of endemics.

The forest provides key regulating services in terms of site-based air quality regulation, climate regulation, water regulation (Water conservation, water quality and health maintenance), carbon sequestration, as well as regulation of natural hazards (storms, flooding, etc). Farmers and forest-based communities benefit from the enhanced forest and food productivity of the site-derived pest and disease regulation. The local population also benefits from erosion regulation that protects the vegetation cover and topsoil. The high magnitude benefit of pollination benefits everyone locally as well as regionally by supporting the richness in biodiversity.

In terms of cultural services, the forest provides the local population with avenues for eco-tourism and spiritual and religious tourism. Farmers and the local population, as well as everyone regionally benefit from the supporting services that occur on site. These include soil formation, primary production, nutrient cycling, and provision of habitat.

Table 119: Value of ecosystem services through plantations in Odisha Forest

Ecosystem Service	Value in Million Rs
	Odisha
Water for agriculture	Data Unavailable
Timber Standing Stock	2251.07
Fuel, fodder and other NTFPs	941.05
Water Conservation	32055.18
Water Purification	Data Unavailable
Carbon Stock	39676.91
Soil Fertility	Data Unavailable
Air Pollution Control	647.30
Erosion Control	6133.88

Ecosystem Service	Value in Million Rs
	Odisha
Recreational Value of Tourism	460.16
Biological Control	21577.40
Gene-pool Protection	68495.65
Pollination	33286.74
Total	205525.34

More details about ecosystem services and calculations given above are stated under Annexure A_13.

14. Key observations and suggestions

Detailed inspection notes covering some important interventions are enclosed under the Annexure. Following are the key observations and suggestions:

Performance of Plantations:

Observations: Majority of the plantations raised under 'Artificial Regeneration" and in "Gap Planting in ANR Sites" have done well. Field verification of these plantations was taken up during hot summer months and survival was generally seen in excess of 75% in many plantations with average height around 2 M and average collar girth around 12 cm which indicates success of plantation initiative. A few plantations however have shown poor performance and they need to be spruced up. Site selection for plantation was appropriately done in majority of the sites. Plantation journals were updated and produced for verification. It was heartening to note that these journals contained details of activities undertaken and expenditure incurred. However, Treatment maps were generally missing or not produced for verification during field visits. It was learnt during interaction with the DFO Angul that drone technology is being used to prepare treatment maps and also to monitor treatment given, especially SMC structures.

Suggestions: It is suggested that treatment maps prepared should be available with the field staff as a guiding factor for treatment of forests. The spacing followed generally is 2.5 x 2.5 in AR plantations with 1600 plants per ha. It is recommended to follow spacing based on species wise crown structure in order to provide enough space for growth. In the same plot fast growing and slow growing species should not be mixed as the fast-growing species suppress the growth of slow growing species.

Species selection:

Observations: Commonly planted species in the surveyed sites were Teak, Sissoo, Simaruba, Gamhar, Sissoo, Neem, Karanj, Chakundi, Bamboo etc., There was no pattern or preference of any species, and it is a reasonably good mix. Unless the idea is to promote a mixed forests through these plantations, such a mix would pose its own issues in terms of silvicultural management as the rate of growth and silvicultural requirements of each species would differ. However, from the point of biodiversity, it is a healthy trend.

Suggestions: In order to augment meagre regeneration of native timber species as noticed in ANR sites, it is suggested to include species like Bhija, Asan, Arjun, Rose wood etc., in nurseries for planting particularly in gaps in ANR sites.

Nurseries:

Observations: Most of nurseries visited are well established, developed and maintained. These nurseries are stocked with well grown seedlings. The quality of planting material is very good in respect of height and the plants were disease free. The nursery infrastructure is quite good with excellent lay out.

Suggestions: It is therefore, recommended that the OFD nurseries may be registered and obtain certification for of quality planting material. For raising seedlings in the nursery, use of known seed sources is to be made mandatory. OFD's R&D should pay attention to this aspect and supply reproductive material (seeds, cuttings etc) from known sources only. Root trainer component may be added to each nursery which will give added benefits (highest survival and good growth) in the plantations. At present root trainers are used to raise seedlings for further conversion as tall plants in large sized bags. Thus, root trainers have just replaced small bags. Root trainer technology, particularly for native indigenous species with strong tap root system, has better utility than the one to which it is put at present.

Photo 13. Visit to a nursery

Biodiversity Conservation:

The assessment of CAMPA project has recorded more than 127 species however, species like Acacia, Satvan, Chakundi, karanj found prominence. Representation of more indigenous species and adding the local herbs and shrubs to the plantations in subsequent operations will increase the biodiversity component and meet the aim of compensatory afforestation. It is observed that many plantations are infested with Lantana and eupatorium weeds. Management and eradication of Lantana and eupatorium

is required to be undertaken in subsequent operations which will pave the way for natural succession of indigenous plants in plantations thus increasing the biodiversity component.

Maintenance of plantations:

Observations: Upkeep and maintenance of plantations is generally satisfactory. Plantations raised during 2017, 2019 and 2020 were 5, 3 and 2 years old at the time of verification. While most of the boundary pillars of the plantations were intact, some were damaged due to movement of wildlife. Similar was the condition of display boards.

Suggestions: Adequate budgetary provision is needed for the weeding and maintenance of these plantations for better growth once their routine maintenance regime is over. Funds from MGNREGS or interest accrued, may be utilized for this purpose.

Status of Natural Regeneration:

Observations: Most of the natural regeneration noticed in ANR sites is at seedling stage indicating a positive response to treatment. The species noticed are Sal (*Shorea robusta*), Kendu (*Diospyros melanoxylon*), Kusum (*Schleira oleosa*), Amla (*Emblica officinalis*), Bija (*Pterocarpus marsupium*), Asan (*Terminalaia alata*), Arjun (*Terminalia arjuna*), Harida (*Terminalia chebula*), Karada (*Cleistanthus collinus*), Kudchi / Kurei / Kurchi (*Holarrhena antidysenterica*), Baula / Bakul/ Baila / Molsari (*Mimusops elangi*) etc.,

Across all the three years, Seedlings made up 54.16% of the natural regeneration while Sapling and Poles made up 29.70% and 16.13% respectively. Nearly 20% of regeneration was found to be of Sal. Kendu leaf, a major NTFP having tremendous economic value is around 5% of the available natural regeneration studied. Regeneration of other timber species like Asan and Bhija were found to be grossly inadequate.

Natural regeneration was generally profuse and its transition from young recruits (Seedling) stage to full establishment (Pole stage) was found to be in the proportion of 3.5:1.

Suggestions: Since proportion of non-Sal timber species is found to be inadequate as mentioned in chapter 10, it is suggested that preference may be given to plant these species in gaps in ANR sites as well as in AR Sites.

Protected Area management:

Observations: Interventions taken up for improvement of habitats and protection and anti-depredation were studied. Elaborate inspections were made in Satkosia and Simlipal Tiger Reserves and Kotagarh WL Sanctuary. In Ghumsur North Division, a novel initiative of providing water troughs in addition to

construction and repairs of existing water holes, has been taken as a measure of conservation of Black Bucks. While the area where these measures are taken are generally outside the forest areas, the works are quite effective. In Satkosia and Simlipal Tiger Reserves, water hole construction and maintenance were found to be in strategic locations as seen from availability of hoof marks of Gaurs in Simlipal and traces of Elephant movement in Satkosia and Simlipal. Since water holes attract wildlife, they are also vulnerable places from protection angle. In Simlipal antipoaching squads are invariably located in the vicinity of such water holes taking care to ensure that human presence in these camps do not disturb wildlife. Similar was the observation in Satkosia as well. In Kotagarh WL Sanctuary also, water hole construction works were visited and found to be reasonably satisfactory. Some of the water holes constructed earlier need desilting.

Suggestions: Desilting may be taken up as a regular maintenance activity at least once every three years.

Meadow development works:

Observations: Meadow development works taken up fall broadly in four categories. The first category is introduction of palatable grass in areas devoid of them like the one noticed near Jagannathapur in Ghumsur North Division where lands are ploughed in strips and broadcast sowing of grass seeds is resorted to when adequate moisture is available to ensure their germination. Since this activity was just initiated, effect of the same could not be studied. The second category is removal of invasive and obnoxious weeds, slightly manipulating tree canopy to ensure sufficient sunlight and sowing and encouraging regeneration of palatable grass. This was seen in Satkosia WL Division and Simlipal Tiger Reserve. These are not typical grass lands but support good woody vegetation. Grass is introduced by scooping and sowing in small patches of natural openings or blanks and minor canopy manipulation is done to ensure adequate sunlight to the grass regeneration. Since canopy manipulation is needed, it is suggested to include this operation in Tiger Conservation Plans and monitor the same closely. It is also suggested to prepare grid maps for each compartment where such an activity is possible which will help in scientific planning and monitoring. The third category of meadows being developed are natural meadows like the one near Chahal in Simlipal North Division. However, such natural meadows are small in extent and very rare. The intervention here is to ensure that weeds are frequently removed before they flower. An elaborate calendar of operations prepared for these meadow development works were shown and they are closely monitored. The fourth category is development of meadows in areas where villages existed in the past but have since been relocated. Since these lands were under agriculture in the past, they support grass growth very well. Since these are large clearances (sometimes even up to 200 ha), and are generally devoid of tree growth, they have been providing very good succor to the herbivora, especially Spotted Deer and Sambar Deer.

Suggestion: There is need to map areas where such meadows have been developed and have potential for further development and include meadow development as an important component in management plans with adequate budgetary support. This initiative of meadow development holds lot of promise for wildlife

management in future. It is also suggested to ensure adequate water availability near these meadows and protection measures.

Voluntary relocation of villages:

Observations: Relocation of villages in Tiger Reserves and other Protected Areas done in accordance with the policy formulated by the National Tiger Conservation Authority of Government of India duly supplemented by a state level policy of the Government of Odisha in Satkosia and Simlipal Tiger Reserves and consequent development of habitat this vacated and in Keonjhar WL Division were studied. It is observed that the efforts for relocation though are quite sincere and the National and State's policy are quite exhaustive. Impact in terms of better habitat resulting in the aftermath of this relocation is very positive. However, lot of care needs to be exercised in terms of livelihoods of people relocated. Though the objective is to avoid or at least minimise human wildlife conflicts and ensure that wildlife habitat is inviolate, the human angle and village dynamics need to be factored in. If land owning people are turning out to be landless, it is certainly a matter of concern. On the contrary, if people can be assured of better life, with good civic amenities and better livelihood options, efforts will bring out satisfying results.

Suggestions: The bottom line is that core competence of forestry personnel lies in forestry, and they are weak in dealing with humanitarian and social issues. It is here that District administration supplements their efforts. There is certainly a role for a Social Development Specialist or a committed NGO to assist the Forest Department in their efforts. This social development specialist can also help in building capacity of relocated community in various sustainable livelihood options.

Functioning of antipoaching squads and protection squads:

Observations: All antipoaching squads visited are located in strategic places and serve the purpose of ensuring better protection. However, it was noticed (particularly in Simlipal) that on an average two to three persons are deployed in these antipoaching squads (Simlipal Tiger Reserve) which is grossly inadequate. This is probably because as against sanctioned number, more stations or squads are located thereby distributing the manpower. This is done to ensure wider area coverage, but squads are quite vulnerable due to depleted number. Further in some squad's personnel from far off places are engaged as it was felt (as informed during visit) that local people are likely to develop vested interests. With lack of knowledge about local area and dynamics these personnel also are felt ineffective (version gathered during interaction). Further such non-locals develop homesickness and there is frequent attrition. There is an elaborate task of record maintenance by these squads and in addition to mobile apps, manual registers also are maintained. This consumes substantial amount of time of these personnel. Regarding Forest and Fire Protection Squads it is observed that Protection squads with support for mobility and Para Forest Staff for foot patrolling and are engaged throughout the year and Fire Protection Squads are engaged

during critical and vulnerable winter and summer months. Though their number appears quite large, they provide much needed support to the frontline staff of Forest Department. Further the state of Odisha has a significant problem of Human Wildlife (particularly Elephant) conflicts and as such services of personnel engaged in these squads would be helpful in addressing this issue.

Suggestions: There is need to study these issues in further details and develop adequate strategies to recruit personnel having interest and commitment towards wildlife conservation and recruit them in adequate numbers and suitably strengthen these squads. Also, there is need to study the efficacy of multiplicity of registers and records and mobile apps and simplify them to reduce workload of record keeping by antipoaching squads so that they can concentrate and utilise their time on patrolling and other protection works. There were general complaints of delays in payment of remuneration to these personnel. This may be suitably addressed.

Ama Jangala Yojana:

Observations: Ama Jangala Yojana is an initiative of the Government of Odisha to continue the efforts of engaging communities in forest management. Communities participating in this activity are organised as Vana Samrakshyana Samitis and are assisted in micro planning and in further forest management. The Policy of the Government of Odisha notified in this regard is very comprehensive and details the procedure for constitution of such committees, their duties, rights and responsibilities and ensures adherence to regulations under Panchayat Extension to Scheduled Areas and the Forest Rights Act. Each community identified is allotted certain forest area near about their village/hamlet and assistance is provided for planning and implementation of forest improvement activities focusing on improvement of natural regeneration. During visit to VSSs and interaction with VSS members and forest officials assisting these VSSs, it was revealed that more than 80% funds under ANR has been utilized in creating wage employment (for the VSS members). Since area allotted is limited, sustainability of interest among communities would depend on usufruct sharing. Though the VSSs are entitled to Minor Forest Products and intermediate yield coming out of silvicultural operations in the course of forest improvement works, in the long run, much would depend on sharing benefits coming out of harvest of forest produce. Since investments are mostly on rejuvenation of natural regeneration, such harvests may not be adequate enough to sustain the interest of the communities.

Suggestions: There is need to explore possibilities of augmenting these initiatives and investments with livelihood enhancement activities (both forest based and non-forest) by providing for skill upgradation, value addition, market support along with required institution development. Financial support for this may be linked with any ongoing Government programme or from reinvestment of funds coming out of sale of forest products coming out of areas under management by these communities with appropriate institutional arrangements and safeguards. Since these livelihood options are likely to be viable only when

aggregated following cluster approach, institution of Forest Development Agency (FDA) can play important role in this regard.

Management Information System (MIS) for data management:

Observation: CAMPA entails maintaining large volumes of multi-layer data across several categories and units. While all Plantation, Natural Forest Management, Forest Protection activities are monitored by CEO CAMPA, Wildlife Conservation works are monitored by the Chief Wildlife Warden. The data management facility in the O/o CEO CAMPA, is mostly through use of Spreadsheets.

Suggestion: A centralized MIS is required for efficient data management at all levels of administration. Currently, information is stored on various facets of CAMPA such as location, current progress, fund allocation for sites and activities, maps, records, etc. in the form of paper files and on computers at all administrative level. MIS will provide all data for each site in one platform, accessible for everyone. Access to such a comprehensive database will (i) support planning and evidence-based decision making; (ii) improve resource allocation and efficiency at operational level; (iii) serve as a monitoring tool to track extent of implementation. This is very critical since there are discrepancies between data made available by field units (Divisions) and State level Office.

General Suggestion:

It is estimated that the employment generation of 7.2 million persons days (1 ha = 450 person days employment - Nugent, 2003) is created for the local population from approximately 16000 ha plantations and ANR, nursery etc., operations from the CAMPA project activity. Investing more in such activity will help restore ecology as well as create more employment opportunity to the people. There is an opportunity to claim Carbon sequestration benefits through voluntary carbon market. As the major aim of CAMPA project is to afforest/ reforest, protect and conserve the natural resources, raising commercial plantations in certain areas wherever feasible can be explored in order to meet the local / industrial demand of wood, MFP, medicinal plants etc. This will help generating profits and serve as revolving fund to plough back in CAMPA project operations for sustaining the activity on long term basis.

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16. List of Annexures

Annexure A

1. Data collection formats, Criteria, and Indicators for evaluation

Format for Evaluation of Artificial Regeneration / Block Plantation Sites

Form 1.1 General descriptions (to be obtained from Office; Separate form for each Plantation/Site)

Component - tick from the below: CA/PCA/Other/Site Specific WLM/NPV	Legal status of the site	Type of plantations - tick from the below: AR/BLOCK/Fruit & Fodder/Miyawaki/RET/Bamboo/Bald Hill/Other (specify)	Expenditure incurred
Name of Plantation/site	Area in ha (as per records)	Species	Espacement
		1. 2. 3... etc.	
Division	Range	Section	Beat
Forest Block	Compartment No.	Year of Planting	Date of Plantation
		2017 / 2019 / 2020	
Stage at time evaluation	No planted (as per records)	Number of Sample Plots (0.1 Ha)	Site Code
	Delineation of 4 ha of plantation site	Evidence of Podu cultivation (past and present)	Nature and quantity of usufruct obtained from plantation

Form 1.2 Field form (Use separate form for each sample plot (33Mx33M / 0.1 Ha) within plantation)

Site Code:

Table 1.2.1 Enumeration form

Division		Range	Plantation / Site Name	Plantation / Site Code	Sample Plot No	Latitude of central Point	Longitude of central point	Altitude (msl)
					X of Y			
Quadrant NE	Row No	Plant No	Species	Height	Collar girth	Planted/Natural		Remark (Mortality, Total Number in each quadrant)
		1						
		2						

		3					
		4					
		5 etc.,					
SE		1					
		2					
		3					
		4					
		5 etc.,					
SW		1					
		2					
		3					
		4					
		5 etc.,					
NW		1					
		2					
		3					
		4					
		5 etc.,					

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	

Table 1.2.2 General observation (to be recorded in the field) (Tick A or B or C as appropriate)

Division	Range	Plantation / Site Name	Plantation / Site Code	Plot No	Latitude of central Point	Longitude of central point
					X of Y	

Parameter	Score
Incidence of grazing	'A' No evidence of grazing noticed 'B' Minor incidence of grazing noticed 'C' Substantial evidence of grazing noticed
Incidence of fire	'A' No incidence, 'B' Medium (Saplings have recovered), 'C' Poor (regeneration not recovered)
Subsidiary silvicultural works taken	
Effect of Weeding, Coppice Cutting	'A' Plantation is relatively weed free 'B' Weeding done but weed growth in some patches not removed and or weed growth has come up again 'C' Weeding not done and / or not effective 'D' Average No. of coppice shoots per stool
Effect of Soil working	'A' Soil working done in the entire plantation and quality of work is good 'B' Soil working done but quality of work is average or below average 'C' Soil working not done
Maintenance of records (Plantation Journal)	'A' Perfect (Maintained, regularly updated and produced during field verification)

	'B' Moderate (Maintained but not updated and / or not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Plantation Map)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained) 'D' Whether the Map has been super imposed over Topo/Cadastral map
Maintenance of records (Treatment map)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Micro plan)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of Display Board.	'A' Perfect (Well maintained) 'B' Moderate (Not maintained) 'C' Bad (Not constructed and displayed)
Assessment of boundary pillars of plantation site (Assess 10% of number as per record, counting every 10th pillar from a random start)	'A' Boundary pillars are intact and numbered 'B' Boundary pillars are intact but not numbered 'C' Boundary pillars are not intact
Participation of VSS (through interaction and verification of records)	'A' Active participation 'B' Participation of only President and a committee member 'C' No participation
Area assessment	f) Gross area of the plantation g) Net area planted h) No. of pillar posted i) Whether pillars are numbered j) Whether the area of the plantation is fully covered (Area of the Plantation calculated from the map on graph sheet / prepared using GPS to be enclosed)
Participation of V.S.S in plantation / protection programme	a) Whether activities discussed in Gramya Sabha resolved or not. b) Resolution No. Date. c) Copy of resolution under FR Act available d) Maintenance of VSS register e) No of meeting held f) Mode of protection plantation g) Fire incident in the plantation site h) Podu cultivation in the plantation site i) Usufruct obtained from the plantation site
General remarks on site selection	a) Suitability of the site for plantation b) Not suitable
General remarks on selection of species	c) Selection is appropriate d) Selection is not appropriate
General remarks on survival of plants	This will be computed from data collected and recorded in Tables 1.2.1, 1.3 and 1.4
General remarks on growth of plants	This will be computed from data collected and recorded in Tables 1.2.1 and 1.3

If any Soil and Moisture Conservation Works are taken up in the Sample Plot use Form 4 for filling details

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Form 1.3 Abstract – Species wise in each Plot (to be computed in Office)

Plot No X of Y	Species	Number planted	Number surviving	Av Girth Planted	Av Height Planted	No naturally regenerated	Av Girth Natural	Av Height Natural	No of mortality (total number in the plot)	Remarks
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10 and so on									

Form 1.4 Abstract – All Plots of the Plantation / Site (to be computed in office)

Plot No	No. Planted	No. surviving	No. Mortality	No. Naturally regenerated
1				
2				
3				
4				
5 etc.				
Total of all Plots				

Format for Evaluation of Linear Plantations / Sites

Form 2.1 General description (to be obtained from Office; Separate form for each Plantation/Site)

Component - tick from the below: CA/PCA/Other/Site Specific WLM/NPV	Legal status of the site	Type of plantations - tick from the below: Avenue/Canal Bank/Other (specify)	Expenditure incurred
Name of Plantation/site	Length in Km	Species	Espacement
		1. 2. 3... etc.	
Division	Range	Section	Beat

Name of the village/s	Number of rows	Year of Planting	2017 / 2019 / 2020
Stage at time evaluation (Stratum)	No planted (as per records)	Description of Plantation stretch (From to To)	Plantation Code (Refer table 2.2)

Form 2.2 Field form (Use separate form for each sample plot within plantation)

Plantation Code:

Table 2.2.1 Enumeration form

Division	Range	Plantation / Site Name	Site Code	Length of Sample Stretch in Mtrs	Latitude and Longitude of starting Point	Latitude and Longitude of end Point	No of Mortality (total)
	Plant No	Species	Height	Collar girth	Planted/Natural	Remark	
	1						
	2						
	3						
	4						
	5 etc.,						

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	

Table 2.2.2 General observation (to be recorded in the field) (Tick A or B or C as appropriate)

Division	Range	Plantation / Site Name	Plantation / Site Code	Plot No	Latitude of central Point	Longitude of central point
					X of Y	

Parameter	Score
Incidence of grazing	'A' No evidence of grazing noticed 'B' Minor incidence of grazing noticed 'C' Substantial evidence of grazing noticed
Incidence of fire	'A' No incidence, 'B' Medium (Saplings have recovered), 'C' Poor (regeneration not recovered)
Subsidiary silvicultural works taken	
Effect of Weeding, Coppice Cutting	'A' Plantation is relatively weed free 'B' Weeding done but weed growth in some patches not removed and or weed growth has come up again 'C' Weeding not done and / or not effective
Effect of Soil working	'A' Soil working done in the entire plantation and quality of work is good 'B' Soil working done but quality of work is average or below average

	'C' Soil working not done
Maintenance of Plantation Journal.	'A' Perfect (Well maintained, regularly updated and produced during field verification) 'B' Moderate (Maintained but not updated and / or not produced during field verification, but shown separately) 'C' Bad (Not maintained)
Maintenance of Display Board.	'A' Perfect (Well maintained) 'B' Moderate (Not maintained) 'C' Bad (Not constructed and displayed)

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Form 2.3 Abstract – Species wise Details (to be computed in Office)

Species	Number planted	Number surviving	Av Girth Planted	Av Height Planted	No naturally regenerated	Av Girth Natural	Av Height Natural	No of Mortality	Remarks
1									
2									
3									
4									
5									
6									
7									
8									
9									
10 and so on									

Form 2.4 Abstract – All Species of the Plantation (to be computed in office)

No Planted	No surviving	No of Mortality	No naturally regenerated

Format for Evaluation of Assisted Natural Regeneration / Rehabilitation of Degraded Forests / Silvicultural Operations

Form 3.1: General description (to be obtained from Office) (to be obtained from Office; Separate form for each Plantation/Site)

Component - tick from the below: CA/PCA/Other/Site Specific WLM/NPV	Legal status of the site	Type of plantations - tick from the below: ANR/Fruit & Fodder/Other (specify)	Expenditure incurred

Name of Site	Area in ha	Species	Espacement
		10. 2. 3... etc	
Division	Range	Section	Beat
Forest Block	Compartment No.	Year of Planting / treatment	Year of Evaluation
			2017 / 2019 / 2020
Stage at time evaluation (Stratum)	No planted (as per records)	Number of Sample Plots (1 Ha)	Site Code
Area in ha (after inspecting atleast 10% of plantation pillars)	Delineation of 4 ha of plantation site	Evidence of Podu cultivation (past and present)	Nature and quantity of usufruct obtained fron plantation

Form 3.2 Field Form

Form 3.2.1 Regeneration Survey (to be filled in field)

(Use separate form for each sample plot within Site)

Division	Range	Site Name	Site Code	Sample Plot No	Latitude of Starting point of Base line	Longitude of End point of Base line
				X of Y		

Grid No.	No. of Seedlings	No. of Saplings	No. of Poles
1	Species / No	Species / No	Species / No
2	Species / No	Species / No	Species / No
3	Species / No	Species / No	Species / No
4	Species / No	Species / No	Species / No
5 upto 50			

Form 3.2.2: General observations: (to be filled in field) (tick what is appropriate)

Division	Range	Site Name	Site Code	Plot No	Latitude of Starting point of Base line	Longitude of End point of Base line
				X of Y		

Parameter	Score (Marks)
Incidence of fire	'A' No incidence, 'B' Medium (Saplings have recovered), 'C' Poor (regeneration not recovered)
Incidence of grazing	'A' No evidence of grazing noticed 'B' Minor incidence of grazing noticed 'C' Substantial evidence of grazing noticed
Subsidiary silvicultural works taken	
Effect of Singling of Coppice Shoots	'A' Less than 2 shoots, 'B' 2 to 4 shoots and 'C' more than 4 shoots
Erosion control	'A', Perfect (No erosion), 'B' Medium- (Incidence of sheet erosion), 'C' Poor (Gully formation seen)
Density of recruits	Saplings and poles (actual count will be classified as dense, medium and sparse on relative terms)- Collation of data from Regeneration Survey.
Shrub and Climber cutting	'A' Perfect and effective

	'B' Work done but climbers have regrown 'C' Not done
Treatment of coppicable high stumps	'A' All live stumps coppiced perfectly 'B' Live stumps coppiced but not effective (no coppice shoots noticed) 'C' No coppicing of high stumps done
Impact on Bamboo clumps	No of new culms emerged (av od one year old culms and av of two-year-old culms and av of three-year-old culms per clump)
Siltation in half moon trenches	'A' Good, 'B' Medium, 'C' No siltation
Treatment of Bamboo clumps	Decongestion done (Score of 1 to 3), Mounding done (Score of 1 to 3)
Maintenance of records (Plantation Journal)	'A' Perfect (Maintained, regularly updated and produced during field verification) 'B' Moderate (Maintained but not updated and / or not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Plantation Map)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Treatment map)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Silviculture register)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of Display Board.	'A' Perfect (Well maintained) 'B' Moderate (Not maintained) 'C' Bad (Not constructed and displayed)
Assessment of boundary pillars of plantation site (Assess 10% of number as per record, counting every 10th pillar from a random start)	'A' Boundary pillars are intact and numbered 'B' Boundary pillars are intact but not numbered 'C' Boundary pillars are not intact

If any Soil and Moisture Conservation Works are taken up in the Sample Plot use Form 4 and for Gap planting done in blocks of 0.5 ha and above, use Forms 1.1, 1.2, 1.2.1, 1.2.2, 1.3, 1.4. for filling details

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Form 3.3 Abstract – All Grids within each Sample Plot (to be computed in office)

Plot No	Species	No of Seedlings	No of Saplings	No of Poles
X of Y	1			
	2			
	3			
	4			
	5 etc			
	Total all Species			

Form 3.4 Abstract – All Sample Plots within each Site

Plot No	Species	No of Seedlings	No of Saplings	No of Poles
	1			
	2			
	3			
	4			
	5 etc			
	Total all Species			

Format for Evaluation Soil and Moisture Conservation Works

Form 4.1: General information (Use separate from for each structure)

Division	Range	Section	Beat
Forest Block	Compt. No	Part of AR/ANR/WL/Other	Type of structure (use separate form for each type of structure)
Number per ha	Year of construction	Amount Sanctioned (S.O. No)	Amount spent
Latitude	Longitude	Nature of terrain	Site Code
Treatment map available	Sample Plot No	Number of structures evaluated	
Extent of Siltation	Efficacy of the Structures	Comparative enhancement of water level	Comparative assessment of the Vegetation cover in the particular area

Form 4.2: Field observations

	Measurements recorded (Length, Breadth, Height, Volume)	Actual measurements (Length, Breadth, Height, Volume)
	Effect on controlling erosion on downhill region (tick what is appropriate)	'A', Perfect (No erosion), 'B' Medium- (Incidence of sheet erosion), 'C' Poor (Gully formation seen)
	Impounding water (tick what is appropriate)	'A' – Evidence of impounding over a relatively large area and no or very little evidence of siltation (silt removed), 'B' Ground water stored, but recharge area silted, 'C' No or little evidence of impounding
	Structural stability (tick what is appropriate)	'A', Stable, 'B' Needs minor repairs, 'C' Needs major repairs
	General Observation on location (tick what is appropriate)	'A' Perfect 'B' Moderate 'C' Bad
	General Observation on relevance of structure (tick what is appropriate)	'A' Perfect 'B' Moderate 'C' Bad

	General observation on impact on vegetation	'A' Positive impact 'B' No impact 'C' Negative impact (due to inundation, incorrect location etc.)

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Format for Evaluation of Interventions for Wildlife Conservation and Management of Protected Areas/ Wildlife Rich Area

Form 5.1: General description (to be obtained from Office)

Name of Protected Area	Site Code	Dominant Species of Flora and Fauna	Forest Type
Year	Circle	District	Division/s
Range/s	Section/s	Beat/s	
Forest Block/s	Compartment No/s	Terrain	Year of Treatment/Creation

Form 5.2: General observation

Parameter	Score (Marks)
Enforcement status	
Number of WL Offence cases registered (to be reviewed in the context of similar cases registered in the past 10 years in all the other Divisions	
Status of disposal of WL Offence Cases Booked	No. booked No of charge sheets filed No of cases pending in courts No of acquittals No of cases where punishments are imposed Status of Appeal cases if any
Anti-Poaching Squads, Base camps / patrolling parties, Check posts	No of Squads, Status of their functioning (through FGDs)
Monitoring arrangements	'A' Survey/Census done periodically for majority of species 'B' Arrears in Wildlife Census for some important species 'C' Census not carried out for majority of species
Camera Traps	'A' Cameras set up covering substantial area of PA, data regularly downloaded and monitored 'B' Cameras established but downloading data is not regular 'C' Cameras not set up or do not cover substantial area of PA
Functioning of Anti- poaching squads, base camps / patrolling parties	'A' Number and Location adequate, movement of patrolling parties is monitored

	'B' Number and / or Location inadequate by movement of patrolling parties is monitored 'C' Number and / or Location inadequate and movement of patrolling parties is not monitored
Maintenance of records (movement registers, evidence gathered during foot patrolling, census records etc.,)	'A' Perfect (All records maintained, regularly updated and produced during field verification) 'B' Moderate (Records maintained but not updated and / or not produced during field verification) 'C' Bad (Not maintained)
Habitat management works (Meadows, Fodder Fruit Plantation, Waterbodies, Salt Lake, Corridor Management – plantation & waterbodies)	
Weed control	Through filed inspections
Maintenance of view lines	Through filed inspections
Boundary demarcation and maintenance	Through filed inspections
Rescue of wild animals	Verification of records, inspections
Record of rescues release	
Anti-depredation measures	Through filed inspections
In situ and Ex situ Conservation measures including ones for specific species	Through filed inspections
Functioning of communication network and systems	Through filed inspections
VHF/ Mobile phones	a) extent of communication network b) Effective usability in protection and anti-depredation activities c) Condition of the network system and recommendation d) maintenance of communication register
Cattle immunization -status, adequacy	
Monitoring arrangements - status, adequacy	Through filed inspections
Infrastructure support - status, adequacy	Through filed inspections
Provision of Salt licks	Through filed inspections
Incidence of grazing	A' Nil, 'B' Medium, 'C' Heavy
Incidence of fire	'A' No incidence, 'B' Medium (Saplings have recovered), 'C' Poor (regeneration not recovered)
Human – Wildlife Conflicts	
No. of cases reported	
No. of case PR submitted.	
PR pending / duration of pending	
Status of resolution	Less than one month Between one Month to six months More than six months Pending
Nature of conflicts (as per policy of the Govt of Odisha)	Crop loss, Injury to human life, Human deaths etc.,
Protection measures - Physical barriers erected f any	Effectiveness of measures
Other initiatives taken in the APOs, their adequacy and effect	Through inspections, verification of records.

For Soil and Moisture Conservation Works, Water Holes (creation and maintenance), use Form 4.

For Infrastructure Development works such as Watch towers, Roads and other civil structures, use Form 6

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Format for Evaluation of Interventions Infrastructure Development (Buildings)

Form 6. 1: General description (to be obtained from Office)

Name of Location	Area	Construction / Repair	
Year	Circle	District	Division
Range	Section	Beat	
Forest Block	Compartment No.	Part of WL/PA works	Site Code
		Yes / No	
Year of Construction (For old structure)	Nature of works taken up (Repairs)	Amount Sanctioned	Amount Spent
If there is deviation in approved plan, state the reason(s)			

Form 6.2: Field observations (tick what is appropriate)

General Condition	Good / Fair / Poor
Site Location	Good / Fair / Poor
Serving the intended purpose	Good / Fair / Poor
Structural stability	Good / Fair / Poor
Present use Free of dampness and leakage	In use/Not in use

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Format for Evaluation of Interventions Infrastructure Development (Roads, Causeway, Culvert, Bridges)

Form 6. 1: General description (to be obtained from Office)

Name of Location	Area	Construction / Repair	
Year	Circle	District	Division

Range	Section	Beat	
Forest Block	Compartment No.	Part of WL/PA works	Site Code
		Yes / No	
Year of Construction (For old structure)	Nature of works taken up (Repairs)	Amount Sanctioned	Amount Spent
If there is deviation in approved plan, state the reason(s)			

Form 6.2: Field observations (tick what is appropriate)

General Condition	Good / Fair / Poor
Site Location	Good / Fair / Poor
Utility of the road	
Serving the intended purpose	Good / Fair / Poor
Duration of usage in a year	
Other funds used for repair	Yes, No

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Format for Evaluation of Interventions Infrastructure Development (Water bodies, Tube well)

Form 6. 1: General description (to be obtained from Office)

Name of Location	Area	Construction / Repair	
Year	Circle	District	Division
Range	Section	Beat	
Forest Block	Compartment No.	Part of WL/PA works	Site Code
		Yes / No	
Year of Construction (For old structure)	Nature of works taken up (Repairs)	Amount Sanctioned	Amount Spent
If there is deviation, state the reason(s)			

Form 6.2: Field observations (tick what is appropriate)

General Condition	Good / Fair / Poor
Site Location	Good / Fair / Poor
Serving the intended purpose	Good / Fair / Poor
Extent of recharge of ground water	Yes, No

Changes in water level	
Usage by wild animals with evidence	

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Format for Evaluation of Interventions for Forest Protection

Form 7.1: General description (to be obtained from Office)

Year	Circle	District	Division/s
Range/s	Section/s	Beat/s	
Forest Block/s	Compartment No/s	Terrain	Location of protection camp

Form 7.2: General observation

Parameter	Score (Marks)
General Protection	
Methodology of protection	Description
Forest Offence cases	No. Booked Qty of forest produce seized No of charge sheets filed No of cases pending in courts No of acquittals No of cases where punishments are imposed Status of Appeal cases if any
	No of Squads, Status of their functioning (through FGDs)
Trends of offence incidents	Description
Nature and extent of cooperation from local villagers	Description
Functioning of protection parties	'A' Number and Location adequate, movement of patrolling parties is monitored 'B' Number and / or Location inadequate but movement of patrolling parties is monitored 'C' Number and / or Location inadequate and movement of patrolling parties is not monitored
Record maintenance (movement registers, Offence registers etc.,)	'A' Perfect (All records maintained, regularly updated and produced during field verification) 'B' Moderate (Records maintained but not updated and / or not produced during field verification) 'C' Bad (Not maintained)
Functioning of check posts	'A' Adequate infrastructure, strategically located 'B' Strategically located; infrastructure not adequate 'C' Infrastructure inadequate, location not strategic 'D' Maintenance of Register in Check Post

Format for Evaluation of Interventions for Fire Protection

Form 8.1: General description (to be obtained from Office)

Year	Circle	District	Division/s
Range/s	Section/s	Beat/s	
Forest Block/s	Compartment No/s	Terrain	Location of protection camp

Form 8.2: General observation

Fire protection	
Fire map	Prepared/Not prepared
Annual Fire Protection Plan	Prepared/Not prepared
Methodology of protection	**Description**
Watch towers	"A' Located in strategic places and 180tilized regularly 'B' Located in strategic places but not 180tilized regularly 'C' Location is not in an effective place
Fire protection squads	No and locations (description)
Location and supply of equipment	'A' Strategically located and adequate supply of equipment 'B' Strategically located but equipment is inadequate 'C' Inadequate in location and equipment
Monitoring of fire protection squads	'A' Movement register maintained and monitored regularly 'B' Movement register maintained but not monitored 'C' Movement register not maintained and no monitoring is noticed
Incidence of forest fires	Number, area damaged
Fire Protection Awareness Programme	Number, Frequency and brief on strategies taught
Response to alerts given by FSI	Number of alerts, period and nature of response
Cooperation from local villagers	Description
Effectiveness of measures	Description
Whether prescribed SOP is followed	Yes No
If NO, state the reason	

Format for Evaluation of Bamboo Plantation Sites

Form 9.1 General descriptions (to be obtained from Office; Separate form for each Plantation/Site)

Component - tick from the below: CA/PCA/Other/Site Specific WLM/NPV	Legal status of the site	Type of plantations - tick from the below: AR/BLOCK/Fruit & Fodder/Miyawaki/RET/Bamboo/Bald Hill/Other (specify)	Expenditure incurred
Name of Plantation/site	Area in ha (as per records)	Species (of Bamboo)	Espacement
		2. 2. 3... etc	
Division	Range	Section	Beat
Forest Block	Compartment No.	Year of Planting	Date of Plantation
		2017 / 2019 / 2020	

Stage at time evaluation	No planted (as per records)	Number of Sample Plots (0.1 Ha)	Site Code
	Delineation of 4 ha of plantation site	Evidence of Podu cultivation (past and present)	Nature and quantity of usufruct obtained from plantation

Form 9.2 Field form (Use separate form for each sample plot (33Mx33M / 0.1 Ha) within plantation)

Site Code:

Table 9.2.1 Enumeration form

Division	Range	Plantation / Site Name	Plantation / Site Code	Sample Plot No	Latitude of central Point	Longitude of central point	Altitude (msl)
				X of Y			
Quadrant NE	Row No and Plant No	Species	No of Culms (Shoots)	Clump girth	Planted/Natural		Remark (Average height of clumps, Mortality, Total Number in each quadrant)
	1						
	2						
	3						
	4						
	5 etc.,						
SE	1						
	2						
	3						
	4						
	5 etc.,						
SW	1						
	2						
	3						
	4						
	5 etc.,						
NW	1						
	2						
	3						
	4						
	5 etc.,						

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	

Table 9.2.2 General observation (to be recorded in the field) (Tick A or B or C as appropriate)

Division	Range	Plantation / Site Name	Plantation / Site Code	Plot No	Latitude of central Point	Longitude of central point
					X of Y	

Parameter	Score
Incidence of grazing	'A' No evidence of grazing noticed 'B' Minor incidence of grazing noticed 'C' Substantial evidence of grazing noticed
Incidence of fire	'A' No incidence, 'B' Medium (Saplings have recovered), 'C' Poor (regeneration not recovered)
Subsidiary silvicultural works taken	
Effect of Weeding, Coppice Cutting	'A' Plantation is relatively weed free 'B' Weeding done but weed growth in some patches not removed and or weed growth has come up again 'C' Weeding not done and / or not effective
Effect of Soil working	'A' Soil working done in the entire plantation and quality of work is good 'B' Soil working done but quality of work is average or below average 'C' Soil working not done
Participation of VSS (through interaction and verification of records)	'A' Active participation 'B' Participation of only President and a committee member 'C' No participation
Area assessment	k) Gross area of the plantation l) Net area planted m) No. of pillar posted n) Whether pillars are numbered o) Whether the area of the plantation is fully covered (Area of the Plantation calculated from the map on graph sheet / prepared using GPS to be enclosed)
Participation of V.S.S in plantation / protection programme	a) Whether activities discussed in Gramya Sabha resolved or not. b) Copy of resolution under FR Act available c) Maintenance of VSS register d) No of meeting held e) Mode of protection plantation f) fire incident in the plantation site g) Podu cultivation in the plantation site h) Usufruct obtained from the plantation site
General remarks on site selection	i. Suitable ii. Not suitable
General remarks on selection of species	i. Selection is appropriate

	ii. Selection is not appropriate
General remarks on survival of plants	This will be computed from data collected and recorded in Tables 9.2.1, 9.3 and 9.4
General remarks on growth of plants	This will be computed from data collected and recorded in Tables 9.2.1 and 9.3
Maintenance of records (Plantation Journal)	'A' Perfect (Maintained, regularly updated and produced during field verification) 'B' Moderate (Maintained but not updated and / or not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Plantation Map)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Treatment map)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Micro plan)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of Display Board.	'A' Perfect (Well maintained) 'B' Moderate (Not maintained) 'C' Bad (Not constructed and displayed)
Assessment of boundary pillars of plantation site (Assess 10% of number as per record, counting every 10th pillar from a random start)	'A' Boundary pillars are intact and numbered 'B' Boundary pillars are intact but not numbered 'C' Boundary pillars are not intact

If any Soil and Moisture Conservation Works are taken up in the Sample Plot use Form 4 for filling details

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Form 9.3 Abstract – Species wise in each Plot (to be computed in Office)

Plot No X of Y	Species	Number planted	Number surviving	Av Clump Girth Planted	Av No of Culms (Shoots) Planted	No naturally regenerated	Av Clump Girth Natural	Av No of Culms (Shoots)	No of mortality (total number in the plot)	Average height of clumps
	1									
	2									
	3									
	4									

	5									
	6									
	7									
	8									
	9									
	10 and so on									

Form 9.4 Abstract – All Plots of the Plantation / Site (to be computed in office)

Plot No	No. Planted	No. surviving	No. Mortality	No. Naturally regenerated	Av No of Culms (Shoots)	Av Clump Girth	Av Clump Height
1							
2							
3							
4							
5 etc							
Total of all Plots							

Format for Evaluation of Rejuvenation of Degraded Bamboo Forests

Form 10.1: General description (to be obtained from Office) (to be obtained from Office; Separate form for each Plantation/Site)

Component - tick from the below: CA/PCA/Other/Site Specific WLM/NPV	Legal status of the site	Expenditure incurred	No of Plants planted (if any)
Name of Site	Area in ha	Species	Espacement
		11. 2. 3... etc.	
Division	Range	Section	Beat
Forest Block	Compartment No.	Year of Planting / treatment	Year of Evaluation
			2017 / 2019 / 2020
Stage at time evaluation (Stratum)	No planted (as per records)	Number of Sample Plots (1 Ha)	Site Code
Area in ha (after inspecting atleast 10% of plantation pillars)	Delineation of 4 ha of plantation site	Evidence of Podu cultivation (past and present)	Nature and quantity of usufruct obtained fron plantation

Form 10.2 Field Form

Form 10.2.1 Regeneration Survey (to be filled in field) (Use separate form for each sample plot within Site)

Division	Range	Site Name	Site Code	Sample Plot No	Latitude of Starting point of Base line	Longitude of End point of Base line				
				X of Y						
Grid No	General Survey (Tree species of size more than Poles (more than 20 CM Collar girth)			Survey of Bamboos						
	Species	Height	Girth (breast height)	Species	Clump No	Av Clump Girth	No of Culms (shoots)			
							1 year	2 years	3 years	More than 3 years
					1					
					2					
					3					
					4					
					5 and so on					

Form 10.2.2: General observations: (to be filled in field) (tick what is appropriate)

Division	Range	Site Name	Site Code	Plot No	Latitude of Starting point of Base line	Longitude of End point of Base line
				X of Y		

Parameter	Score (Marks)
Incidence of fire	'A' No incidence, 'B' Medium (Saplings have recovered), 'C' Poor (regeneration not recovered)
Incidence of grazing	A' Nil, 'B' Medium, 'C' Heavy
Incidence of fire	'A' No evidence of grazing noticed 'B' Minor incidence of grazing noticed 'C' Substantial evidence of grazing noticed
Subsidiary silvicultural works taken	
Effect of Singling of Coppice Shoots	'A' Less than 2 shoots, 'B' 2 to 4 shoots and 'C' more than 4 shoots
Erosion control	'A', Perfect (No erosion), 'B' Medium- (Incidence of sheet erosion), 'C' Poor (Gully formation seen)
Density of recruits	Saplings and poles (actual count will be classified as dense, medium and sparse on relative terms)- Collation of data from Regeneration Survey.
Shrub and Climber cutting	'A' Perfect and effective 'B' Work done but climbers have regrown 'C' Not done
Treatment of coppicable high stumps	'A' All live stumps coppiced perfectly 'B' Live stumps coppiced but not effective (no coppice shoots noticed) 'C' No coppicing of high stumps done
Impact on Bamboo clumps	No of new culms emerged (av od one year old culms and av of two-year-old culms and av of three-year-old culms per clump)
Siltation in half moon trenches	'A' Good, 'B' Medium, 'C' No siltation
Treatment of Bamboo clumps	'i' Decongestion done (Score of 1 to 3),

	'ii' Mounding done (Score of 1 to 3)
Maintenance of records (Plantation Journal)	'A' Perfect (Maintained, regularly updated and produced during field verification).'B' Moderate (Maintained but not updated and / or not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Plantation Map)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Treatment map)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of records (Microplan)	'A' Perfect (Maintained and produced during field verification) 'B' Moderate (Maintained but not produced during field verification, shown separately after field inspection) 'C' Bad (Not maintained)
Maintenance of Display Board.	'A' Perfect (Well maintained) 'B' Moderate (Not maintained) 'C' Bad (Not constructed and displayed)
Assessment of boundary pillars of plantation site (Assess 10% of number as per record, counting every 10th pillar from a random start)	'A' Boundary pillars are intact and numbered 'B' Boundary pillars are intact but not numbered 'C' Boundary pillars are not intact

If any Soil and Moisture Conservation Works are taken up in the Sample Plot use Form 4

Name of Evaluator:	Name& designation of Officer interacted:
Signature of Evaluator:	Signature of Officer Interacted:
Date of Enumeration:	Attach Three Photos

Form 10.3 Abstract – All Grids within each Sample Plot (to be computed in office)

Plot No	Species (General Survey)	Av Height	Av Girth (Breast Height)	No of Clumps	Av Clump Girth	Av No of Culms (1 year)	Av No of Culms (2 year)	Av No of Culms (3 year)	Av No of Culms (more than 3 year)
X of Y	1								
	2								
	3								
	4								
	5 etc.								
	Total all Species								

Form 10.4 Abstract – All Sample Plots within each Site

Plot No	Species	Av Height	Av Girth (Breast Height)	No of Clumps	Av Clump Girth	Av No of Culms (1 year)	Av No of Culms (2 year)	Av No of Culms (3 year)	Av No of Culms (more than 3 year)
	1								
	2								
	3								
	4								
	5 etc								
	Total all Species								

Questionnaire for Interviews of Selected Officers and Staff (Google Form)

Name of the Respondent	Designation	Circle
Division	Range	Section
Beat		

I. Views on objective and programme content of CAMPA:

1. Are they relevant and contemporary?

a Yes

b No

c Not sure / Don't know

2. Are they adequate to meet global, national and local needs? If not suggestions for improvement.

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvements

3. Are they adequate to meet Sustainable Developmental Goals? If not suggestions for improvement

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

4. Are they in tune with working plan prescriptions?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

5. Is the Budget support from CAMPA adequate to implement working plan prescriptions?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

6. Is there adequate Budget available from sources other than CAMPA to implement working plan prescriptions?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

7. Is Budget under CAMPA released in time to meet requirement of seasonal operations?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

8. Is the process of planning under CAMPA flexible?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

9. Is the process of planning under CAMPA participatory:

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

10. Is there scope for flexibility and discretion in site selection?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

11. Is there flexibility and discretion in selection of species?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

12. Are local people consulted in site selection?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

13. Are local people consulted in selection of species?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

14. Is there flexibility and discretion in finalising treatment models?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

15. Are local people cooperating in forest protection?

a Yes

b No

c Not sure / Don't know

If answer is "b" suggest improvement

16. Is the monitoring arrangement adequate?

a Yes

b No

c Not sure / Don't know

If answer is “b” suggest improvement

17. Are you aware of e-green watch? Is it useful for you in monitoring and evaluation?

a Yes

b No

c Not sure / Don’t know

If answer is “b” suggest improvement

18. Does CAMPA programme ensure livelihood security for the local people?

a Yes

b No

c Not sure / Don’t know

If answer is “b” suggest improvement

19. Has CAMPA Programme resulted in improvement of forest management?

a Yes

b No

c Not sure / Don’t know

If answer is “b” suggest improvement

20. Has implementation of CAMPA programme resulted in strengthening of Forestry Administration?

a Yes

b No

c Not sure / Don’t know

If answer is “b” suggest improvement

Questionnaire for Interviews of Selected Van Surakshya Samiti

Form 11.1: General description (to be obtained from Office)

Name of the VSS		Circle	
Division		Range	
Section		Beat	

Form 11.2: General observation

Record Maintenance	
Accounts books	Yes/No/Not available during visit
Stock register	Yes/No/Not available during visit

Microplanning	Preparation of micro plans, nature of participation, general awareness about forest under VSS management and about micro plan, convergence with Working Plan prescriptions
Functionality	
VSS meetings	Yes/No/Sometimes (Monthly/Quarterly/Biannual)
VSS AGM	Yes/No/Sometimes (Monthly/Quarterly/Biannual)
Do you know the objectives of the VSS	Description
Were there any trainings conducted? If yes, what were the topics	Description
Participation of VSS in Forest Protection	Description (Nature of participation, details of cases booked, offenders apprehended etc,.)
Participation of VSS in Forest Conservation and Afforestation works	Description (Nature of participation)
Benefits accrued to VSS	Usufruct sharing arrangement as per policy and actually shared (nature of usufruct, quantity, total realised and shared etc.,)
Linkage with Forest Rights Act	Convergence with Grama Sabha, grant of CFR rights, preparation of micro plan CFR for, implementation of micro plan for CFR.
Conflicts and resolution	Nature of conflicts if any and nature of resolution
Gender issues addressed	Profile of membership of VSS, profile of participation of men and women
Issues of indigenous people	Profile of membership and participation
Constitution and functioning of SHGs within VSS	Nature and number of SHGs, nature of activities, corpus fund and its utilization
Any other relevant information	

Date	
Name of Respondent	Signature

Questionnaire for Capacity Building & Research – Range/DFO office/RCCF office level

Training Type/ Category	1. Staff 2. VSS/ Community Members 3. Other.....
Nos. of participants trained	
Areas required for training	
Training Requirement	
Whether training led to empowerment	
Any further requirement of capacity building	
Gaps in training	

Questionnaire for Activities under Forest IT - Range/DFO office/RCCF office level

Type of gadgets operated by field staff and % of frontline staff conversant in using.	
Usage of IT for enhancing efficiency	
Whether field functionaries are able to understand technology	
Deliverable	
Gaps	
Use of monitoring, foot patrolling devices, Recording keeping of use of devices, validation of data collected by devices.	
Any other suggestions	

Focus Group Discussion Questionnaire (Facilitation Sheet for Community)

Sl. No.	Question	Excellent	Good	Average	Poor	Very Poor	Remarks
1	General awareness about the CAMPA Project, its objectives and activities						
2	Participation in site selection for treatment						
3	Participation in species selection						
4	Relevance of Entry Point Activities						
5	Adequacy of training provided						
6	Participation in forest protection						
7	Participation in programme implementation and sense of ownership						
8	Conflict resolution						
9	Relation with Forest Department						
10	Relevance and adequacy of treatment practices						
11	Relevance and adequacy of interventions in ensuring livelihood security						
12	Impact of interventions in improvement of forests and ecosystem services						
13	Impact of interventions on gender issues						

14	Impact of interventions on weaker sections of the society						
15	Impact of interventions on employment generation						

Name of Facilitator: Signature of Facilitator:

Date:

Names and Signatures of Participants

Sl. No.	Name	Father / Husband Name	Gender	Age Group	Address / Contact	Signature

2. List of species enumerated

List of species with Odia and Botanical names

S. No.	Odia name	Botanical name	Family
Trees			
1	Acacia	*Acacia auriculiformis*	Mimosaceae
2	Achu	*Motinda tomentosa*	Rubiaceae
3	Agathi, Agastya	*Sesbania grandiflora*	Papilonaceae
4	Ambada, Hog tree, Amata	*Spondias pinnata*	Anacardiaceae
5	Amla	*Emblica officinalis*	Euphorbiaceae
6	Arjuna	*Terminalia arjuna*	Combretaceae
7	Asan, Sahaj	*Terminalia alata*	Combretaceae
8	Ashoka	*Saraca indica, S. asoca*	Caesalpiniaceae
9	Aswastha (Pipal)	*Ficus religiosa*	Moraceae
10	Babul	*Acacia nilotica*	Mimosaceae
11	Bahada	*Terminalia bellirica*	Combretaceae
12	Bana bhalia, Kala bhalia, marking nut, Kalabhalia	*Semecarpus anacardium*	Anacardiaceae
13	Bara, Bud, Banyan, Baraghacha, Vat	*Ficus benghalensis*	Moraceae
14	Barada	*Bauhinia purpurea*	Caesalpiniaceae
15	Barkuli	*Ziziphus mauritiana*	Rhamnaceae
16	Baula, Bakul, Baila, Molsari	*Mimusaps elangi*	Sapotaceae
17	Bel, Bael	*Aegle marmelos*	Rutaceae

18	Bheru	*Chloroxylon swietenia*	Rutaceae
19	Casuarina	*Casuarina equisitifolia*	Casuarinaceae
20	Chadeigudi	*Vitex leucoxylon*	Verbenaceae
21	Chakunda	*Cassia siamea, Senna siamea*	Caesalpiniaceae
22	Char, charoli, Chironji	*Buchanania lanzan*	Anacardiaceae
23	Chatian, satvan, satparni	*Alstonia schloris*	Apocynaceae
24	Chotaral, Rai	*Dillenia aurea,*	Dilleniaceae
25	Devadaru	*Poliyalthia pendula*	Annonaceae
26	Dhaman	*Grewoa latifolia*	Tiliaceae
27	Dhaura, Dhawra, Dhoura	*Anogeissus latifolia*	Combretaceae
28	Dhauranga, Dharanja	*Holoptelia integrifolia*	Ulmaceae
29	Dhiiri (Tambal)	*Ficus hispida*	Moraceae
30	Dhobi (Barabakalia)	*Dalbergia paniculata*	Fabaceae
31	Dupamoi, Rajmohi, Moi, Mahi	*Lannea coromondelica*	Anacardiaceae
32	False Ashoka	*Polyalthia longifolia*	Annonaceae
33	Gambharia, Gambhari	*Gmelinia arborea*	Verbenaceae
34	Gangasiuli	*Nyctanthes arbor-tristis*	Nyctaginaceae
35	Genduli, Kodala	*Sterculia urens, Firmiana simplex*	Sterculiaceae
36	Ghoralanjia, kala siris, Tentra	*Albizzia odoratissimia*	Mimosaceae
37	Gohala, Lausoda	*Cordia mixa*	*Boraginaceae*
38	Guava	*Psidium guajava*	*Myrtaceae*
39	Haland, Haldu, Kurum	*Adina cardifolia*	Rubiaceae
40	Harida	*Terminalia chebula*	Combretaceae
41	Jackfruit, Phanas	*Atrocarpus integrifolia*	Moraceae
42	Jandamari	*Dyospyros montana*	Ebenaceae
43	Jari, Kua jari	*Ficus virens*	Moraceae
44	Jarnmbu, jamu	*Syzygium cumini*	Myrtaeae
45	Kadamb	*Anthocephalus cadamba, Neolamrckia cadamba*	Rubiaceae
46	Kaju, Cashew	*Anacardium occidentale*	Anacardiaceae
47	Kakopoi, Rain tree, Bada chakunda	*Samanea saman*	Fabaceae
48	Kalachua, Kala kaucha, Kalachua	*Glochidion zeylanicum*	Euphorbiaceae
49	Kamalgundi, Sindurigundi	*Mallotus philippensis*	Euphorbiaceae
50	Kanchan	*Bauhinia variegata*	Caesalpinaceae
51	Karada, Karla, Garadi, Garari, Giridi	*Cleistanthus collinus*	Euphorbiaceae
52	Karanj	*Pongamia pinnata*	Fabaceae
53	Kasi	*Bridelia retusa*	Euphorbiaceae
54	Kataka, Katkol	*Strychnos potatorum*	Strychnaceae, Loganiaceae
55	Katang bas,Thorny bamboo	*Bambusa arundinaceae*	Poaceae
56	Katha badam	*Terminalia catapa*	Combretaceae
57	Kavita, Kaith, Wood apple	*Feronia elephantum*	Rutaceae
58	Kendu	*Diospyros melanoxylon*	Ebenaceae
59	Khair	*Acacia catechu*	Mimosaceae
60	Khirkoli	*Manilkara hexandra*	Sapotaceae
61	Kolimoi, Sarupatri	*Garuga pinnata*	Burseraceae
62	Krishna chuda, Krishna chura	*Caesalpinia pulcherrima*	Caesalpiniaceae
63	Kuchla, Kuchila	*Strychnos nux-vomica*	Strychnaceae, Loganiaceae
64	Kusum	*Schleichera oleosa*	Sapindaceae
65	Mahalimba,Mahanim	*Ailanthus excelsa*	Simaroubaceae
66	Mahaneem, Bakayan, Persian lailac	*Melia azedarach*	Meilaceae
67	Mahogany	*Swietenia mahagoni*	Meliaceae

68	Mahul, Mohula	*Madhuca indica syn Bassia latifolia, Madhuca latifolia*	Sapotaceae
69	Mahul, Mahuwa	*Madhuca longifolia*	Sapotaceae
70	Mango, Amba	*Mangifera indica*	Anacardiaceae
71	Mundi	*Mitragyna parvifolia*	Rubiaceae
72	Neem	*Azadirachta indica*	Meliaceae
73	Ou, Rai	*Dillenia pentagyna, D. indica*	Dilleniaceae
74	Palas	*Butea monosperma*	Fabaceae
75	Panigambhari	*Trewis nudiflora*	Euphorbiaceae
76	Patuli, Patala	*Stereospermum suaveolens*	Bignoniaceae
77	Peltophorum	*Peltophorum pterocarpum*	Fabaceae
78	Phanphani, Phonophonia Sona patha	*Oroxylum indicum*	Bignoniaceae
79	Phasi, Passi	*Anogeissus acuminata*	Combretaceae
80	Piasal, Bija sal	*Pterocarpus marsupium*	Fabaceae
81	Pista badam	*Sterculia foetida*	Sterculiaceae
82	Pitakarichio, Phad korwan	*Wrightia arborea*	Apocynaceae
83	Punnanga, Polango	*Calophyllum inophyllum*	Calophyllaceae
84	Raktachandan	*Pterocarpus santalinus*	Fabaceae
85	Rohini	*Soymida febrifuga*	Meilaceae
86	Rosewood (black), Pahadi sissoo	*Dalbergia latifolia*	Fabaceae
87	Sal, Sargi, Rengal	*Shorea robusta*	Dipterocarpaceae
88	Salai	*Boswellia serrata*	Burseraceae
89	Salai bamboo	*Dendrocalamus strictus*	Poaceae
90	Salapa, Sago palm	*Caryota urens*	Arecaceae
91	Semal	*Bombax ceiba*	Bombacaceae
92	Sidha, Sinha, Patoli	*Lagerstroemia parviflora Lagerstroemia lanceolata*	Lythraceae
93	Simarouba	*Simarouba glauca*	Simaroubaceae
94	Siris	*Albiizzia lebbeck*	Mimosaceae
95	Sissoo, Bali sissoo	*Dalbergia sissoo*	Fabaceae
96	Sitaphal	*Anona squmosa*	Annonaceae
97	Sunari, Amaltas	*Cassia fistula*	Caesalpiniaceae
98	Supari, Araca palm	*Areca catechu*	Arecaceae
99	Suvarna champa	*Michelia champaka*	Magnoliaceae
100	Tangini, Kongra	*Xylia xylocarpa*	Mimosaceae
101	Teak, Sagwan	*Tectona grandis*	Verbenaceae
102	Tentuli, imli, Tamarind	*Tamarindus indica*	Caesalpiniaceae
103	Tody palm, wild date palm, Shindhi, Wild Khajur	*Phoenix sylvestris*	Arecaceae
Shrubs			
1	Aka, Ark,Madar Milk weed, Aakonda	*Calotropis gigantea and C. procera*	Apocynaceae
2	Ankula	*Alangium salvifolium*	Alangiaceae
3	Assamlata, Gandhuri, Bada pokasunga	*Eupatorium odoratum, Chromolaena odorata*	Asteraceae
4	Ban tulsi	*Ocimum gratissimum*	Lamiaceae
5	Banamali	*Jasminum arborescens*	Oleaceae
6	Begunia, Nirgundi	*Vitex negundo*	Verbenaceae
7	Bhauin champa	*Ochna obtusata*	Ochnaceae
8	Chhanapata	*Crotolaria junceae*	Fabaceae
9	Dhatuk, Dhatuki	*Woodfordia fruticosa*	Lythraceae
10	Dubuduba	*Glycosmis pentaphylla*	Rutaceae

11	Girili, Giridi	*Indigofera pulchella, Indigofera cassiodes*	Fabaceae
12	Kasa kasi jari	*Ficus tinctoria*	Moraceae
13	Khirakoli	*Carisa caranda*	Apocynaceae
14	Kamini, Ban malika, curry leaf, kadi patta	*Murraya paniculata, M.koenigii*	Rutaceae
15	Kanteikoli, Toran bel, Jackal jujube	*Ziziphus oenoplea*	Rhamnaceae
16	Kurei, Kurchi, Kudchi	*Holarrhena antidysenterica*	Apocynaceae
17	Lantana, Nagurai	*Lalntana camara*	Verbenanceae
18	Pengu	*Celastrus paniculata*	Celastraceae
19	Pokasunga	*Ageratum conizoides*	Asteraceae
20	Saloporni	*Desmodium gangeticum*	Fabaceae
21	Totadika	*Canthium parviflorum*	Rubiaceae
22	Tulasi	*Ocimum sanctum*	Lamiaceae
Herbs			
1	Apamaranga	*Achyranthes aspera*	Amaranthaceae
2	Ashwagandha	*Withania somnifera*	Solanaceae
3	Badi amla	*Phyllanthus niruri*	Euphorbiaceae
4	Bhuin neem, Chireita	*Andrographis paniculata*	Acanthaceae
5	Bisa karpura	*Sida cordifolia*	Malvaceae
6	Bisalyakarni	*Tridax procumbens*	Asteraceae
7	Odashamari	*Argemone mexicana*	Papaveraceae
Climbers			
1	Anantamala	*Hemidesmus indicus*	Asclepiadaceae
2	Atundi	*Combretum decandrum*	Combretaceae
3	Kaincha	*Arbus precatorius*	Fabaceae
4	Keuti, Raktakhai	*VEntilago madraspatana*	Rahmanaceae
5	Khakundia, Atundi	*Calycopteris floribunda*	Combretaceae
6	Sailai	*Bauhinia vahlii*	Caesalpiniaceae
7	Vandaka, Orchid	*Vanda tessellata*	Orchidaceae
Grass			
1	Duba	*Cynodon dactylon*	Poaceae
2	Kasa tandi	*Saccharum spontaneum*	Poaceae
3	Mutha kanda	*Cyperus rolimadus*	Cyperaceae
4	Phul Jhadu, Hill Broom	*Thysanolaena maxima*	Poaceae

3. Species wise performance for Artificial Regeneration

2017-18: Performance of Top 5 Species in Block Plantations

S.No.	Circle	Division	Species	Count of Species	Avg. Height(M)	Avg. CG(cm)
1	Angul	Angul	Teak	181	1.19	10.55
2	Angul	Athagarh	Teak	446	1.69	13.30
3	Angul	Cuttack	Teak	124	1.43	13.81
4	Angul	Dhenkanal	Teak	309	1.83	15.32
5	Baripada	Baripada	Teak	201	2.65	19.21
6	Baripada	Karanjia	Teak	141	3.17	22.61
7	Baripada	Keonjhar WL	Teak	75	1.82	13.69
8	BBSR	Khordha	Teak	82	3.20	23.56
9	BBSR	Nayagarh	Teak	166	2.01	17.60
10	Berhampur	Balliguda	Teak	120	1.46	8.60

11	Berhampur	Berhampur	Teak	64	2.12	11.86
12	Berhampur	Paralakhemundi	Teak	141	1.50	8.69
13	Bhawanipatna	Bolangir	Teak	202	2.40	14.24
14	Bhawanipatna	Kalahandi (N)	Teak	355	2.70	18.76
15	Bhawanipatna	Kalahandi (S)	Teak	129	2.16	15.54
16	Bhawanipatna	Khariar	Teak	385	1.61	9.97
17	Koraput	Jeypore	Teak	81	1.35	9.15
18	Koraput	Malkangiri	Teak	49	2.45	13.86
19	Koraput	Nabarangpur	Teak	471	2.67	21.00
20	Koraput	Rayagada	Teak	837	2.42	19.59
21	Rourkela	Bonai	Teak	25	2.54	17.90
22	Rourkela	Deogarh	Teak	41	2.59	17.07
23	Rourkela	Keonjhar	Teak	159	1.68	9.61
24	Rourkela	Sundargarh	Teak	22	2.49	21.36
25	Sambalpur	Bamara WL	Teak	41	0.96	8.05
26	Sambalpur	Bargarh	Teak	173	0.95	6.11
27	Sambalpur	Jharsuguda	Teak	123	0.96	6.69
28	Sambalpur	Sambalpur	Teak	41	1.06	7.89
Sub-Total				**5184**	**1.97**	**14.13**
1	Angul	Angul	Karanja	23	1.06	8.33
2	Angul	Athagarh	Karanja	8	1.64	14.64
3	Angul	Dhenkanal	Karanja	45	1.06	8.74
4	Baripada	Baripada	Karanja	31	2.17	16.04
5	Baripada	Keonjhar WL	Karanja	13	1.32	11.78
6	BBSR	Khordha	Karanja	75	2.39	16.60
7	BBSR	Nayagarh	Karanja	16	0.98	4.56
8	Berhampur	Balliguda	Karanja	33	1.52	8.59
9	Berhampur	Ghumsur (S)	Karanja	3	0.78	7.62
10	Bhawanipatna	Bolangir	Karanja	9	1.04	9.00
11	Bhawanipatna	Khariar	Karanja	7	1.43	7.87
12	Koraput	Nabarangpur	Karanja	24	2.30	17.79
13	Koraput	Rayagada	Karanja	4	1.70	12.07
14	Rourkela	Bonai	Karanja	16	2.24	16.03
15	Rourkela	Deogarh	Karanja	21	1.72	10.81
16	Rourkela	Keonjhar	Karanja	30	1.35	8.68
17	Rourkela	Rourkela	Karanja	99	1.01	10.44
18	Rourkela	Sundargarh	Karanja	15	1.72	14.19
19	Sambalpur	Bamara WL	Karanja	162	1.08	7.76
20	Sambalpur	Bargarh	Karanja	2	0.62	4.32
21	Sambalpur	Jharsuguda	Karanja	96	0.86	5.14
22	Sambalpur	Rairakhol	Karanja	74	1.11	8.12
23	Sambalpur	Sambalpur	Karanja	62	0.82	5.67
Sub-Total				**868**	**1.39**	**10.21**
1	Angul	Athagarh	Acacia	3	2.07	15.16
2	Angul	Dhenkanal	Acacia	11	0.88	6.95
3	Baripada	Baripada	Acacia	21	2.18	16.40

4	Baripada	Keonjhar WL	Acacia	36	2.45	19.73
5	BBSR	Khordha	Acacia	19	2.81	20.28
6	BBSR	Nayagarh	Acacia	423	2.00	14.26
7	Berhampur	Berhampur	Acacia	10	3.86	19.15
8	Berhampur	Ghumsur (S)	Acacia	84	3.78	26.19
9	Koraput	Nabarangpur	Acacia	2	3.94	23.88
Sub-total				**609**	**2.66**	**18.00**
1	Angul	Angul	Neem	33	1.15	7.97
2	Angul	Cuttack	Neem	2	2.45	58.42
3	Angul	Dhenkanal	Neem	14	0.95	7.15
4	Baripada	Baripada	Neem	22	2.02	15.11
5	Baripada	Rairangapur	Neem	28	3.22	19.76
6	BBSR	Khordha	Neem	47	2.32	16.69
7	BBSR	Nayagarh	Neem	28	1.54	7.61
8	Berhampur	Berhampur	Neem	7	1.60	7.95
9	Berhampur	Ghumsur (S)	Neem	2	2.04	10.41
10	Berhampur	Paralakhemundi	Neem	7	0.73	5.59
11	Bhawanipatna	Bolangir	Neem	4	1.41	11.68
12	Bhawanipatna	Kalahandi (N)	Neem	8	0.40	3.52
13	Bhawanipatna	Khariar	Neem	8	0.88	4.06
14	Koraput	Malkangiri	Neem	30	1.96	16.04
15	Koraput	Nabarangpur	Neem	28	1.91	13.00
16	Koraput	Rayagada	Neem	122	1.66	12.58
17	Rourkela	Bonai	Neem	17	2.21	15.81
18	Rourkela	Rourkela	Neem	4	1.86	13.40
19	Rourkela	Sundargarh	Neem	26	1.78	14.20
20	Sambalpur	Bamara WL	Neem	22	0.78	5.63
21	Sambalpur	Bargarh	Neem	72	1.05	5.91
22	Sambalpur	Jharsuguda	Neem	24	0.99	4.92
23	Sambalpur	Rairakhol	Neem	32	1.14	8.56
24	Sambalpur	Sambalpur	Neem	17	0.68	3.68
Sub-Total				**604**	**1.53**	**12.07**
1.	Angul	Angul	Sisoo(Bali)	57	1.68	23.38
2.	Angul	Athagarh	Sisoo(Bali)	4	1.22	9.21
3.	Angul	Dhenkanal	Sisoo(Bali)	15	1.26	9.06
4.	Baripada	Baripada	Sisoo(Bali)	18	2.26	16.47
5.	Baripada	Keonjhar WL	Sisoo(Bali)	7	1.23	10.12
6.	BBSR	Khordha	Sisoo(Bali)	12	2.06	14.90
7.	BBSR	Nayagarh	Sisoo(Bali)	11	1.49	8.79
8.	Berhampur	Balliguda	Sisoo(Bali)	35	2.00	9.73
9.	Berhampur	Berhampur	Sisoo(Bali)	1	2.79	14.22
10	Berhampur	Ghumsur (S)	Sisoo(Bali)	29	0.97	8.71
11.	Berhampur	Paralakhemundi	Sisoo(Bali)	1	0.13	2.54
12.	Bhawanipatna	Bolangir	Sisoo(Bali)	39	1.15	6.27
13.	Bhawanipatna	Kalahandi (N)	Sisoo(Bali)	32	0.57	4.24
14.	Koraput	Nabarangpur	Sisoo(Bali)	18	2.13	13.08

15.	Koraput	Rayagada	Sisoo(Bali)	14	1.59	10.92
16.	Rourkela	Bonai	Sisoo(Bali)	1	2.08	16.00
17.	Rourkela	Deogarh	Sisoo(Bali)	20	1.73	9.77
18.	Rourkela	Keonjhar	Sisoo(Bali)	19	1.53	9.81
19.	Rourkela	Rourkela	Sisoo(Bali)	1	3.05	22.86
20	Rourkela	Sundargarh	Sisoo(Bali)	8	1.85	14.48
21.	Sambalpur	Bamara WL	Sisoo(Bali)	17	0.55	4.29
22	Sambalpur	Bargarh	Sisoo(Bali)	19	0.69	3.80
23	Sambalpur	Jharsuguda	Sisoo(Bali)	50	0.77	4.41
24	Sambalpur	Rairakhol	Sisoo(Bali)	77	1.06	7.34
Sub-Total				**505**	**1.49**	**10.60**
Total no. of species planted				54		
Total no. of seedlings counted				11713		

2019-20: Performance of top 5 Species in Block Plantations

S.no.	Circle	Division	Species	Count of Trees	Avg. Height (M)	Avg. CG (in Cm.)
1	Angul	Angul	Teak	92	1.21	9.73
2	Angul	Athagarh	Teak	53	1.30	9.77
3	Angul	Athmallik	Teak	359	1.75	12.69
4	Angul	Cuttack	Teak	200	1.91	11.45
5	Angul	Dhenkanal	Teak	274	0.88	6.36
6	Baripada	Baripada	Teak	2	3.09	19.69
7	BBSR	Khordha	Teak	126	1.38	8.26
8	Berhampur	Balliguda	Teak	503	2.71	16.66
9	Berhampur	Berhampur	Teak	164	4.90	23.48
10	Berhampur	Boudh	Teak	156	1.31	8.15
11	Berhampur	Paralakhemundi	Teak	279	2.22	12.89
12	Berhampur	Phulbani	Teak	540	2.70	22.03
13	Bhawanipatna	Bolangir	Teak	73	2.24	18.65
14	Bhawanipatna	Kalahandi (N)	Teak	2	2.01	15.88
15	Bhawanipatna	Kalahandi (S)	Teak	167	2.47	19.03
16	Koraput	Koraput	Teak	30	1.19	7.52
17	Koraput	Malkangiri	Teak	12	1.28	5.33
18	Koraput	Rayagada	Teak	414	2.22	16.88
19	Rourkela	Bonai	Teak	42	1.62	9.96
20	Rourkela	Rourkela	Teak	26	2.02	16.06
21	Rourkela	Sundargarh	Teak	11	1.58	7.18
22	Sambalpur	Bargarh	Teak	8	1.22	10.67
23	Sambalpur	Rairakhol	Teak	4	1.24	7.87
24	Sambalpur	Sambalpur	Teak	1	1.42	6.86
Sub-total				**3538**	**1.91**	**12.63**
1	Angul	Angul	Sisoo(Bali)	181	1.38	10.59
2	Angul	Athmallik	Sisoo(Bali)	1	0.13	6.35
3	Angul	Dhenkanal	Sisoo(Bali)	74	1.26	8.45

4	Baripada	Karanjia	Sisoo(Bali)	23	1.68	8.91
5	BBSR	Chilika WL	Sisoo(Bali)	21	2.01	13.34
6	BBSR	Khordha	Sisoo(Bali)	22	1.68	10.51
7	BBSR	Nayagarh	Sisoo(Bali)	26	1.52	10.70
8	Berhampur	Balliguda	Sisoo(Bali)	20	1.04	6.63
9	Berhampur	Berhampur	Sisoo(Bali)	80	2.51	11.18
10	Berhampur	Boudh	Sisoo(Bali)	82	2.35	19.63
11	Berhampur	Ghumsur (N)	Sisoo(Bali)	451	1.67	16.02
12	Berhampur	Paralakhemundi	Sisoo(Bali)	51	0.75	4.52
13	Berhampur	Phulbani	Sisoo(Bali)	22	2.15	13.25
14	Bhawanipatna	Bolangir	Sisoo(Bali)	18	1.69	13.00
15	Bhawanipatna	Kalahandi (N)	Sisoo(Bali)	209	2.34	13.64
16	Bhawanipatna	Kalahandi (S)	Sisoo(Bali)	35	1.32	10.23
17	Bhawanipatna	Subarnapur	Sisoo(Bali)	3	2.02	13.04
18	Koraput	Jeypore	Sisoo(Bali)	19	1.16	5.87
19	Koraput	Koraput	Sisoo(Bali)	3	0.81	7.28
20	Koraput	Malkangiri	Sisoo(Bali)	23	2.85	18.38
21	Koraput	Nabarangpur	Sisoo(Bali)	51	2.88	13.84
22	Koraput	Rayagada	Sisoo(Bali)	103	1.25	10.19
23	Rourkela	Bonai	Sisoo(Bali)	27	1.39	7.86
24	Rourkela	Keonjhar	Sisoo(Bali)	79	1.71	11.46
25	Rourkela	Rourkela	Sisoo(Bali)	22	1.53	9.76
26	Sambalpur	Bamara WL	Sisoo(Bali)	4	1.02	4.89
27	Sambalpur	Bargarh	Sisoo(Bali)	21	0.97	4.95
28	Sambalpur	Jharsuguda	Sisoo(Bali)	11	0.47	3.88
29	Sambalpur	Rairakhol	Sisoo(Bali)	75	1.19	7.88
Sub-total				**1757**	**1.54**	**10.21**
1	Angul	Angul	Karanja	75	1.23	10.03
2	Angul	Athmallik	Karanja	13	1.08	7.11
3	Angul	Cuttack	Karanja	18	0.65	2.57
4	Angul	Dhenkanal	Karanja	321	0.94	5.89
5	Baripada	Karanjia	Karanja	51	1.58	10.32
6	Baripada	Keonjhar WL	Karanja	22	1.74	13.95
7	BBSR	Chilika WL	Karanja	21	1.44	10.01
8	BBSR	Khordha	Karanja	11	1.08	7.25
9	BBSR	Nayagarh	Karanja	4	1.07	7.87
10	Berhampur	Balliguda	Karanja	52	1.14	7.61
11	Berhampur	Berhampur	Karanja	3	2.60	10.24
12	Berhampur	Boudh	Karanja	54	1.85	12.63
13	Berhampur	Ghumsur (N)	Karanja	13	0.36	6.17
14	Berhampur	Paralakhemundi	Karanja	28	2.34	10.07
15	Berhampur	Phulbani	Karanja	28	2.63	22.18
16	Bhawanipatna	Kalahandi (N)	Karanja	43	1.63	10.71
17	Bhawanipatna	Kalahandi (S)	Karanja	81	0.68	4.74
18	Bhawanipatna	Khariar	Karanja	12	0.70	4.38
19	Bhawanipatna	Subarnapur	Karanja	4	1.70	11.24
20	Koraput	Jeypore	Karanja	52	1.10	5.85
21	Koraput	Koraput	Karanja	9	1.38	10.47
22	Koraput	Malkangiri	Karanja	40	2.00	13.41

23	Koraput	Nabarangpur	Karanja	10	2.32	15.72
24	Koraput	Rayagada	Karanja	36	1.39	10.33
25	Rourkela	Bonai	Karanja	90	1.47	8.52
26	Rourkela	Keonjhar	Karanja	88	1.48	9.37
27	Rourkela	Rourkela	Karanja	51	1.55	9.90
28	Rourkela	Sundargarh	Karanja	116	1.46	9.11
29	Sambalpur	Bamara WL	Karanja	10	1.34	8.71
30	Sambalpur	Bargarh	Karanja	5	0.91	4.32
31	Sambalpur	Jharsuguda	Karanja	96	0.73	4.97
32	Sambalpur	Rairakhol	Karanja	58	1.34	8.13
Sub-total				**1515**	**1.40**	**9.18**
1	Angul	Angul	Neem	301	1.29	11.08
2	Angul	Athmallik	Neem	23	1.71	9.09
3	Angul	Cuttack	Neem	33	1.53	6.68
4	Angul	Dhenkanal	Neem	4	0.34	2.29
5	Baripada	Karanjia	Neem	11	2.08	10.90
6	Baripada	Keonjhar WL	Neem	6	1.57	12.57
7	BBSR	Nayagarh	Neem	68	1.14	7.84
8	Berhampur	Berhampur	Neem	135	3.09	15.24
9	Berhampur	Boudh	Neem	81	1.95	15.41
10	Bhawanipatna	Bolangir	Neem	21	2.23	16.98
11	Bhawanipatna	Kalahandi (N)	Neem	19	1.66	11.66
12	Bhawanipatna	Kalahandi (S)	Neem	48	1.12	7.03
13	Bhawanipatna	Khariar	Neem	18	1.55	13.01
14	Bhawanipatna	Subarnapur	Neem	1	1.93	12.95
15	Koraput	Jeypore	Neem	5	1.09	5.33
16	Koraput	Rayagada	Neem	61	1.68	11.88
17	Rourkela	Bonai	Neem	27	1.52	8.36
18	Rourkela	Keonjhar	Neem	23	1.37	7.11
19	Rourkela	Rourkela	Neem	10	1.78	13.21
20	Rourkela	Sundargarh	Neem	104	2.24	14.48
21	Sambalpur	Bamara WL	Neem	67	1.17	6.48
22	Sambalpur	Bargarh	Neem	1	0.76	7.11
23	Sambalpur	Jharsuguda	Neem	5	0.51	5.38
24	Sambalpur	Sambalpur	Neem	17	1.23	8.82
Sub-total				**1089**	**1.52**	**10.04**
1	Angul	Angul	Simaruba	1	0.51	7.62
2	Angul	Athmallik	Simaruba	1	2.03	10.67
3	Angul	Cuttack	Simaruba	13	1.55	9.53
4	Angul	Dhenkanal	Simaruba	136	0.63	4.40
5	Baripada	Keonjhar WL	Simaruba	45	1.89	16.53
6	BBSR	Khordha	Simaruba	27	1.65	11.40
7	Berhampur	Berhampur	Simaruba	9	3.63	18.43
8	Bhawanipatna	Kalahandi (S)	Simaruba	23	1.87	14.72
9	Koraput	Jeypore	Simaruba	81	1.97	12.17
10	Koraput	Koraput	Simaruba	49	1.19	10.01
11	Koraput	Malkangiri	Simaruba	9	1.14	8.69
12	Koraput	Nabarangpur	Simaruba	11	2.54	19.00
13	Koraput	Rayagada	Simaruba	120	1.48	11.39

14	Rourkela	Bonai	Simaruba	166	1.68	10.33
15	Rourkela	Rourkela	Simaruba	28	1.65	10.14
16	Rourkela	Sundargarh	Simaruba	157	1.57	14.51
17	Sambalpur	Bargarh	Simaruba	3	2.03	10.75
18	Sambalpur	Jharsuguda	Simaruba	3	0.38	3.22
19	Sambalpur	Rairakhol	Simaruba	1	1.09	13.21
Sub-total				**883**	**1.61**	**11.41**
Total no. of Species planted			55			
Total no. of seedlings counted			14598			

2020-21: Performance of Top 5 Species in Block Plantations

S.no	Circle	Division	Species	Count of Trees	Avg. Height (M)	Avg. CG (cm)
1	Angul	Angul	Karanja	47	0.86	7.03
2	Angul	Athagarh	Karanja	83	0.97	7.15
3	Angul	Cuttack	Karanja	166	0.86	8.70
4	Baripada	Balasore WL	Karanja	17	1.28	6.26
5	Baripada	Karanjia	Karanja	18	1.74	13.70
6	BBSR	Chilika WL	Karanja	20	1.69	11.93
7	BBSR	Khordha	Karanja	25	0.99	5.03
8	BBSR	Nayagarh	Karanja	78	1.19	6.54
9	Berhampur	Balliguda	Karanja	38	1.48	10.35
10	Berhampur	Berhampur	Karanja	85	1.93	14.23
11	Berhampur	Boudh	Karanja	72	1.55	10.07
12	Berhampur	Ghumsur (N)	Karanja	7	1.02	8.42
13	Berhampur	Paralakhemundi	Karanja	25	1.54	9.93
14	Berhampur	Phulbani	Karanja	52	1.35	8.62
15	Bhawanipatna	Bolangir	Karanja	21	0.45	3.44
16	Bhawanipatna	Kalahandi (N)	Karanja	45	1.63	9.22
17	Bhawanipatna	Kalahandi (S)	Karanja	34	1.22	8.75
18	Bhawanipatna	Khariar	Karanja	45	1.22	7.82
19	Bhawanipatna	Subarnapur	Karanja	39	1.06	8.04
20	Bhawanipatna	Sunabeda WL	Karanja	13	0.79	5.55
21	Koraput	Koraput	Karanja	45	1.25	7.21
22	Koraput	Malkangiri	Karanja	30	0.98	6.23
23	Koraput	Nabarangpur	Karanja	101	0.87	6.04
24	Koraput	Rayagada	Karanja	133	1.50	10.90
25	Rourkela	Bonai	Karanja	57	1.49	9.18
26	Rourkela	Deogarh	Karanja	41	1.37	8.08
27	Rourkela	Keonjhar	Karanja	29	1.70	6.95
28	Rourkela	Rourkela	Karanja	157	1.54	10.83
29	Rourkela	Sundargarh	Karanja	86	1.78	13.86
30	Sambalpur	Bargarh	Karanja	79	0.88	5.12

31	Sambalpur	Rairakhol	Karanja	2	1.35	6.99
32	Sambalpur	Sambalpur	Karanja	19	0.67	3.90
			Sub-Total	**1709**	**1.26**	**8.32**
1	Angul	Angul	Neem	69	0.99	6.12
2	Angul	Athagarh	Neem	93	1.00	7.39
3	Angul	Cuttack	Neem	49	0.93	5.85
4	Angul	Dhenkanal	Neem	314	1.65	10.64
5	Baripada	Balasore WL	Neem	23	1.26	6.45
6	Baripada	Karanjia	Neem	20	2.59	12.28
7	Baripada	Rairangapur	Neem	15	1.78	11.24
8	BBSR	Chilika WL	Neem	15	1.99	12.62
9	BBSR	Khordha	Neem	180	1.51	9.77
10	BBSR	Nayagarh	Neem	101	1.23	6.66
11	Berhampur	Balliguda	Neem	9	1.52	11.32
12	Berhampur	Berhampur	Neem	45	2.73	13.20
13	Berhampur	Boudh	Neem	69	1.89	11.12
14	Berhampur	Ghumsur (N)	Neem	1	0.51	3.81
15	Berhampur	Ghumsur (S)	Neem	2	1.38	11.05
16	Berhampur	Paralakhemundi	Neem	4	2.54	14.10
17	Berhampur	Phulbani	Neem	33	1.35	8.91
18	Bhawanipatna	Bolangir	Neem	20	2.64	11.06
19	Bhawanipatna	Kalahandi (S)	Neem	14	1.13	8.76
20	Bhawanipatna	Khariar	Neem	23	1.13	6.65
21	Bhawanipatna	Sunabeda WL	Neem	17	1.04	6.50
22	Koraput	Rayagada	Neem	55	1.55	10.46
23	Rourkela	Bonai	Neem	8	1.72	11.91
24	Rourkela	Deogarh	Neem	31	1.49	7.28
25	Rourkela	Keonjhar	Neem	20	1.95	6.85
26	Rourkela	Rourkela	Neem	25	1.29	7.50
27	Rourkela	Sundargarh	Neem	120	2.45	14.88
28	Sambalpur	Bargarh	Neem	194	0.98	5.69
29	Sambalpur	Sambalpur	Neem	12	0.69	4.19
Sub-total				**1581**	**1.55**	**9.11**
1	Angul	Angul	Sisoo(Bali)	32	0.97	9.13
2	Angul	Athagarh	Sisoo(Bali)	32	0.98	6.14
3	Angul	Cuttack	Sisoo(Bali)	24	0.92	6.09
4	Baripada	Balasore WL	Sisoo(Bali)	26	1.23	5.90
5	Baripada	Karanjia	Sisoo(Bali)	47	2.39	16.26
6	Baripada	Rairangapur	Sisoo(Bali)	22	1.30	7.87
7	BBSR	Chilika WL	Sisoo(Bali)	20	1.72	12.66
8	BBSR	Nayagarh	Sisoo(Bali)	358	1.58	9.26
9	Berhampur	Balliguda	Sisoo(Bali)	60	1.68	9.39

10	Berhampur	Berhampur	Sisoo(Bali)	71	2.03	9.08
11	Berhampur	Boudh	Sisoo(Bali)	103	1.76	12.98
12	Berhampur	Ghumsur (N)	Sisoo(Bali)	93	1.95	17.57
13	Berhampur	Ghumsur (S)	Sisoo(Bali)	3	1.65	7.70
14	Berhampur	Paralakhemundi	Sisoo(Bali)	13	1.63	8.01
15	Berhampur	Phulbani	Sisoo(Bali)	38	1.56	10.90
16	Bhawanipatna	Bolangir	Sisoo(Bali)	71	1.32	5.94
17	Bhawanipatna	Kalahandi (N)	Sisoo(Bali)	14	1.55	6.01
18	Bhawanipatna	Kalahandi (S)	Sisoo(Bali)	37	1.18	8.15
19	Bhawanipatna	Khariar	Sisoo(Bali)	20	0.83	4.60
20	Bhawanipatna	Subarnapur	Sisoo(Bali)	59	1.27	18.60
21	Bhawanipatna	Sunabeda WL	Sisoo(Bali)	29	1.11	5.82
22	Koraput	Malkangiri	Sisoo(Bali)	22	1.13	6.14
23	Koraput	Nabarangpur	Sisoo(Bali)	30	1.09	6.30
24	Koraput	Rayagada	Sisoo(Bali)	82	1.62	10.92
25	Rourkela	Bonai	Sisoo(Bali)	26	1.31	7.04
26	Rourkela	Deogarh	Sisoo(Bali)	43	1.76	9.88
27	Rourkela	Keonjhar	Sisoo(Bali)	29	1.49	7.95
28	Sambalpur	Bargarh	Sisoo(Bali)	36	0.91	6.52
29	Sambalpur	Rairakhol	Sisoo(Bali)	9	0.86	4.83
30	Sambalpur	Sambalpur	Sisoo(Bali)	12	0.65	3.28
Sub-Total				**1461**	**1.38**	**8.70**
1	Angul	Angul	Amla	58	0.64	3.32
2	Angul	Athagarh	Amla	49	0.53	3.08
3	Angul	Cuttack	Amla	1	0.79	5.84
4	Baripada	Balasore WL	Amla	3	1.18	8.55
5	Baripada	Rairangapur	Amla	18	1.65	11.74
6	BBSR	Chilika WL	Amla	10	1.68	11.46
7	BBSR	Nayagarh	Amla	121	1.25	7.56
8	Berhampur	Balliguda	Amla	35	1.07	5.78
9	Berhampur	Berhampur	Amla	22	1.44	8.64
10	Berhampur	Boudh	Amla	62	1.45	9.70
11	Berhampur	Ghumsur (S)	Amla	5	1.18	8.28
12	Berhampur	Paralakhemundi	Amla	30	0.98	6.80
13	Berhampur	Phulbani	Amla	45	0.87	5.55
14	Bhawanipatna	Bolangir	Amla	43	1.31	8.89
15	Bhawanipatna	Kalahandi (N)	Amla	28	0.94	5.80
16	Bhawanipatna	Kalahandi (S)	Amla	59	0.96	7.32
17	Bhawanipatna	Khariar	Amla	39	0.67	6.19
18	Bhawanipatna	Subarnapur	Amla	50	0.36	30.70
19	Bhawanipatna	Sunabeda WL	Amla	38	0.68	4.08
20	Koraput	Malkangiri	Amla	18	0.86	5.15
21	Koraput	Nabarangpur	Amla	13	0.76	4.87

22	Koraput	Rayagada	Amla	75	1.34	9.13
23	Rourkela	Bonai	Amla	18	1.03	5.84
24	Rourkela	Deogarh	Amla	8	1.15	6.92
25	Rourkela	Keonjhar	Amla	3	1.18	5.50
26	Sambalpur	Bargarh	Amla	70	0.69	4.16
27	Sambalpur	Rairakhol	Amla	22	0.84	4.86
28	Sambalpur	Sambalpur	Amla	10	0.41	3.12
Sub-Total				**953**	**1.00**	**7.46**
1	Angul	Angul	Gombhari	18	0.91	6.04
2	Angul	Athagarh	Gombhari	20	1.08	8.66
3	Baripada	Balasore WL	Gombhari	7	1.36	10.41
4	Baripada	Karanjia	Gombhari	9	1.56	12.95
5	BBSR	Chilika WL	Gombhari	25	2.10	13.99
6	BBSR	Khordha	Gombhari	11	0.84	5.10
7	Berhampur	Balliguda	Gombhari	3	2.23	10.50
8	Berhampur	Berhampur	Gombhari	127	2.85	16.96
9	Berhampur	Boudh	Gombhari	1	1.14	7.87
10	Berhampur	Ghumsur (S)	Gombhari	4	1.23	11.75
11	Berhampur	Paralakhemundi	Gombhari	39	1.89	11.93
12	Berhampur	Phulbani	Gombhari	6	1.85	11.13
13	Bhawanipatna	Kalahandi (N)	Gombhari	61	1.25	9.19
14	Bhawanipatna	Kalahandi (S)	Gombhari	11	1.53	14.50
15	Bhawanipatna	Khariar	Gombhari	36	1.74	11.95
16	Bhawanipatna	Subarnapur	Gombhari	1	0.51	3.30
17	Bhawanipatna	Sunabeda WL	Gombhari	30	1.03	6.68
18	Koraput	Koraput	Gombhari	27	0.99	9.20
19	Koraput	Malkangiri	Gombhari	40	1.36	8.31
20	Koraput	Nabarangpur	Gombhari	103	2.70	22.02
21	Koraput	Rayagada	Gombhari	57	1.63	12.03
22	Rourkela	Deogarh	Gombhari	15	1.61	8.89
23	Rourkela	Keonjhar	Gombhari	15	1.61	6.74
24	Rourkela	Sundargarh	Gombhari	11	3.66	19.03
25	Sambalpur	Bargarh	Gombhari	15	0.79	5.83
26	Sambalpur	Sambalpur	Gombhari	19	0.79	4.06
Sub-Total				**711**	**1.55**	**10.35**
Total no. of species planted					59	
Total no. of seedlings counted					12607	

4. Regeneration details in Assisted Natural Regeneration

Regeneration Density

Regeneration Density in Assisted Natural Regeneration - 2017-18									
Total Count									
Circle	Division	Grid Total	Seedling	Sapling	Pole	Grid Area	Seedling/ Ha	Sapling/ Ha	Pole/ Ha
Angul	Angul	16	192	69	39	6400	300	108	61
	Athagarh	16	177	40	25	6400	277	63	39
	Cuttack	4	23	7	10	1600	144	44	63
	Dhenkanal	28	410	254	128	11200	366	227	114
	Sub-Total	64	802	370	202	25600	313	145	79
Baripada	Baripada	12	80	26	11	4800	167	54	23
	Balasore WL	68	391	265	112	27200	144	97	41
	Keonjhar WL	16	92	53	30	6400	144	83	47
	Sub-Total	96	563	344	153	38400	147	90	40
BBSR	Khordha	8	131	76	38	3200	409	238	119
	Nayagarh	28	525	387	139	11200	469	346	124
	Rajnagar WL	4	36	25	19	1600	225	156	119
	Sub-Total	40	692	488	196	16000	433	305	123
Berhampur	Balliguda	84	797	291	171	33600	237	87	51
	Berhampur	4	29	17	12	1600	181	106	75
	Ghumsur (S)	8	87	61	18	3200	272	191	56
	Paralakhemundi	84	677	326	224	33600	201	97	67
	Sub-Total	180	1590	695	425	72000	221	97	59
Bhawanipatna	Bolangir	380	2938	1627	1066	152000	193	107	70
	Khariar	65	316	207	223	26000	122	80	86
	Sub-Total	445	3254	1834	1289	178000	183	103	72
Koraput	Jeypore	4	54	28	23	1600	338	175	144
	Malkangiri	224	2196	1228	707	89600	245	137	79
	Nabarangpur	96	855	495	200	38400	223	129	52
	Rayagada	10	49	42	14	4000	123	105	35
	Sub-Total	334	3154	1793	944	133600	236	134	71
Rourkela	Bonai	4	23	8	3	1600	144	50	19
	Deogarh	4	30	18	14	1600	188	113	88
	Keonjhar	8	62	33	16	3200	194	103	50
	Rourkela	72	541	253	111	28800	188	88	39
	Sundargarh	1	6	5	1	400	150	125	25
	Sub-Total	89	662	317	145	35600	186	89	41
Sambalpur	Balliguda	4	170	23	7	1600	1063	144	44
	Bamara WL	20	430	210	42	8000	538	263	53

	Bargarh	20	343	144	103	8000	429	180	129
	Jharsuguda	20	366	251	80	8000	458	314	100
	Rairakhol	12	97	66	38	4800	202	138	79
	Sambalpur	56	1095	759	400	22400	489	339	179
	Sub-Total	132	2501	1453	670	52800	474	275	127
Grand Total		1380	13218	7294	4024	552000	239	132	73

Regeneration Density in Assisted Natural Regeneration - 2019-20									
Total Count									
Circle	Division	Grid Total	Seedling	Sapling	Poles	Gride Area	Seedling/ Ha	Sapling/ Ha	Poles/ Ha
Angul	Angul	32	284	206	151	12800	222	161	118
	Athagarh	4	50	41	8	1600	313	256	50
	Athmallik	16	452	244	88	6400	706	381	138
	Cuttack	12	251	143	57	4800	523	298	119
	Satkosia WL	49	705	491	201	19600	360	251	103
	Dhenkanal	44	1164	537	176	17600	661	305	100
	Sub-Total	157	2906	1662	681	62800	463	265	108
Baripada	Karanjia	16	119	72	50	6400	186	113	78
	Sub-Total	16	119	72	50	6400	186	113	78
BBSR	Chilika WL	4	32	17	5	1600	200	106	31
	Khordha	8	121	51	21	3200	378	159	66
	Nayagarh	4	80	44	6	1600	500	275	38
	Sub-Total	16	233	112	32	6400	364	175	50
Berhampur	Balliguda	228	2502	945	371	91200	274	104	41
	Berhampur	16	100	68	38	6400	156	106	59
	Ghumsur (N)	16	456	149	50	6400	713	233	78
	Paralakhemundi	44	260	169	138	17600	148	96	78
	Sub-Total	304	3318	1331	597	121600	273	109	49
Bhawanipatna	Bolangir	53	198	128	154	21200	93	60	73
	Khariar	78	691	325	396	31200	221	104	127
	Sub-Total	131	889	453	550	52400	170	86	105
Koraput	Jeypore	16	241	118	57	6400	377	184	89
	Koraput	12	91	49	42	4800	190	102	88
	Malkangiri	128	1572	763	460	51200	307	149	90
	Nabarangpur	56	477	260	117	22400	213	116	52
	Rayagada	5	24	25	8	2000	120	125	40
	Sub-Total	217	2405	1215	684	86800	277	140	79
Rourkela	Bonai	44	317	173	111	17600	180	98	63
	Keonjhar	6	47	16	9	2400	196	67	38
	Rourkela	61	459	250	192	24400	188	102	79

	Sundargarh	16	118	68	37	6400	184	106	58
	Sub-Total	127	941	507	349	50800	185	100	69
Sambalpur	Bamara WL	8	202	80	18	3200	631	250	56
	Bargarh	8	165	62	35	3200	516	194	109
	Jharsuguda	16	222	128	47	6400	347	200	73
	Rairakhol	32	706	809	241	12800	552	632	188
	Sambalpur	8	250	78	27	3200	781	244	84
	Balasore WL	56	209	108	47	22400	93	48	21
	Sub-Total	128	1754	1265	415	51200	343	247	81
Grand Total		1096	12565	6617	3358	438400	287	151	77

Regeneration Density in Assisted Natural Regeneration - 2020-21

Total Count									
Circle	Division	Grid Count	Seedlings	Saplings	Poles	Grid Area	Seedlings /ha	Saplings /ha	Poles/ ha
Angul	Angul	36	450	387	114	14400	313	269	79
	Athagarh	16	204	102	65	6400	319	159	102
	Cuttack	8	39	21	19	3200	122	66	59
	Dhenkanal	8	93	66	99	3200	291	206	309
	Sub-Total	68	786	576	297	27200	289	212	109
Baripada	Karanjia	16	120	68	43	6400	188	106	67
	Sub-Total	16	120	68	43	6400	188	106	67
BBSR	Chilika WL	4	21	11	9	1600	131	69	56
	Khordha	8	104	53	38	3200	325	166	119
	Nayagarh	24	516	260	101	9600	538	271	105
	Puri WL	4	4	8	16	1600	25	50	100
	Sub-Total	40	645	332	164	16000	403	208	103
Berhampur	Balliguda	32	190	132	57	12800	148	103	45
	Berhampur	16	63	42	39	6400	98	66	61
	Ghumsur (N)	4	178	73	28	1600	1113	456	175
	Ghumsur (S)	12	40	37	16	4800	83	77	33
	Paralakhemundi	58	1113	481	235	23200	480	207	101
	Sub-Total	122	1584	765	375	48800	325	157	77
Bhawanipatna	Bolangir	143	1165	619	452	57200	204	108	79
	Khariar	36	183	156	167	14400	127	108	116
	Kalahandi (S)	32	212	132	97	12800	166	103	76
	Subarnapur	28	80	30	18	11200	71	27	16
	Sunabeda WL	8	68	20	28	3200	213	63	88
	Sub-Total	247	1708	957	762	98800	173	97	77
Koraput	Koraput	12	75	51	31	4800	156	106	65

	Malkangiri	56	657	332	170	22400	293	148	76
	Nabarangpur	112	1072	585	347	44800	239	131	77
	Rayagada	26	145	110	32	10400	139	106	31
	Sub-Total	206	1949	1078	580	82400	237	131	70
Rourkela	Bonai	8	63	22	21	3200	197	69	66
	Deogarh	8	60	31	18	3200	188	97	56
	Keonjhar	8	60	22	9	3200	188	69	28
	Rourkela	9	96	51	28	3600	267	142	78
	Sundargarh	8	36	28	16	3200	113	88	50
	Sub-Total	41	315	154	92	16400	192	94	56
Sambalpur	Bargarh	16	275	217	85	6400	430	339	133
	Rairakhol	28	382	101	69	11200	341	90	62
	Sambalpur	4	57	21	5	1600	356	131	31
	Bamara WL	48	867	433	247	19200	452	226	129
	Sub-Total	96	1581	772	406	38400	412	201	106
Grand Total		836	8688	4702	2719	334400	260	141	81

ANR- Species performance

2017- 18 - Seedling Regeneration Species wise		
Species	**Count**	**Percentage %**
Sal	549	19.69
Neem	254	9.11
Teak	254	9.11
Mahula	217	7.78
Amla	157	5.63
Kendu	146	5.24
Kusum	116	4.16
Dhaura	109	3.91
Bela	90	3.23
Kurei	85	3.05
Jamun	84	3.01
Asan	79	2.83
Sunari	74	2.65
Bahada	66	2.37
Khaira	56	2.01
BadaChankunda	51	1.83
Simaruba	44	1.58
Karanja	35	1.26
Mundi	27	0.97
Gombhari	24	0.86
Sirisa(D)	22	0.79
Bija	21	0.75
Gangasiuli	21	0.75
Kasi	20	0.72
Acacia	17	0.61

PahadiSisoo	16	0.57
Harida	15	0.54
Bamboo	14	0.50
Kaitha	14	0.50
Piasala	14	0.50
Kuruma	13	0.47
Sanachakunda	10	0.36
Tentuli (Tamarind)	6	0.22
Arjuna	5	0.18
Simol	5	0.18
Sisoo(Bali)	5	0.18
Amba	4	0.14
Kanchana	4	0.14
Phasi	4	0.14
Boula	3	0.11
Dhuben	3	0.11
Phanphana	3	0.11
Sirisa(K)	3	0.11
akul	2	0.07
Barakoli	2	0.07
Cashew	2	0.07
chilikanta	2	0.07
pokasungha	2	0.07
Subabul	2	0.07
Subabul	2	0.07
Piasala	2	0.07
Ashok	2	0.07
Ata	1	0.04
Babul	1	0.04
Bara	1	0.04
Chara	1	0.04
Debadaru	1	0.04
Hill Broom	1	0.04
kadamba	1	0.04
Mahaneem	1	0.04
Mehogani	1	0.04
Pijuli	1	0.04
Awastha	1	0.04
Chhatian	0	0.00
Panasa	0	0.00
Patoli	0	0.00
Acacia Mangium	0	0.00
Total	2788	

2017- 18 - Sapling Regeneration Species wise		
Species	**Count**	**Percentage %**
Sal	488	19.43
Teak	250	9.95
Neem	217	8.64

Mahula	200	7.96
Amla	118	4.70
Jamun	114	4.54
Dhaura	114	4.54
Kendu	110	4.38
Kusum	91	3.62
Bela	87	3.46
Kurei	83	3.30
Bahada	55	2.19
BadaChankunda	53	2.11
Sunari	46	1.83
Asan	45	1.79
Bija	40	1.59
Piasala	33	1.31
Mundi	33	1.31
Harida	30	1.19
Simaruba	24	0.96
Bamboo	23	0.92
Karanja	22	0.88
Kaitha	22	0.88
Acacia	19	0.76
Sirisa(D)	18	0.72
Kasi	18	0.72
Gombhari	18	0.72
Gangasiuli	17	0.68
Dhaura	16	0.64
Kuruma	10	0.40
Arjuna	10	0.40
Cashew	7	0.28
Sanachakunda	6	0.24
Phasi	6	0.24
Khaira	6	0.24
Kanchana	6	0.24
Mahaneem	5	0.20
PahadiSisoo	4	0.16
Mehogani	4	0.16
Chhatian	4	0.16
Sirisa(K)	3	0.12
Simol	3	0.12
Kaitha	3	0.12
Dhuben	3	0.12
Tentuli (Tamarind)	2	0.08
Subabul	2	0.08
Sisoo(Bali)	2	0.08
pokasungha	2	0.08
Patoli	2	0.08
Panasa	2	0.08
chilikanta	2	0.08
Boula	2	0.08

Barakoli	2	0.08
Amba	2	0.08
akul	2	0.08
Phanphana	1	0.04
kadamba	1	0.04
Chara	1	0.04
Awastha	1	0.04
Ashok	1	0.04
Acacia Mangium	1	0.04
Pijuli	0	0.00
HillBroom	0	0.00
Debadaru	0	0.00
Bara	0	0.00
Babul	0	0.00
Ata	0	0.00
Total		2512

2017- 18 - Sapling Regeneration Species wise		
Species	**Count**	**Percentage %**
Sal	445	20.69
Mahula	253	11.76
Teak	246	11.44
Neem	142	6.60
Kusum	116	5.39
Dhaura	113	5.25
Kendu	81	3.77
Amla	76	3.53
Bahada	57	2.65
Jamun	54	2.51
Sunari	52	2.42
Kurei	51	2.37
Harida	50	2.32
Bija	47	2.19
BadaChankunda	44	2.05
Bela	41	1.91
Piasala	37	1.72
Asan	32	1.49
Mundi	27	1.26
Sirisa(D)	23	1.07
Kasi	19	0.88
Bamboo	14	0.65
Karanja	12	0.56
Gombhari	11	0.51
Simaruba	11	0.51
Kuruma	10	0.46
Khaira	9	0.42
Sirisa(K)	9	0.42
Kanchana	8	0.37
Acacia	7	0.33

Gangasiuli	7	0.33
Arjuna	6	0.28
Phanphana	5	0.23
Bara	4	0.19
PahadiSisoo	4	0.19
Mahaneem	3	0.14
Panasa	3	0.14
Amba	2	0.09
chilikanta	2	0.09
Dhuben	2	0.09
pokasungha	2	0.09
akul	1	0.05
Ata	1	0.05
Barakoli	1	0.05
Boula	1	0.05
Cashew	1	0.05
Chhatian	1	0.05
HillBroom	1	0.05
Kaitha	1	0.05
Patoli	1	0.05
Phasi	1	0.05
Sanachakunda	1	0.05
Simol	1	0.05
Subabul	1	0.05
Tentuli (Tamarind)	1	0.05
Total	2151	

2019-20 - Seedling Regeneration Species wise		
Species	**Count**	**Percentage %**
Sal	479	17.99
Mahula	207	7.77
Neem	162	6.08
Sunari	142	5.33
Kusum	127	4.77
Kendu	125	4.69
Asan	120	4.51
Jamun	120	4.51
Teak	117	4.39
Dhaura	112	4.21
Amla	99	3.72
Bahada	88	3.30
Bela	83	3.12
Harida	74	2.78
Simaruba	52	1.95
Piasala	51	1.92
BadaChankunda	45	1.69
Kurei	43	1.61
Kasi	31	1.16
Gombhari	29	1.09

Mundi	29	1.09
Bija	28	1.05
Karanja	26	0.98
Amba	22	0.83
Gangasiuli	20	0.75
Khaira	18	0.68
Kanchana	16	0.60
Cashew	15	0.56
Acacia	11	0.41
Chhatian	11	0.41
Kuruma	11	0.41
Sirisa(D)	11	0.41
Acacia Mangium	8	0.30
Arjuna	8	0.30
Bamboo	7	0.26
Char	7	0.26
Kaitha	7	0.26
Sanachakunda	7	0.26
Sirisa(K)	7	0.26
kadamba	6	0.23
PahadiSisoo	6	0.23
Subabul	6	0.23
dhau	5	0.19
karada	5	0.19
Phasi	5	0.19
Pijuli	5	0.19
smai	5	0.19
Bara	4	0.15
Mahaneem	4	0.15
Phanphana	4	0.15
Tentuli (Tamarind)	4	0.15
Boula	3	0.11
Mehogani	3	0.11
Panasa	3	0.11
Simol	3	0.11
Ata	2	0.08
Debadaru	2	0.08
Khrushnachuda	2	0.08
PestaBadam	2	0.08
Awastha	1	0.04
Babul	1	0.04
Casuarina	1	0.04
Champa	1	0.04
Chandan	1	0.04
Jacaranda	1	0.04
Radhachuda	1	0.04
Silver Oak	1	0.04
Sisoo(Bali)	1	0.04
Ashok	0	0.00

HillBroom	0	0.00
Patoli	0	0.00
Total	2663	

2019-20 - Sapling Regeneration Species wise		
Species	**Count**	**Percentage %**
Sal	411	19.05
Mahula	191	8.85
Neem	112	5.19
Teak	105	4.87
Jamun	103	4.78
Dhaura	102	4.73
Kusum	101	4.68
Kendu	100	4.64
Sunari	91	4.22
Bela	80	3.71
Asan	79	3.66
Amla	76	3.52
Bahada	72	3.34
Bija	50	2.32
Harida	46	2.13
Piasala	45	2.09
BadaChankunda	43	1.99
Kurei	39	1.81
Simaruba	30	1.39
Gombhari	26	1.21
Kasi	22	1.02
Cashew	19	0.88
Karanja	19	0.88
Mundi	16	0.74
Arjuna	15	0.70
Bamboo	15	0.70
Gangasiuli	12	0.56
Acacia	10	0.46
Chhatian	10	0.46
Amba	9	0.42
Acacia Mangium	8	0.37
Phasi	8	0.37
Kanchana	7	0.32
Khaira	7	0.32
Kuruma	6	0.28
Babul	5	0.23
kadamba	5	0.23
Phanphana	5	0.23
Sanachakunda	5	0.23
Sirisa(D)	5	0.23
Chandan	4	0.19
PahadiSisoo	4	0.19
Patoli	4	0.19

Subabul	4	0.19
Bara	3	0.14
Boula	3	0.14
Casuarina	3	0.14
Mehogani	3	0.14
Sirisa(K)	3	0.14
Sisoo(Bali)	3	0.14
Champa	2	0.09
Debadaru	2	0.09
karada	2	0.09
Ata	1	0.05
Char	1	0.05
HillBroom	1	0.05
Kaitha	1	0.05
Khrushnachuda	1	0.05
Mahaneem	1	0.05
Radhachuda	1	0.05
Ashok	0	0.00
dhau	0	0.00
Panasa	0	0.00
Pijuli	0	0.00
smai	0	0.00
Tentuli (Tamarind)	0	0.00
Total	2157	

2019-20 - Poles Regeneration Species wise		
Species	**Count**	**Percentage %**
Sal	435	24.27
Mahula	194	10.83
Sunari	115	6.42
Teak	112	6.25
Kusum	81	4.52
Jamun	76	4.24
Neem	75	4.19
Dhaura	72	4.02
Kendu	67	3.74
Bahada	59	3.29
Amla	55	3.07
Asan	52	2.90
Piasala	46	2.57
BadaChankunda	44	2.46
Bela	38	2.12
Bija	35	1.95
Harida	26	1.45
Kurei	23	1.28
Mundi	22	1.23
Bamboo	17	0.95
Cashew	16	0.89
Gombhari	15	0.84

Simaruba	15	0.84
Karanja	13	0.73
Acacia	8	0.45
Arjuna	8	0.45
Kanchana	8	0.45
Kasi	6	0.33
PahadiSisoo	6	0.33
Amba	4	0.22
kadamba	4	0.22
Khaira	4	0.22
Sirisa(D)	4	0.22
Ashok	3	0.17
Chandan	3	0.17
Kuruma	3	0.17
Panasa	3	0.17
Phanphana	3	0.17
Phasi	3	0.17
Acacia Mangium	2	0.11
Ata	2	0.11
Boula	2	0.11
Gangasiuli	2	0.11
Khrushnachuda	2	0.11
Mahaneem	2	0.11
Tentuli (Tamarind)	2	0.11
Chhatian	1	0.06
Jacaranda	1	0.06
Mehogani	1	0.06
Radhachuda	1	0.06
Sanachakunda	1	0.06
Babul	0	0.00
Bara	0	0.00
Char	0	0.00
Debadaru	0	0.00
dhau	0	0.00
karada	0	0.00
Patoli	0	0.00
Pijuli	0	0.00
Sirisa(K)	0	0.00
Sisoo(Bali)	0	0.00
smai	0	0.00
Subabul	0	0.00
Total	1792	

2020-21 - Seedling Regeneration Species wise		
Species	**Count**	**Percentage %**
Sal	416	20.18
Teak	217	10.53
Neem	161	7.81
Sunari	128	6.21

Kendu	118	5.73
Kusum	82	3.98
Bahada	75	3.64
Dhaura	69	3.35
Amla	64	3.11
Bela	64	3.11
Asan	62	3.01
Jamun	54	2.62
Mahula	53	2.57
Piasala	51	2.47
Bija	38	1.84
Khaira	32	1.55
Harida	31	1.50
Kurei	27	1.31
Arjuna	24	1.16
Sirisa(D)	23	1.12
Karanja	22	1.07
Pokamora	18	0.87
BadaChankunda	17	0.82
PahadiSisoo	14	0.68
Tentuli (Tamarind)	14	0.68
Amba	12	0.58
Gangasiuli	12	0.58
Acacia	10	0.49
Kaitha	10	0.49
Mundi	9	0.44
Kanchana	8	0.39
Kasi	8	0.39
Sisoo(Bali)	8	0.39
Cashew	7	0.34
Mehogani	7	0.34
Patoli	7	0.34
Simaruba	7	0.34
Bamboo	6	0.29
Gombhari	6	0.29
Pijuli	6	0.29
Ata	5	0.24
Bara	5	0.24
Casuarina	5	0.24
Kuruma	5	0.24
Sanachakunda	5	0.24
Chara	4	0.19
Falsa	4	0.19
Telkuari	4	0.19
Boula	3	0.15
Sirisa(K)	3	0.15
Dhatuk	2	0.10
Hill Broom	2	0.10
Karda	2	0.10

Padhel	2	0.10
Phasi	2	0.10
Simol	2	0.10
Subabul	2	0.10
Ashok	1	0.05
Babul	1	0.05
Champa	1	0.05
Debadaru	1	0.05
Kadamba	1	0.05
Phanphana	1	0.05
Radhachuda	1	0.05
Mahaneem	0	0.00
Total	2061	

2020-21 - Sapling Regeneration Species wise		
Species	**Count**	**Percentage %**
Sal	371	20.81
Teak	209	11.72
Kendu	95	5.33
Dhaura	90	5.05
Sunari	83	4.66
Bahada	75	4.21
Mundi	72	4.04
Amla	58	3.25
Jamun	55	3.08
Bela	53	2.97
Neem	49	2.75
Mahula	43	2.41
Piasala	42	2.36
Asan	41	2.30
Kuruma	36	2.02
Kusum	35	1.96
Bija	33	1.85
Arjuna	31	1.74
Mahaneem	31	1.74
Kurei	28	1.57
Harida	25	1.40
BadaChankunda	22	1.23
Karanja	18	1.01
Bamboo	15	0.84
Pokamora	14	0.79
Gombhari	12	0.67
Sirisa(D)	12	0.67
Khaira	11	0.62
PahadiSisoo	11	0.62
Amba	10	0.56
Kanchana	9	0.50
Sanachakunda	9	0.50
Acacia	8	0.45

Casuarina	6	0.34
Gangasiuli	6	0.34
Kasi	6	0.34
Tentuli (Tamarind)	6	0.34
Sirisa(K)	5	0.28
Ata	4	0.22
Falsa	4	0.22
Simaruba	4	0.22
Sisoo(Bali)	4	0.22
Bara	3	0.17
Cashew	3	0.17
Chara	3	0.17
Chhatian	3	0.17
Patoli	3	0.17
Telkuari	3	0.17
Debadaru	2	0.11
Padhel	2	0.11
Phasi	2	0.11
Pijuli	2	0.11
Boula	1	0.06
Dhatuk	1	0.06
Kaitha	1	0.06
Karda	1	0.06
Mehogani	1	0.06
Silver Oak	1	0.06
Ashok	0	0.00
Babul	0	0.00
Champa	0	0.00
Hill Broom	0	0.00
kadamba	0	0.00
Kaitha	0	0.00
Radhachuda	0	0.00
Simol	0	0.00
Subabul	0	0.00
Total	1783	

2020-21 - Poles Regeneration Species wise		
Species	**Count**	**Percentage %**
Sal	353	23.63
Teak	202	13.52
Mahula	105	7.03
Bahada	91	6.09
Dhaura	85	5.69
Sunari	77	5.15
Neem	75	5.02
Piasala	69	4.62
Kendu	62	4.15
Kusum	51	3.41
Asan	35	2.34

Bela	33	2.21
BadaChankunda	29	1.94
Jamun	25	1.67
Amla	21	1.41
Kurei	18	1.20
Bija	16	1.07
Acacia	13	0.87
Bamboo	12	0.80
Harida	12	0.80
Karanja	11	0.74
Mundi	10	0.67
Arjuna	9	0.60
Kasi	7	0.47
Sanachakunda	7	0.47
Sirisa(D)	7	0.47
Casuarina	6	0.40
Kanchana	6	0.40
Amba	5	0.33
Pokamora	5	0.33
Sirisa(K)	5	0.33
Sisoo(Bali)	4	0.27
Chara	3	0.20
Kuruma	3	0.20
Cashew	2	0.13
Falsa	2	0.13
Gombhari	2	0.13
PahadiSisoo	2	0.13
Telkuari	2	0.13
Tentuli (Tamarind)	2	0.13
Ata	1	0.07
Bara	1	0.07
Gangasiuli	1	0.07
Karda	1	0.07
Khaira	1	0.07
Mahaneem	1	0.07
Padhel	1	0.07
Phasi	1	0.07
Simaruba	1	0.07
Subabul	1	0.07
Dhatuk	0	0.00
Hill Broom	0	0.00
Kaitha	0	0.00
Mehogani	0	0.00
Patoli	0	0.00
Pijuli	0	0.00
Radhachuda	0	0.00
Simol	0	0.00
Total	1494	

5. List of Infrastructures works inspected- 2017-18

Buildings 2017-2019

Infrastructure Details - 2017-18							
Circle	**Division**	**Site & Structure**	**General**	**Location**	**Purpose**	**Stability**	**Dampness**
Angul	Angul	Balipata-FG Quarter	3	3	3	3	3
		Jarapada RO campus-RO Residence	3	3	3	3	3
		Karatpata-Forester quarters	3	2	2	2	3
		Talcher RO Campus-Common Toilet	2	3	2	2	3
	Athmallik	Madhapur-Forester Quarter	3	3	3	3	3
	Dhenkanal	Bampa-Forester Quarter	3	3	3	3	3
		Bania-Forest Guard Quarter	3	3	3	3	3
	Mahanadi WL	Chhamundia FRH-Boundary Wall	2	3	3	3	3
		Kuanria-Common Toilet	3	3	3	3	3
		Senepari Beat-Forest Guard Quarter	3	3	3	3	3
	Satkosia WL	Katrang RF boundary mandapautha to disbadi-Boundary wall	2	2	3	2	3
		Naleswar-Forest Guard Quarter	2	3	2	2	3
		Tuluka-Forester quarters	3	3	3	3	3
Baripada	Baripada	Baripada-Ranger Residence	3	3	3	3	3
		Range officer Residence-Building	3	3	3	3	3
	Karanjia	forest Guard Quarter-Building	3	3	3	3	3
		Forester quarter-Building	3	3	3	3	3
	Keonjhar WL	Anandpur-Common Toilet	3	3	3	3	3
		Antipoaching Barrack-Building	3	3	3	3	3
		Boundry Wall-Boundry Wall	3	3	3	3	3
		Division Office-Common Toilet	3	3	3	3	3
		forest Guard Quarter-Building	3	3	3	3	3
		Forest Guard Quater, Ganpur-Building	3	3	3	3	3
		Forester quarter-Building	3	3	3	3	3
		Range office Anandapur-Building	3	3	3	3	3
	Rairangapur	Common Toilet-Common Toilet	3	3	3	3	3
		Forest Guard Quarter- Khanta Beat-Building	3	3	3	3	3
		Forester quarter-Building	3	3	3	3	3
	STR South	Kandadhenu-Forest Guard Quater	3	3	3	3	3
BBSR	Bhadrak WL	INSIDE RO CAMPUS BHADRAK WL-Interpretation Hall	3	3	3	3	3
	Chandaka WL	Godibari-Rescue center & veterinary facilities	3	3	3	3	3
	Khordha	Baideswar-Forester Quarter	3	3	3	3	3
	Nayagarh	Bhapur-Forester quarter	2	3	2	3	3
		R.O Campus-RO Residence	3	3	3	3	3

	Rajnagar WL	boundary wall, permanent Nursery pankapala-boundary wall	2	2	2	3	3
		Gupti-F G quarter	3	3	3	3	3
		kujanga range office campus-FG Quarter	3	3	3	3	3
		Rajnagar RO campus-Common toilet	3	3	3	3	3
Berhampur	Balliguda	NA-Common toilet	2	3	3	3	3
	Ghumsur (S)	Dharakote-Forester Quarter	3	3	3	3	3
	Phulbani	Raikia-Common Toilet	3	3	3	3	3
		Tikabali-Forester Quater	3	3	3	3	3
Bhawanipatna	Bolangir	Deogaon-Building	3	3	3	3	3
		Saintala-Forest Guard Quarter	3	3	3	3	3
	Kalahandi (N)	Bhawanipatna-Boundary wall	3	3	3	3	3
		Fencing-Fencing	1	3	3	1	2
		M Rampur-Common Toilet	3	3	3	3	3
		M Rampur-Forester Quater	3	3	3	3	3
		M Rampur-Ranger officer Residence	3	3	3	3	3
		Narla-Forest Guard Quater	3	3	3	3	3
		Near Sankus village-Culvert Tulapada-Manikera	1	3	1	1	2
	Kalahandi (S)	Inside forest colony Parmanandpur-Common Toilet	3	3	3	3	3
		kiapadarA-Forester Quater	3	3	3	3	3
	Khariar	Ghatsar-Boundary wall	3	3	3	3	3
	Subarnapur	forest Guard Quarter-Building	3	3	3	3	3
Koraput	Jeypore	Division office Jeypore-Common Toilet	3	3	3	3	3
		Ramagiri-Forester Quarter	3	3	3	3	3
	Koraput	Laxmipur-Common Toilet	3	3	3	3	3
		Laxmipur-Range Officer's Residence	3	3	3	3	3
		Narayanpatna-Forester Quarter	3	3	3	3	3
	Malkangiri	Govindpalli-Forester Quarter	3	3	3	3	3
		MV-79-Range Officer Residence	3	3	3	3	3
	Nabarangpur	Dabugam-Range Officer Residence	3	3	3	3	3
		Kundei-Forester Quarter	3	3	3	2	3
		Papadahandi-Watch tower	3	3	3	3	3
		Raighar-Boundary wall	3	3	3	3	3
		Raighar-Forest Guard Quarter	3	3	3	2	3
Rourkela	Bonai	Forest Guard Quarter Benuam-Building	3	3	3	3	3
		Forester Quarter Bhaludungri-Building	3	3	3	3	3
	Deogarh	Boundry Wall Purunapani-Boundry Wall	3	3	3	3	3
		forest Guard Quarter-Building	3	3	3	3	3
		Forester Quarter Thinal-Building	3	3	3	3	3
		Inside Ranger Office-Common Toilet	3	3	3	3	3
	Keonjhar	Boundary wall-Boundary wall	3	3	3	3	3
		Dhenkikote-Forester Quarter	3	3	3	3	2
	Rourkela	Forest Barrack-Building	3	3	3	3	3

		forest Guard Quarter-Building	3	3	3	3	3
		Range office-Building	3	3	3	3	3
	Sundargarh	Boundary wall-Boundary wall	3	3	3	3	3
		Boundry Wall -Badhunjharia-Boundry Wall	3	3	3	3	3
		Common Toliet-common Toliet	3	2	2	2	3
		forest Guard Quarter-Building	3	3	3	3	3
		Forest Guard Quarter-Forest Guard Quarter	3	3	3	3	3
		Forester Quarter-Forester Quarter	3	2	3	2	3
		Range officer Residence-Range officer Residence	3	3	3	3	3
Sambalpur	Bamara WL	kutab-FG QUARTER	3	3	3	3	3
	Bargarh	Budhasambar chhak-Forester quarter	3	3	2	2	2
		Komgaon-FG QUARTER	3	3	3	3	3
		Narsingnath-Narsingnath R O residence	3	3	3	3	3
		RO campus paikmal-Boundary wall	3	2	3	3	3
	Hirakuda WL	WACC-Animal keeper Barrack, Block 2	3	3	3	3	3
		WACC-Bear Feeding Chamber	3	3	3	3	3
	Jharsuguda	Kanaktora Check gate-FG QUARTER	3	3	3	3	2
		Range Office-Forester quarter	2	3	3	2	3
	Sambalpur	Bhalubahal-Forester Qtrs	3	2	2	3	2
		Bhimkhoj-FG QUARTER	3	3	2	3	2
		Padiabahal-RANGE OFFICER RESIDENCE	3	3	3	3	3

Roads 2017-2018

Infrastructure Details - 2017-18

Circle	Division	Site & Structure	General	Location	Stability	Purpose	Duration
Angul	Athagarh	Badamba-Forester quarter	2	3	2	2	3
		Banapur-F G quarter	3	2	2	2	3
	Athmallik	kamrei-dimridihi-Forest Road	3	3	3	3	3
	Cuttack	Berena to Banjhiama-Forests road	3	3	3	3	3
		Damdamani Beat office-Boundry wall	3	3	3	3	2
		Ramachandrapur to Ambilijhari Forest road-Culvert	3	3	3	3	2
	Dhenkanal	Chhotatentuli to Mahisagoda-Culvert	3	3	3	3	3
		Chhotatentuli to Mahisakada-Culvert	3	3	3	3	3
		Pathargarh to Gundichanali-Causeway	3	3	3	3	3
	Mahanadi WL	Buguda-Causeway	3	3	3	3	2

		Duising Nallah-Culvert	2	3	3	3	3
	Satkosia WL	Hatibari beat house-Common toilet	1	3	3	1	2
		Jhankadataida-Causeway	3	3	3	3	3
		Jhankadataila-Culvert	2	3	3	3	3
		Pampasar Campus-Boundary Wall	3	3	3	3	3
		Pampasar Range Office campus-Common Toilet	3	3	3	3	3
		Tarava to sahajabahal-Forest Road	3	3	3	3	3
Baripada	Baripada	Forest Road Devkund Road	3	3	3	3	3
		Badmakabadi C-PP19-Cause Way	3	2	2	3	3
		Badmakabadi C-PP19-Cause Way 2	3	3	3	3	3
		jodapal causeway-causeway	3	3	3	3	3
	Keonjhar WL	Causeway- Pitanau-Causeway	3	3	3	3	3
		Culvert-Culvert	3	3	3	3	3
BBSR	Khordha	Patia-Nakithana Forest road-Causeway	3	3	3	3	3
		Patia-Nakithana Forest Road-Forest Road	3	3	3	3	3
	Nayagarh	Kaudia - Andharakani,kukudakhai Nala-Culvert	3	3	3	3	3
		kaudia Andharakani Frd.-causeway	3	3	3	3	3
Berhampur	Balliguda	Lassery to Badipanga Road-Cause way	3	2	2	2	3
	Paralakhemundi	Causeway- Taljharana-Causeway	3	3	2	3	3
		labanyagada-fencing	3	3	3	3	3
		Sambarpatu-culvert	3	3	2	2	2
Bhawanipatna	Bolangir	Desbandh forest road-forest road	3	3	2	2	3
		Kondei to Goidimal-Culvert	3	3	3	3	3
		Siker Section office-Boundary wall	3	3	1	3	3
		Tikrapada to Salemudge-Road	3	3	3	3	3
	Kalahandi (N)	Tulapada to Manikera-Forest Road	3	3	3	3	3
	Kalahandi (S)	Forest Quarter- Karlapat -A-Forest Guard Quarter	3	3	3	3	2
		Sagada- Deadrah forest road-maintenance of Forest Road	3	3	3	3	2
Koraput	Jeypore	Gupteswar-Forest Road	3	3	3	3	3
	Koraput	Ambaguda-Culvert	2	3	2	3	3
		Kutkajhala Forest Road-Culvert	3	3	3	3	3
		Patadevi Dangar-Culvert	2	3	2	3	3
	Malkangiri	Pilakusumi-Puspalli-Cause Way	3	3	3	3	3
		Pilakusumi-Puspalli-Culvert	3	3	3	3	3
		Pilakusumi-Puspalli-Forest Road	3	3	3	3	3
	Nabarangpur	Maidalpur- Gudpanipadar-Culvert	3	3	3	3	3
	Rayagada	Durgi-Colvote	3	3	3	3	2
		Fanching-Elephant Trench	3	3	3	3	2
Rourkela	Bonai	Forest Road-Forest Road Boneikela to Kulijhar	3	3	3	3	3
		Forest Road-Road	3	3	3	3	3

	Keonjhar	Causeway-Causeway	3	3	3	3	3
		Forest Road Similipal to Sankoi-Road	3	3	3	3	3
	Sundargarh	cause way-Causeway	3	3	3	3	3
		Culvert- Didigajharan to Gundiadihi-Culvert	3	3	3	3	3
		Forest Road Didigajharan to Gundiadihi-Road	3	3	3	3	3
Sambalpur	Bargarh	Chuhapali to suklipahad-Forest road mntn	3	3	3	3	3
		Chuhapali to sukulipahad-Cause way	3	3	3	3	3
		Chuhapali-Culvert	3	3	3	3	3
	Hirakuda WL	DK to mp-Forest road	2	2	2	2	3
	Jharsuguda	Amdarah - Badjob Forest road-culvert	3	3	3	3	3
	Rairakhol	kuakhol-Bhatra FRd Causeway-Causeway	2	3	2	3	3
		kuakhol-Bhatra FRd-Culvert	2	3	3	3	3
	Sambalpur	Barikpali - Thuntikatarbaga Forest Rd.-Causeway	3	3	3	3	2
		Jhankarpali to Jhankarbahali Forest Road-Culvert	3	3	3	2	3
		Near Deer park-Boundry wall	2	3	3	2	3

Water Bodies 2017-2018

Infrastructure Details - 2017-18					
Circle	**Division**	**Site - Structure Type**	**General**	**Location**	**Purpose**
Angul	Angul	FG Quarter, Kumunda-Tubewell	3	3	1
		kanheijena-Water body	3	3	2
		Krushnachandragarh PRF C/2-water body	3	3	2
		Kulasingha PRF C/1-water body	3	3	3
		Patharbandh PRF-Waterbody	3	3	3
	Athagarh	BAULA RF-water body	3	3	3
	Athmallik	Northern RF C/23-Water body	3	2	2
		Northern RF C/24-water body	3	3	3
		Tileswar village-tube well	3	3	3
	Dhenkanal	Kai RF-Waterbody	2	3	3
		Kapilash RF-Maintenance of Water body	2	3	3
		Mahulpal Beat-Tubewell	3	3	3
	Mahanadi WL	Senepari Beat Quarter-Tubewell	2	3	2
	Satkosia WL	Jagannathpur-Tube well	3	3	3
		Kholabasa Rf-Water body C/5	2	3	2
		Kumuri-Tube Well	3	3	3
		Nardaghai-Water body	2	3	2

Baripada	Baripada	Boghejhran RF-waterbody	3	3	3
		Kabataghai 2-Waterbody	3	3	3
		Waterbody jenabil-waterbody jenabil	3	3	3
	Karanjia	Tube well Ghantiadar-Tube Well	3	3	3
	Keonjhar WL	Tube Well-Tube Well	3	3	3
		waterbody-Waterbody	3	3	3
	Rairangapur	Waterbody Burudihi-Waterbody	2	3	2
BBSR	Chandaka WL	Bhola RF-Waterbody	3	3	3
	Nayagarh	Bahadajhola inside section office campus-Boundary wall	3	3	3
		MI Colony-Tubewell	3	3	3
	Puri WL	Kurujanga FS-Creation of waterbody	2	3	2
	Rajnagar WL	Charigheria-Water body	3	3	3
		kansaripatia-water body	2	2	2
Berhampur	Balliguda	Tube well in Range office-Tube well	2	2	2
	Ghumsur (S)	dharakote-tubewell	3	3	3
		Madangandapalli-Maintenance of Waterbody	3	3	3
		Tangrai RF-Maintenance of Water body	2	3	3
	Paralakhemundi	Narayanpur-Perculation Tank	2	2	1
		Nuagada-Tubewell	3	2	3
		Tiniamba - Staggered trench-staggered trench	3	3	3
	Phulbani	Badagada-Waterbody	3	3	3
Bhawanipatna	Bolangir	Kapsila-Tubewell	3	3	3
	Kalahandi (N)	kesinga Range office Campus-Tubewell	3	3	3
		Urladani-Waterbody	3	3	3
	Kalahandi (S)	Inside Range office karlapat campus , Bhawanipatna-Tubewell	3	3	3
		Waterbody Nehela RF-40 x 30	3	3	3
	Subarnapur	Waterbodies, Patrapali-40 x 35	2	2	2
		Waterbody 17-18-40x30	3	3	3
		waterbody-Waterbody	3	3	3
Koraput	Jeypore	Chitra RF-Pond	3	3	3
		Kotpad-Tubewell	2	3	3
	Koraput	Kilua-Pond	3	3	3
	Malkangiri	Bhaliamba-Water body	3	3	3
	Nabarangpur	Jogipara-Pond	3	3	3
		Koilari-Water body	3	3	3
		Raighar-Tubewell	3	3	3
Rourkela	Bonai	Tube well Rengali-Tube well	3	3	3
	Sundargarh	Tube Well-Tube Well	3	3	3
		waterbody-Waterbody	3	3	3
Sambalpur	Bamara WL	Govindpur DFO office campus-Tube well	3	3	3
	Bargarh	Melchamunda-Tube well	3	3	3
	Hirakuda WL	Old dhodrokusum-maintenance of water body	2	3	2
		WACC-Bore well	3	3	3
	Sambalpur	Jhankarpali-Tube well	3	3	2
		Ladladi, Oram pada-waterbody	3	3	3

6. List of Infrastructure works inspected - 2019-20

Buildings 2019-2020

Infrastructure Details 2019-20							
Circle	**Division**	**Site & Structure**	**General**	**Location**	**Purpose**	**Stability**	**Dampness**
Angul	Angul	Kaniha-Forester Quarter	3	3	3	3	3
		RO Campus-RO Residence	3	3	3	3	3
	Athagarh	Megha-FG QUARTER	3	3	3	3	3
		Narasingha-Forester quarters	3	1	3	2	3
	Athmallik	Gopalpur Beat-FG Quarter	3	3	3	3	3
	Cuttack	FG quarter,Bhagatpur-FG quarter	3	3	3	3	3
	Dhenkanal	Dollar F G Quarter-Forest Guard Quarter	3	3	3	3	3
		Forest Colony, Dhenkanal-F.G Quarters (Twin F.G Quarters)	3	3	3	3	3
		Forest Colony, Dhenkanal-Forester Quarters	3	3	3	3	3
		Madhapur-Anti Poaching Barrack	3	3	3	3	2
		RO Quarter - Kapilash-RO Quarter	3	3	3	3	3
	Satkosia WL	Raigaga rasanda-Forester quarters	2	3	2	2	3
		Raigoda border-F G quarter	2	3	2	2	3
Baripada	Balasore WL	Gopalpur-Forest Guard quater	3	3	3	3	3
		Nilgiri-Forest Guard quater	3	3	3	3	3
		Sajanagarh-Forest Guard quater	3	3	3	3	3
	Baripada	forest Guard Quarter-Building	3	3	3	3	3
		Range officer Residence-Building	3	3	3	3	3
		Shyamanandapur-Forest Guard quater	3	3	3	3	3
		Udala-Forest Guard quater	3	3	3	3	3
	Deogarh	Pallahara-Forest Guard Quater	3	3	3	3	3
	Karanjia	Forest Guard Quarter Baliposi-Building	3	3	3	3	3
		Inside Satkosia Ranger office-Forester Quater	3	3	3	3	3
		Miludihi-Antipoaching Barrack Building-Antipoaching Barrack	3	3	3	3	3
	Rairangapur	Boundary wall of Section office-Boundary wall	3	3	3	3	3
		Forest Guard Quarter, Asana-Building	3	3	3	3	3
		forest Guard Quarter-Building	3	3	3	3	3
		Forester Quarter, Bisoi-Building	3	3	3	3	3

		Forester quarter-Building	3	3	3	3	3
		Range officer Residence-Building	3	3	3	3	3
		Range Officer's Residence Rairangpur-Building	3	3	3	3	3
		Solar Fencing -Tirilipi DPF-Solar Fencing	3	3	2	2	3
	STR South	Andharitota C-PP16-Common Toilet	3	3	3	3	3
		Bhajam-Common Toilet	3	3	3	3	3
		Dhudruchampa Antipoaching Barack-Anti Poaching Barack	3	3	3	3	3
		Hatisal Beat-FG Quater Hatisal	3	3	3	3	3
		Jodapal 1-Anti Poaching Barack	3	3	3	3	3
		jodapal 2-Anti Poaching Barack building	3	3	3	3	3
	STR North	Debasthali-Antipoaching Barack	3	3	3	3	3
		Digdida-Forest Guard quater	3	3	3	3	3
BBSR	Bhadrak WL	R.O Campus-Search seizure yard	3	3	3	3	3
	Chandaka WL	Godibari-Rescue centre	3	3	3	3	3
	City Forest	Bhagalpur-FG Quarter	2	2	2	2	3
		Bhagalpur-FG Quarter, Gangeshwar Beat	2	3	2	3	3
		Bhagalpur-Forester quarter	2	1	3	2	3
	Khordha	Patia-Forester Quarter	3	3	3	3	3
		Randa-2-F.G Quarter	3	3	3	3	3
	Nayagarh	Banigochha section campus-Forester Quarter	3	3	3	3	3
		Forest colony-RO RESIDENCE	3	3	3	3	3
		Khandapada-FG Quarter	3	3	3	3	3
	Rairangapur	Ajagarapatia-FG Quarter	3	3	3	2	3
		Kalibhanjadia-Anti Poching Barrack	3	3	3	2	3
	Rajnagar WL	Batighara-Forester quarter	2	3	3	2	3
		Mathadia-Watch Tower	3	3	3	2	2
Berhampur	Balliguda	Barakhama Boundary wall-Boundary wall	3	3	3	3	3
		Pokharibandh Forest Quarter-Forest Quarter building	3	3	3	3	2
		Sirla-Forest Quarter building	3	3	3	2	3
	Boudh	Common toilet In Range office-Common toilet	3	2	3	3	3
	Paralakhemundi	Boundary wall inside jeerango section office-Boundary wall	3	3	3	3	3
		Nuagada Section Office-Forester Quarter	3	3	3	3	2
	Phulbani	Baraba-Forest Quater	3	3	3	3	3
Bhawanipatna	Bolangir	Khaprakhol-Forester Quarter	3	3	3	3	3
	Kalahandi (N)	forest Guard Quarter-Building	3	3	3	3	3

		M Rampur area-Ranger Residence Narla	3	3	3	3	3
		Madanpur village-Forester Quater	3	3	3	3	3
		Narla-VHF Base Station, Narla	3	3	3	3	3
	Kalahandi (S)	forest Guard Quarter-Building	3	3	3	2	3
		Forster quarter-building	3	3	3	3	3
		Range officer Residence-Building	3	3	3	3	3
		Th Rampur-Range office Building	3	3	3	3	3
	Khariar	Khaira-Forest Guard's Quarter	3	3	3	3	3
Koraput	Jeypore	Haldikund-Forester Quarter	3	3	3	3	3
		Tanginiguda-Forest Guard Quarter	3	3	2	2	2
	Koraput	Balda-Forest Guard Quarter	3	3	3	3	3
		Katangi-Forest Guard Quarter	3	3	2	3	3
		Kunduli-Forest Guard Quarter	2	2	2	3	2
	Nabarangpur	Jharigaon-Anti-poaching barrack	3	3	3	3	3
		Semla-Bear hideout	3	3	3	3	3
		Tentulikhunti-Forester Quarter	2	3	1	2	2
	Rayagada	Muniguda-Forest Guard Quarter	3	3	3	3	2
		Tikiri-Forester Quarters	3	3	3	3	3
		Tikiri-Range Office Residence	3	3	3	3	3
		Tikiri-Ranger Residence	3	3	3	3	3
Rourkela	Bonai	forest Guard Quarter-Building	3	3	3	3	3
		Forester quarter-Building	3	3	3	3	3
	Deogarh	forest Guard Quarter-Building	3	3	3	3	3
		Inside Danda RF-Water Tower	3	3	3	3	3
		Jamardihi-Forest Guard Quater	3	3	3	3	3
	Keonjhar	Boundary wall-Boundary wall	3	2	3	3	3
		Dhenkikot-Forest Guard Quater	3	3	3	3	3
		Watch Tower Atei R. F-Building	2	2	2	2	2
	Sundargarh	Forest Guard Quarter Raidihi-Building	3	3	3	3	3
		Forester Quarters-Building	3	3	3	3	3
		Range Officer's Residence-Building	3	3	3	3	3
Sambalpur	Bamara WL	Janda-FG QUARTER	3	3	3	3	3
		Mendhabahal-FR QUARTER	3	3	3	3	2
	Bargarh	forest Guard quarter, lamarjuna-FG quarter	3	3	3	3	3
		Forester Quarter, Jamshed-Forester Quarter	3	3	3	2	3
		Padampur-RO RESIDENCE	3	3	3	3	3
	Hirakuda WL	Govindpur-watch tower	3	3	3	3	3
		Khola-Anti-poaching Check Gate	3	3	2	2	3
		WACC-1st floor of Permanent Camp Shed	3	3	3	3	3

		WACC-Fixing of paver block	3	3	3	3	3
		WACC-Maintenance of Post mortem House	3	3	3	3	3
	Jharsuguda	Tangarpali-FG QUARTER	3	3	3	3	3
	Rairakhol	FG QUARTER,Brahmani-FG QUARTER	3	3	3	3	2
	Sambalpur	Jhamjhuri-Forest guard quarter	3	2	1	3	3
		Panchput-Forester quarter	3	3	3	3	3
		TOWN RANGE OFFICE-Forest Range officer Residence	3	3	3	3	3

Roads 2019-2020

Infrastructure Details 2019-20

Circle	Division	Site & Structure	General	Location	Stability	Purpose	Duration
Angul	Angul	Bulajhar-Culvert	2	3	2	2	3
		Manikjodi to sitikoili-Causeway	3	3	3	3	3
		RF-culvert	3	3	3	3	2
	Athagarh	badakhola katurighasa Nala Road-Forest Road	3	3	3	3	3
		Murjanala to Sankrida Road-Road	3	3	3	3	3
	Cuttack	Kumutibahali-Couseway	2	2	2	2	3
		RO - Residence-Building	3	3	3	3	2
	Dhenkanal	Mahulpunji to Tenua-Maintenance of forest Road	2	3	3	3	3
	Mahanadi WL	Gochabari to Buriapaju-Forest Road	3	3	3	3	3
	Satkosia WL	Fire line at culvert (Musamara to majhipada 12)-Culvert	3	3	2	3	3
		Labangi to Rosanda-Forest Road	3	3	3	3	3
		Raigoda-Culvert Tersingh	2	2	2	2	3
Baripada	Balasore WL	Bhaliaposhi to Kaimahudi Road-Forrst Road	3	3	3	3	3
		kuldiha sanctuary-Causeway	3	3	3	3	3
	Baripada	Andharitota C-PP16-Cause Way	3	3	3	3	3
		Culvert-Culvert	3	3	3	3	3
	Karanjia	Culvert Bisipur RF-Culvert	3	3	3	3	3
		kumbalor-causeway	3	3	3	3	3
	STR (North) WL, Jashipur	Forest Road -Bhandadhara-Forest Road	3	3	3	3	3
		Forest Road Nawana-Forest Road	3	3	3	3	3

BBSR	Nayagarh	Gochhabari -Sampada Frd.-causeway	3	3	3	3	3
		Gochhabari Sampada-Culvert	3	3	3	3	3
	Rajnagar WL	Bhitarkanika-Lili Pond	3	3	2	3	3
		Kalibhanjadia-Forest road	2	3	2	2	3
Berhampur	Balliguda	Karjandi Cause way-Cause way	2	2	2	2	2
	Ghumsur (S)	Flush Causeway at Andharinala-Causeway	3	3	3	3	3
	Paralakhemundi	Allada to Baijhal Forest Road-Causeway	3	3	3	3	2
		Allada-Culvert	3	3	3	3	3
Bhawanipatna	Bolangir	Dengpadar to Satbahani-Cause way	3	3	3	3	3
		Siker to Gulmi Forest road-Road	3	3	3	3	3
	Kalahandi (N)	Golamunda to Bokrasil-Forest Road	3	3	3	3	3
		Sikuan to Ramchandrapur-Causeway	3	3	3	3	3
	Kalahandi (S)	karlapat causeway-Causeway	3	3	3	3	3
		karlapat culvert-culvert	3	3	3	3	3
		karlapat RF-Forest Road Jakam to karlapat	3	3	3	3	3
	Khariar	Kholi to Redhamal-Road (6 km)	3	3	3	3	3
		Kholi-Redhamal-Road	3	3	3	3	3
Koraput	Koraput	Ambaguda-Causeway	2	3	2	2	3
		Nandapur-Culvert	2	3	3	3	3
	Malkangiri	Pitatung Forest Road-Culvert	3	3	3	3	3
		Pitatung-Causeway	3	3	3	3	3
	Nabarangpur	Jharigaon-Causeway	3	3	3	3	3
	Rayagada	Durgi-Coseway	3	3	3	3	2
Rourkela	Bonai	Culvert Jhiripani to Pitagaon road-Culvert	3	3	3	3	3
		Culvert- S Balang to Kareiput-Culvert	3	3	3	3	3
		Forest road S. Bolang to Kareiput-Road	3	3	3	3	3
	Deogarh	Cause way-Cause way	3	3	2.5	2.5	2
		Culvert-Culvert	3	3	3	3	2
	Karanjia	Culvert Bhimkund to Baiganpal forest road-Culvert	3	3	3	3	3
	Keonjhar	Causeway at Bhimkund to Baiganpal forest road-Causeway	3	3	3	3	3
		Culvert Near Similipal Village-Culvert	3	3	3	3	3
		Tanda- Banamahuldiha-Road	3	3	3	3	3
	Rourkela	bagdega to rutkupedi Forest road-Forest road	3	3	3	3	2
		Cause way-Cause way	3	3	3	3	2

		Culvert-Culvert	3	3	3	3	2
	Sundargarh	Causeway-Causeway	3	3	3	3	3
Sambalpur	Bamara WL	Badbahal Loimura Forest road-Culvert	3	3	3	3	3
		Ballam Khalasuni Forest Rd Causeway-Causeway	3	3	3	3	3
	Bargarh	Chuhapali-Culvert	3	3	3	3	3
		Chuhapali-Forest road mnt	3	3	3	3	3
		Narsingnath to kapildhar-Cause way	3	3	3	3	3
	Hirakuda WL	Tangarghat Nallah-RCC Bridge and 9 box cell culvert	3	3	3	3	3
	Sambalpur	Near Galchira-culvert	2	3	3	3	3
		Sapne -Istapali Forest Rd.-Causeway	1	3	2	3	3

Water Bodies 2019-2020

Infrastructure Details 2019-20					
Circle	**Division**	**Site - Structure Type**	**General**	**Location**	**Purpose**
Angul	Angul	Balanga C/13-water body	3	3	3
		Bulajhar-Waterbody	3	3	3
		Nuakheta RF C/2-Waterbody	2	3	3
		phuljhari RF-Water body	2	3	2
	Athagarh	Barakhola Rf-Water body	3	2	3
	Athmallik	Taleipathar RF C/6-Waterbody	3	1	2
		West Bareni RF C/2-Waterbody	2	3	3
	Dhenkanal	Bampa-water body creation.	3	2	1
	Satkosia WL	Gandhianali-water body	3	3	3
		Raigoda panchaphutia C/3-Water body	2	3	2
		Raigoda RF C/6-Water body	3	2	2
Baripada	Keonjhar WL	Tubewell -Dalki near Dam-Tube Well	3	3	3
	Rairangapur	waterbody-Waterbody	3	3	3
BBSR	Chandaka WL	Mulijhar-Water body	3	3	3
	Puri WL	Bhagabati FS-Water body	3	3	3
		Gadhialata-waterbody	3	3	3
		Guhalpur FS-Creation of water body	2	3	2
		Ishaneswar FS-2nd year maintenance of fruit and fodder	2	3	2
		Ishaneswar FS-Maintenance of Water body	3	3	2
		Konark manguleswar FS-Maintenance of Water body	3	2	2
		mangaleswar FS-3rd year Fruit and fodder maintenance	2	3	2

		manguleswar FS-Creation of water body	3	3	2
		Ramchandi FS-Water body	3	3	2
	Rajnagar WL	Hawakhana-waterbody mnt	3	3	3
		sahadabedi-water body	3	3	3
Berhampur	Ghumsur (N)	Creation of Waterbody at Durgamadhabpur (Blackbuck)-Waterbody	3	3	3
		Kaliamba RF C/6-Water Body	3	3	3
		Kamasaragada-Waterbody	2	3	3
		Keutapalli near Banatumba-Creation of Waterbody	1	3	3
		Ragada RF C/2-Creation of Waterbody	3	3	3
	Ghumsur (S)	Dantaribagada-Creation of Waterbody	3	3	3
		Kadapada RF-Construction of Water body	3	3	1
	Phulbani	Dahisara RF-Water body	2	2	2
		RANABA RF COMPARTMENT 3-Good	3	3	3
Bhawanipatna	Kalahandi (N)	Urladani-Waterbody	3	3	3
	Kalahandi (S)	Tubewell-Tubewell	2	2	1
	Khariar	Khaira-Tube Well	3	3	3
	Subarnapur	Gadgadbahal Waterbody-waterbody	3	3	3
		Tube well in forest Guard quarter-tube well	2	2	2
		Waterbodies Sighijuba RF-40 X 30	3	3	3
		waterbody-Waterbody	2	2	2
Koraput	Jeypore	Tallur-Water body	3	3	3
	Koraput	Chilam-Waterbody	2	3	3
	Nabarangpur	Jiraguda-Pond	3	3	3
Rourkela	Keonjhar	Waterbody Kalapat R. F near Similipal Village-Waterbody	3	3	3
Sambalpur	Bargarh	inside chardapali PRF-Maintenance of water body	3	3	2
		Jadamunda-waterbody	3	3	3
	Hirakuda WL	Debrigarh RF-Water body	3	3	2
		Magargada-Water body	2	2	2
		Teteldhipa pond-Mntn of fruit and fooder species	2	2	2
		WACC-Water body	2	1	2
	Jharsuguda	Bhimjor-water body	3	3	3
		Pitamal PRF-water body	3	3	3

7. List of infrastructure works inspected - 2020-21

Buildings 2020-2021

Infrastructure Details 2020-21						
Division	**Site & Structure**	**General**	**Location**	**Purpose**	**Stability**	**Dampness**
Angul	Balipata- II-FG Quarter	3	3	2	3	3
	Kaniha-RO Residence	3	3	3	3	3
	OFRH Angul-Rescue centre	2	3	3	3	3
	Paranga-Forester quarters	2	2	3	2	2
	RO Campus-Range Office	3	3	3	3	3
Athagarh	Gopapur-Forester quarter	3	3	2	2	2
	Kusapal-F G quarter	3	3	2	2	2
	Nuabhuhin Camp shed-Forester quarters	3	2	2	3	3
Cuttack	FG Quarter, Chaudwar-FG QUARTER	2	2	2	3	2
Dhenkanal	Bhuban RO Quarter-Range Officer Quarter	3	3	3	3	3
Mahanadi WL	Banigochha-Range office	3	3	3	3	3
	Nayagarh Forest Colony-Forester Quarter	3	3	3	3	2
	Range office Campus, Kuanria-FG Quarter	3	3	3	3	3
	Sitalpani-Forester Quarter	3	3	2	3	2
Satkosia WL	Baladamara-Watch Tower	2	2	2	2	3
	Raigoda-R O residence	3	2	2	2	3
Balasore WL	Balinal-Forester quater	3	3	3	3	3
	panchalingeswar-compound wall	3	3	3	3	3
	Rangamatia-Forest Guard quater	3	3	3	3	3
Baripada	Chitrada-Forest Guard Quater	3	3	3	3	3
	forest Guard Quarter-Building	3	3	3	3	3
	Forester quarter-Building	3	3	3	3	3
Karanjia	Forest Colony Near Purneswar Temple-Boundry Wall	3	3	3	3	3
	Inside Range office-Ranger Residence	3	3	3	3	3
Keonjhar WL	Forester quarter-Building	3	3	3	3	3
	Range office Campus-Range officer's Residence	3	3	3	3	3
Rairangapur	forest Guard Quarter-Building	3	3	3	3	3
	Forester quarter-Building	3	3	3	3	3
	Range office Boundary wall-Boundary wall	3	3	3	3	3
STR South	Baharaghar-1-FG Quarter	3	3	3	3	3
	Barhaghar-2-FG Quarter	3	3	3	3	3
	Bhanjabasa-Range Officer's Residence	3	3	3	3	3
	Bisipur-Check Gate and Quarter	3	3	3	3	3
	Boundary Wall Nawana Range-Boundary Wall	3	3	3	3	3
	Forester Quarter, Nekedanacha-Forester Quater	3	3	3	3	3

	Gaurakanta-FG Quater Gaurakanta	3	3	3	3	3
STR North	Boundry Wall Ecotourism-Boundry Wall	3	3	3	3	3
	Champaguda-Forest Guard Quater	3	3	3	3	3
	Range Officer's Residence - Talabandha-Building	3	3	3	3	3
	Tamalbandha(Forester Quarter)-Building	2	2	2	2	2
City Forest	Mahanadivihar-Range Officer Residence	3	3	3	3	2
Cuttack	Mahanadivihar-Construction of range office	2	3	2	2	3
	Mahanadivihar-F G quarter	2	3	2	3	3
	Mahanadivihar-Forester quarter	2	2	2	3	3
Khordha	Balipatna-RO Residence	3	3	3	3	3
	Patia-F.G Quarter	3	3	3	3	3
	Randa-2 Beat-Const. of Staff Barrack	3	3	3	3	3
Nayagarh	bhogabadi-FG Quarter	3	3	3	3	3
	khedapada-FR QUARTER	3	3	3	3	3
	Nuagaon beat House-Baundary Wall	3	3	3	3	3
	Range office campus-Ro Residence	3	3	3	3	3
Rajnagar WL	Bhitarkanika-R.O Residence	3	3	2	2	3
	inside bhitarakanika-Range Office	3	3	3	2	3
	Okilapal-Animal Rescue Centre	3	3	3	3	3
Balliguda	Subarnagiri forest Quarter building-Forest Quarter building	3	3	3	3	3
Ghumsur (S)	sheragada-Boundary wall	3	3	3	3	3
Paralakhemundi	Forest Guard Quarter-construction of Forest Guard quarter	3	3	3	3	3
	Watch Tower-watch tower	3	3	3	3	2
Phulbani	Pasara-Forest Guard Quater	3	3	3	3	3
	Pasara-Guard quarter	3	3	3	3	3
	phulbani-Mega Nursery	3	3	3	3	3
Bolangir	Baddakala-Forester Quarter	3	3	2	3	3
	Bangomunda-Range Office	3	3	3	3	3
	Lathore-Range Officer's Residence	3	3	3	3	3
	Saintala-Forester Quarter	3	3	3	3	3
	Singbahali-Forest Guard Quarter	3	3	3	3	3
Kalahandi (N)	Bhawanipatna-Animal Rescue Centre Building	3	3	3	3	3
	Bhawanipatna-Forest Guard quater	3	3	3	3	3
	Bhawanipatna-Forester quater	3	3	3	3	3
	forest Guard Quarter-Building	3	3	3	3	3
	kutrukhai Mega Nursery-capacity building Mega Nursery	3	3	3	3	3
	M Rampur arena-Boundary wall	3	3	3	3	3
	M Rampur-Anti Poaching Barrack	3	3	3	3	3
	Ramsagar Pada-Residence RO	3	3	3	3	3
Kalahandi (S)	forest Guard Quarter-Building	3	3	3	3	3
	Forester quarter-Building	3	3	3	3	3
	Range office junagarh-Building	3	3	3	3	3
Khariar	Rajana-Forester's Quarter	3	3	3	3	3
	Sargadi(Lachhipur)-Forest Guard Quarter	3	3	3	3	3

Jeypore	Borigumma-R.O.Residence	3	3	3	3	2
	Chandili-Anti-poaching Barrack	3	3	3	3	2
	Panasput-F.G.Quarter	3	3	2	3	2
	Panasput-Forester Quarter	3	3	3	3	2
	Ramagiri-Anti Poaching Barrack-Ramgiri,Gupteswar Range	3	3	3	3	3
	Ramgiri-Range Office	3	3	3	3	3
Koraput	Balda-RO Residence	3	3	3	3	3
	Katangi-Forester Quarter	3	3	3	3	3
	Narayanpatna-Range Officer	3	3	3	3	2
	Patri-Forest Guard Quarter	3	3	3	3	3
Malkangiri	Challanguda-Boundary wall	3	3	3	3	3
	Godiali-Forest Guard Quarter	3	3	3	3	2
	Govindpalli-Range officer's residence	3	3	3	3	3
	Kalimela-Range Officer's Residence	3	3	3	3	3
	Pangam-Forester Quarter	3	3	3	3	2
	Podia-Forester Quarter	3	3	3	3	3
Nabarangpur	Jagannathpur-Forest Guard Quarter	3	3	3	3	3
	Jharigaon-Watch tower	3	3	3	3	3
	Malgaon-Tubewell	3	2	3	2	3
	Raighar-Forester Quarter	3	3	3	3	3
	Umarkote-Boundary Wall	3	3	3	3	3
Rayagada	F.G.Quarter,Jambuguda-Building	3	3	3	3	2
	Forester Quarters-Building	3	3	3	3	2
	Gunupur-Ranger Residence Gunupur	3	3	3	3	3
STR South	Bissam Cuttack-Boundary Wall	3	3	3	3	2
Bonai	Boundary wall Range office-Boundary wall	3	3	3	3	3
	Boundry wall Bhaludungri-Boundry wall	3	3	3	3	3
	Forester quarter-Building	3	3	3	3	3
	Range Officer's Quarter Bonai-Building	3	3	3	3	3
Deogarh	Pallahara-Forester Quater	3	3	3	3	3
	Pallahara-Range office Pallahara	3	3	3	3	3
	Watch Tower Pradhanpat R. F Near Kadalipal-Building	3	3	3	3	3
Rourkela	forest Guard Quarter-Building	3	3	3	3	3
	Forester Quater-Building	3	3	3	3	3
	Range Office, Birmitrapur-Building	3	3	3	3	3
	Range officer Residence-Building	3	3	3	3	3
Sundargarh	forest Guard Quarter-Building	3	3	3	3	3
	Forester Quarter-Forester Quarter	3	3	3	3	3
	Rang officer Residence-Building	3	3	3	3	3
Bamara WL	Bamra-RO RESIDENCE	3	3	2	3	2
	kardakhaman Mahulmunda PRF-FG QUARTER	3	3	3	3	3
	Pitabalikhaman-Boundary wall	3	3	3	3	3
	Range office Campus-FR QUARTER	3	3	3	3	3
Bargarh	Bhatli-Forester quarter	3	3	3	3	3
	DFO Office Campus-Boundary wall	3	3	3	3	3

	Gangei-FG quarter	3	3	3	3	3
	Pipaalmunda-wild animal rescue centre	3	3	3	3	3
Hirakuda WL	Anti-poaching barrack,Chalgate-Anti poaching barrack	3	3	3	3	3
Jharsuguda	Puturadera-FG QUARTER	3	3	3	3	3
	Puturadera-FR QUARTER	3	3	3	3	3
Rairakhol	FG QUARTER, Kadobahali-Forest Guard Quarter	3	3	3	3	3
	FR QUARTER, GHOSRAMAL-FR QUARTER	3	3	3	3	3
	Giripur-Forester quarters	3	3	2	2	2
	Giripur-Range office	3	3	2	2	3
Sambalpur	Larasara-Forester quarter	3	3	3	3	3
	TOWN RANGE OFFICE-FG QUARTER	3	3	3	3	3

Roads 2020-2021

Infrastructure Details 2020-21

Circle	Division	Site & Structure	General	Location	Stability	Purpose	Duration
Angul	Angul	Forester quarter-Forester quarter	3	3	3	3	2
	Athmallik	F.G Quarter Rainali-boundary wall	3	3	3	3	3
		Hatidhara RF C/38-Wire mesh check dam	3	3	3	3	3
		Hatidhra RF C/28-Causeway	3	3	3	3	3
		kamrei - dimridihi-Forest road	3	3	3	3	3
	Cuttack	Berana to Manjhiamana-Cause way	3	3	3	3	2
		Forester quarter-building	3	3	3	3	3
	Dhenkanal	Kadua to Tapoban-Maintenance of Forest Road	3	3	3	3	3
	Mahanadi WL	Dahikhai Nallah-Culvert	2	3	2	3	2
		Rajiv Taila-Causeway	2	3	3	2	2
	Satkosia WL	FRH campus Pampasar-Forester Quarter	3	3	3	3	3
		Jocub-Forest Guard Quarter	3	3	3	3	2
Baripada	Balasore WL	kanjipani-Causeway	3	3	3	3	3
	Baripada	Causeway Ghagara-Causeway	3	3	3	3	3
		Kalkam-Cause Way	3	3	3	3	3
		Near Nimia Camp-Cause Way	3	3	3	3	3
		Nimia Manchan-Causeway	3	3	3	3	3
		Rusibasa-Causeway	3	3	3	3	3
	Keonjhar WL	Hadagarh Near Dam-Solar Fencing	3	3	3	3	3
	Rairangapur	Forest Road, Kusumghaty to Dahupani-Forest Road	3	3	3	3	3
	STR (North) WL, Jashipur	causeway Saguanbagan-causeway	3	3	3	3	3

		Forest road-Forest road	3	2	2	2	3
BBSR	Nayagarh	Pokharigochha RF C/3-Cement concrete Check dam	2	3	2	3	3
	Rajnagar WL	Bhandua to satabhaya-petrolling path	2	2	2	2	3
		Bhitarkanika Jetty to Temple-Forest road	3	3	2	3	3
		Dangamala gate to Jetty-Forest road	2	3	3	3	3
		Dobandhi to barunei-Petrolling path	3	3	3	3	3
Berhampur	Ghumsur (S)	Forest Road from Talasara to Nadiamba-Maintenance of Forest Road	3	3	3	3	3
	Paralakhemundi	LBCD didinguda-LBCD	3	3	3	3	2
Bhawanipatna	Bolangir	Gaindimal to Kandei-Causeway	2	3	2	3	3
		Naikensita to Lamkani Forest road-Culvert	3	3	3	3	3
		Siker to Narikota Forest Road-Road	3	3	3	3	3
		Tentulikhunti-Boundary wall	3	3	2	3	3
	Subarnapur	Culvert-Culvert	3	3	3	3	2
Koraput	Jeypore	Malchama- Gupteswar-Causeway-2	3	3	2	3	3
		Malchama- Gupteswar-Forest Road	3	3	3	3	3
		Malchama-Gupteswar-Causeway	3	3	2	3	3
	Koraput	Kuambo-Forest road	3	3	2	2	3
	Malkangiri	Nuagaon-LBCD	3	3	2	3	3
	Nabarangpur	Charakabana-Culvert	3	3	3	3	3
		Jharigaon-Culvert	3	3	3	3	3
		Maidalpur- Gudpanipadar-Causeway	3	3	3	3	3
		Podagada-Check dam	3	3	3	3	3
	Rayagada	durgi-causeway	3	3	3	3	2
		durgi-culvert	3	3	3	3	2
		Forest Road, Rodangi to Lingaguda over 6km-Forest Road	3	3	3	3	2
		Rodangi to lingagdua-Forest Road	3	3	3	3	2
Rourkela	Deogarh	Forest Road Chhuriabahal to Tusula 10.3 k. m-Road	3	3	3	3	3
		Forest road Churiabahal to Tusula 4.7 K. M-Forest Road	3	3	3	3	3
		Panibhandari to punjipathar forest road-Forest road	3	3	3	3	2
	Keonjhar	Causeway-Cause way	3	3	3	3	2
		Culvert-Culvert	3	3	3	3	2
	Rourkela	Cause way-Cause way	3	3	3	3	2
	Sundargarh	Colvote-Colvote	3	3	3	3	3
Sambalpur	Bargarh	Budhipali-culvert	3	3	3	3	3
		Chuhapali-Cause way	3	3	3	3	3

		Chuhapali-Forest road mntn	3	3	3	3	3
	Hirakuda WL	DK to mp-maintenance of Forest road	2	3	2	2	3

Water Bodies 2020-2021

Infrastructure Details 2020-21					
Circle	**Division**	**Site - Structure Type**	**General**	**Location**	**Purpose**
Angul	Angul	Badakathia RF-Waterbody	3	3	3
		Durga pur Rf-Water body	3	3	3
		Jindal-Water whole	3	3	3
		Kankurpal RF-Waterbody	3	3	3
	Athagarh	Baniabandha RF C/8-water body	3	3	3
	Athmallik	Nuagaon RF C/2-Waterbody	3	3	3
		Nuagaon RF C/4-Waterbody	3	3	3
	Dhenkanal	Bhuban Section-Tubewell	2	3	3
		Talaganda waterbody-waterbody	3	3	3
	Satkosia WL	Katrang RF C/8 juriutha-Water body	3	3	3
		katrang RF C/9 ranibandha-Second year maintenance of fruit bearing	2	3	2
		Raigoda Tersingh-maintenance of water body	2	2	2
Baripada	Baripada	Dakisole-Water Body	3	3	3
		Fhulajhari-Water Body	3	3	3
		Hatikote-Waterbody Hatikote	3	3	3
		Inside Suliapada RF Near Bhandarisal-Water Body	3	3	3
		Sorasole-Water Body	3	3	3
		waterbody-Matiachua-waterbody	3	3	3
		waterbody-Waterbody	3	3	3
	Karanjia	Nada Beat Campus-Tubewell	3	3	3
	Keonjhar WL	waterbody-Waterbody	3	3	3
	Rairangapur	Tubewell-Tubewell	2	2	2
	STR (North)	Eco Tourism-Tube Well	3	3	3
BBSR	Khordha	Pangarsingh RF-Waterbody(WHS)	3	3	3
	Nayagarh	Banigochha section office campus-Boring/Tube well	3	3	2
		Hadakata beat Haus-tubewell	2	3	2
	Puri WL	Inside sanctuary-water body	3	3	3
		Ramchandi FS-Waterbody	3	3	3
	Rajnagar WL	Kalibhanjadia-Water body	3	3	2
Berhampur	Ghumsur (N)	Jagannath Prasad RF C/7-Maintenance of Waterbody	1	3	3
		Jagannath Prasad RF C/9-Creation of Waterbody	3	3	3
		Paichelia C/5-Water Body	3	3	3

	Ghumsur (S)	Garabaganda-Waterbody	3	3	3
	Paralakhemundi	Khandava-staggered trench	3	2	2
	Phulbani	Mallickpada-Tubewell	3	3	3
		Mallikpada-Tube well	3	3	3
Bhawanipatna	Bolangir	Dhanpur-Tube Well	3	3	3
	Subarnapur	Dumerkhol-waterbody	3	3	3
Koraput	Jeypore	Bakulpada-Pond	3	3	3
	Koraput	Chatua-Tube well	3	3	3
		Kakiriguma-Tubewell	3	3	3
	Malkangiri	Challanguda-Tube Well	3	3	3
	Nabarangpur	Padeiguda-Water Body	3	3	3
		Ponduguda-Water Body	3	3	3
		Tandaguda 1-Water body-1	3	3	3
	Rayagada	Ramanaguda-Tube Well	3	3	2
Rourkela	Keonjhar	Tubewell-Tubewell	3	3	3
	Rourkela	Tubewell-Tubewell	3	3	3
	Sundargarh	Tube Well-Tube Well	3	3	3
Sambalpur	Bamara WL	Kudamkhol-Tube well	3	3	3
	Bargarh	Bankigud-maintenance of Waterbody	2	3	3
		Dava-Tube well	3	3	3
		Sankhulia-waterbody	3	3	3
	Hirakuda WL	Dhadrokusum C/14-Water body	2	3	3
		Jhagadabehra water body-water body	3	3	3
		old dhodrokusum-Mntn of water body created previous year	2	3	3
	Jharsuguda	Katikela RF-water body	3	3	2
		Kumrapali-waterbody	3	3	2

8. List of works studied along with geo coordinates

2017

List of works inspected and studied					
Year	**Division**	**Name of work**	**Latitude**	**Longitude**	**Type of Work**
2017	Balasore WL	ANR without gap Kusgad	21.89076	87.10122	ANR Without GAP
2017	Balasore WL	Govinpura WL	21.54342	86.70172	ANR Without GAP
2017	Balliguda	Manjiapada ANR AJY	19.962232	83.692477	ANR Without GAP
2017	Bolangir	Banjipali	20.806971	82.956789	ANR Without GAP
2017	Bolangir	Bijamal	20.433407	83.069061	ANR Without GAP
2017	Bolangir	Dabjori	20.497073	83.213398	ANR Without GAP
2017	Bolangir	Dhanghara	20.47482	83.48661	ANR Without GAP
2017	Bolangir	Indpur	20.840032	83.163879	ANR Without GAP
2017	Bolangir	Jurabandha	20.561052	83.173714	ANR Without GAP
2017	Bolangir	Kandhbahal	20.413581	83.917613	ANR Without GAP

2017	Bolangir	kanijuri	20.255179	83.203745	ANR Without GAP
2017	Bolangir	Kumbhipada	20.309248	83.195128	ANR Without GAP
2017	Bolangir	Malijhar	20.252316	83.22008	ANR Without GAP
2017	Bolangir	Padarapita	20.643945	83.485286	ANR Without GAP
2017	Bolangir	Pandripani	20.749917	83.068355	ANR Without GAP
2017	Bolangir	Pipalbahal	20.622992	82.795712	ANR Without GAP
2017	Bolangir	Sagadghat	20.332911	83.195032	ANR Without GAP
2017	Bolangir	Sandhimunda	20.670473	82.914634	ANR Without GAP
2017	Khariar	Ankapur	20.186129	82.679048	ANR Without GAP
2017	Khariar	Palenbasa	20.200326	82.695048	ANR Without GAP
2017	Malkangiri	Chidipalli	18.446422	81.819734	ANR Without GAP
2017	Malkangiri	Kamalapadar	18.313473	81.77481	ANR Without GAP
2017	Malkangiri	Kondel	18.30332	82.109108	ANR Without GAP
2017	Malkangiri	Maavandragharani	18.134211	82.136058	ANR Without GAP
2017	Malkangiri	Murliguda	18.057357	81.969891	ANR Without GAP
2017	Malkangiri	Nakamudi	18.218848	82.113584	ANR Without GAP
2017	Malkangiri	Padrapalli	18.43766	82.00215	ANR Without GAP
2017	Malkangiri	Rekhapalli	18.06084	82.147597	ANR Without GAP
2017	Malkangiri	Sanyasiguda	18.415769	81.972157	ANR Without GAP
2017	Nabarangpur	Anr without gap dhanpur plantation 50 ha	19.722246	82.304945	ANR Without GAP
2017	Nabarangpur	Chikili	19.731107	82.436203	ANR Without GAP
2017	Nabarangpur	Kuamba	19.765715	82.572616	ANR Without GAP
2017	Paralakhemundi	N. Jhalarasingi	19.238794	84.077817	ANR Without GAP
2017	Paralakhemundi	Ranaloi	19.221649	84.236546	ANR Without GAP
2017	Paralakhemundi	Subalada	19.073449	84.254942	ANR Without GAP
2017	Rairakhol	ANR AJY VSS Erundibahal	21.083801	84.19961	ANR Without GAP
2017	Rourkela	ANR without Gap Hariharpur	22.3059	84.761696	ANR Without GAP
2017	Rourkela	ANR without gap	22.091818	84.75323	ANR Without GAP
2017	Angul	ANR with gap plnt Budhia RF	21.22444	85.04760	ANR With GAP
2017	Angul	Balanga RF C/1	20.709737	84.967455	ANR With GAP
2017	Angul	Madhapur RF	20.75216	84.99951	ANR With GAP
2017	Angul	Similipathr RF 2-3	20.95211	84.824419	ANR With GAP
2017	Athagarh	Belapada Rf	20.408607	85.40368	ANR With GAP
2017	Athagarh	Deobhuin RF c/2	20.553528	85.14279	ANR With GAP
2017	Athagarh	Talachandragiri C/1	20.55563	85.146582	ANR With GAP
2017	Cuttack	Kalakala	20.46458	85.253688	ANR With GAP
2017	Dhenkanal	aswakhola RF (Kamalpur)	20.68866	85.97889	ANR With GAP
2017	Dhenkanal	Balibo RF	20.82387	85.84872	ANR With GAP
2017	Dhenkanal	Maulabhanja Rf	20.91031	85.88160	ANR With GAP
2017	Dhenkanal	Maulabhanja RF ANR	20.94629	85.63284	ANR With GAP
2017	Dhenkanal	Moulabhanja RF- ANR	20.94629	85.63284	ANR With GAP

2017	Dhenkanal	Ramei RF compartment 1	20.94434	85.63109	ANR With GAP
2017	Dhenkanal	Sulia RF	20.71116	85.76732	ANR With GAP
2017	Baripada	ANR with gap kuliana	20.52561	85.44449	ANR With GAP
2017	Baripada	Kairakocha ANR with gap	22.070763	86.64932	ANR With GAP
2017	Karanjia	Gagi RF	22.295678	86.519357	ANR With GAP
2017	Keonjhar WL	ANR gap plantation 100 ha. Santoshpur RF	22.296002	86.519831	ANR With GAP
2017	Keonjhar WL	Asanbahali ANR	21.83917	85.85256	ANR With GAP
2017	Keonjhar WL	Daitari ANR	21.32439	86.10125	ANR With GAP
2017	Rairangapur	ANR Badampahar RF Near Purunapani	21.14253	85.58104	ANR With GAP
2017	Khordha	Barunei RF	21.11757	85.6282	ANR With GAP
2017	Khordha	Kuhudi	22.1260000	86.1886111	ANR With GAP
2017	Nayagarh	Bandra	20.154383	85.646761	ANR With GAP
2017	Nayagarh	Dattapokhari	19.907964	85.317849	ANR With GAP
2017	Nayagarh	Ragadimada RF C/1	20.257585	85.222649	ANR With GAP
2017	Nayagarh	Sikharpur RF	20.258271	85.223914	ANR With GAP
2017	Rajnagar WL	Jamboo PF	20.279685	85.11339	ANR With GAP
2017	Balliguda	ANR Siangabali	20.280128	85.11529	ANR With GAP
2017	Balliguda	ANR Withgap	20.188687	84.841172	ANR With GAP
2017	Balliguda	Badabanga	20.225161	85.135028	ANR With GAP
2017	Berhampur	Thanagaon	20.225388	85.137222	ANR With GAP
2017	Ghumsur (S)	Biripada	20.426423	86.724528	ANR With GAP
2017	Ghumsur (S)	Kiriamba C/1	19.91106	84.20053	ANR With GAP
2017	Paralakhemundi	Janapada	19.64058	84.22353	ANR With GAP
2017	Paralakhemundi	Rajapura	19.97521	84.16468	ANR With GAP
2017	Bolangir	Chungidadar	19.080493	84.474624	ANR With GAP
2017	Bolangir	Jhinkipada	19.635317	84.374337	ANR With GAP
2017	Bolangir	Mahulpati	19.892333	84.909861	ANR With GAP
2017	Bolangir	Salemudge	19.085106	84.108755	ANR With GAP
2017	Kalahandi (N)	ANR Dumermunda	19.349084	84.292934	ANR With GAP
2017	Kalahandi (N)	ANR with Gap pltn Maskaguda	20.935732	83.430461	ANR With GAP
2017	Kalahandi (N)	Beherakuni	20.169646	82.864258	ANR With GAP
2017	Kalahandi (S)	Hatisal ANR	20.569794	82.764853	ANR With GAP
2017	Kalahandi (S)	Hatisal ANR with gap	20.417419	82.739859	ANR With GAP
2017	Khariar	Mahagaon	20.18133	83.25725	ANR With GAP
2017	Khariar	Rokal	20.065165	83.436908	ANR With GAP
2017	Subarnapur	ANR Gap plantation Khajuriapali	19.954025	83.033999	ANR With GAP
2017	Jeypore	Katharagada	19.80034	83.37674	ANR With GAP
2017	Malkangiri	Kathiguda	19.82702	83.35140	ANR With GAP
2017	Malkangiri	Nuagoan RF	20.067829	82.674614	ANR With GAP
2017	Nabarangpur	Anr with gap Bodadora	20.66638	82.674946	ANR With GAP
2017	Nabarangpur	Bejiguda	20.228973	82.629016	ANR With GAP

2017	Nabarangpur	Chuinmati	21.02808	83.97181	ANR With GAP
2017	Nabarangpur	Karka PRF	18.103606	82.753197	ANR With GAP
2017	Nabarangpur	Karlichua	18.529737	82.139963	ANR With GAP
2017	Rayagada	ANR With Gap	18.231339	82.083696	ANR With GAP
2017	Rayagada	Budidimal	19.835514	82.150618	ANR With GAP
2017	Rayagada	Chilikarambhu	19.65111	82.464992	ANR With GAP
2017	Rayagada	Guseai Gulumunda	19.652213	82.468261	ANR With GAP
2017	Rayagada	Jabaguda	19.703113	82.480309	ANR With GAP
2017	Rayagada	Jabguda	19.774914	82.117501	ANR With GAP
2017	Rayagada	Karanja PRF	19.267625	82.714537	ANR With GAP
2017	Rayagada	Tidimaska	19.12961	83.593341	ANR With GAP
2017	Bonai	Nalghati-Rajbasa ANR with gap	19.094129	83.732894	ANR With GAP
2017	Deogarh	ANR Plantation Ratab Village	##N/A##	##N/A##	ANR With GAP
2017	Keonjhar	ANR plantation champajhar	19.194886	83.713165	ANR With GAP
2017	Keonjhar	ANR Plantation Lata	19.804579	83.523792	ANR With GAP
2017	Rourkela	Bad Uparbahal	19.805282	83.522977	ANR With GAP
2017	Sundargarh	Cheliguduri	19.581388	83.319582	ANR With GAP
2017	Balliguda	Binjipali	19.58038	83.31923	ANR With GAP
2017	Bamara WL	Garpati RF	21.867833	84.806532	ANR With GAP
2017	Bamara WL	Garpati RF	21.49747	85.17084	ANR With GAP
2017	Bamara WL	Guljipali KF	21.57166	85.30479	ANR With GAP
2017	Bamara WL	kardakhaman DPF	21.52687	85.40580	ANR With GAP
2017	Bamara WL	khajuria RF C/16	21.80461	83.79231	ANR With GAP
2017	Bargarh	ANR pandaritarei	21.783934	83.894716	ANR With GAP
2017	Bargarh	ANR PLANTATION Pandaripani	21.78872	83.72858	ANR With GAP
2017	Bargarh	Pandripani PRF	21.12697	84.23803	ANR With GAP
2017	Jharsuguda	Amkhaman Sagarpali RF	21.15127	84.451664	ANR With GAP
2017	Jharsuguda	Bartap	21.152733	84.45310	ANR With GAP
2017	Jharsuguda	Outer perimeter of mining lease IB valley	21.71582	84.14011	ANR With GAP
2017	Jharsuguda	Sunari RF	21.716583	84.138009	ANR With GAP
2017	Rairakhol	ANR Berhampura PRF	21.715272	84.136479	ANR With GAP
2017	Rairakhol	Tandabira RF C/4	21.216693	84.179807	ANR With GAP
2017	Sambalpur	Ghichamura RF	21.26867	84.184647	ANR With GAP
2017	Sambalpur	Ghichmura jarmal RF	21.469811	83.860655	ANR With GAP
2017	Sambalpur	Ghirchamura RF	21.471675	83.861573	ANR With GAP
2017	Sambalpur	Jarang DPF	21.78872	83.72858	ANR With GAP
2017	Sambalpur	Near zero point	21.80175	83.79169	ANR With GAP
2017	Dhenkanal	SSO Bamboo kandhara RF	20.555307	85.26246	Bamboo SSO
2017	Phulbani	Baraba Bamboo SSO-C	19.911149	84.369488	Bamboo SSO
2017	Phulbani	Baraba-B Bamboo SSO	19.912758	84.363245	Bamboo SSO
2017	Subarnapur	Degreded Bamboo, Singhasan RF 'A'	21.11606°	83.89984°	Bamboo SSO

2017	Athagarh	Badamba-Forester quarter	20.418343	85.344245	Infrastructure
2017	Athagarh	Banapur-F G quarter	20.441553	368302	Infrastructure
2017	Athmallik	kamrei-dimridihi-Forest Road	21.00347	84.63795	Infrastructure
2017	Cuttack	Berena to Banjhiama-Forests road	20.632139	85.863313	Infrastructure
2017	Cuttack	Damdamani Beat office-Boundry wall	20.632023	85.862862	Infrastructure
2017	Cuttack	Ramachandrapur to Ambilijhari Forest road-Culvert	20.61970	85.87627	Infrastructure
2017	Dhenkanal	Chhotatentuli to Mahisagoda-Culvert	20.752174	85.900518	Infrastructure
2017	Dhenkanal	Chhotatentuli to Mahisakada-Culvert	20.740324	85.876227	Infrastructure
2017	Dhenkanal	Pathargarh to Gundichanali-Causeway	20.97027	85.53632	Infrastructure
2017	Mahanadi WL	Buguda-Causeway	20.4196998	84.7187683	Infrastructure
2017	Mahanadi WL	Duising Nallah-Culvert	20.5128033	84.7386121	Infrastructure
2017	Satkosia WL	Hatibari beat house-Common toilet	20.61520	84.80971	Infrastructure
2017	Satkosia WL	Jhankadataida-Causeway	20.706141	84.815742	Infrastructure
2017	Satkosia WL	Jhankadataila-Culvert	20.724382	84.799018	Infrastructure
2017	Satkosia WL	Pampasar Campus-Boundary Wall	20.702276	84.947913	Infrastructure
2017	Satkosia WL	Pampasar Range Office campus-Common Toilet	20.702231	84.947697	Infrastructure
2017	Satkosia WL	Tarava to sahajabahal-Forest Road	20.714175	84.817407	Infrastructure
2017	Baripada	##N/A##-Forest Road Devkund Road	"21.38'45""""	"86.29'18""""	Infrastructure
2017	Baripada	Badmakabadi C-PP19-Cause Way	21.86056	86.62611	Infrastructure
2017	Baripada	Badmakabadi C-PP19-Cause Way 2	21.86056	86.62611	Infrastructure
2017	Baripada	jodapal causeway-causeway	21.776467	86.396692	Infrastructure
2017	Keonjhar WL	Causeway- Pitanau-Causeway	21.310936	86.233441	Infrastructure
2017	Keonjhar WL	Culvert-Culvert	21.308486	86.243655	Infrastructure
2017	Khordha	Patia-Nakithana Forest road-Causeway	19.964583	85.344	Infrastructure
2017	Khordha	Patia-Nakithana Forest Road-Forest Road	19.968229	85.346123	Infrastructure
2017	Nayagarh	Kaudia - Andharakani,kukudakhai Nala-Culvert	20.210927	85.072042	Infrastructure
2017	Nayagarh	kaudia Andharakani Frd.-causeway	20.210927	85.072042	Infrastructure
2017	Balliguda	Lassery to Badipanga Road-Cause way	19.756496	83.693018	Infrastructure
2017	Paralakhemundi	Causeway- Taljharana-Causeway	19.349541	84.329374	Infrastructure
2017	Paralakhemundi	labanyagada-fencing	18.798354	84.31584	Infrastructure
2017	Paralakhemundi	Sambarpatu-culvert	19.326855	84.33487	Infrastructure
2017	Bolangir	Desbandh forest road-forest road	20.56014	83.18853	Infrastructure
2017	Bolangir	Kondei to Goidimal-Culvert	20.403196	82.748997	Infrastructure

2017	Bolangir	Siker Section office-Boundary wall	20.339769	83.197358	Infrastructure
2017	Bolangir	Tikrapada to Salemudge-Road	20.401666	82.749353	Infrastructure
2017	Kalahandi (N)	Tulapada to Manikera-Forest Road	20.5'50"	83.30'57"	Infrastructure
2017	Kalahandi (S)	Forest Quarter- Karlapat -A-Forest Guard Quarter	19.649103	83.119387	Infrastructure
2017	Kalahandi (S)	Sagada- Deadrah forest road-maintenance of Forest Road	19.806094	83.116881	Infrastructure
2017	Jeypore	Gupteswar-Forest Road	18.863838	82.23219	Infrastructure
2017	Koraput	Ambaguda-Culvert	18.965812	83.177559	Infrastructure
2017	Koraput	Kutkajhala Forest Road-Culvert	18.973355	83.136424	Infrastructure
2017	Koraput	Patadevi Dangar-Culvert	18.811354	82.698139	Infrastructure
2017	Malkangiri	Pilakusumi-Puspalli-Cause Way	18.325195	82.09951	Infrastructure
2017	Malkangiri	Pilakusumi-Puspalli-Culvert	18.346309	82.090663	Infrastructure
2017	Malkangiri	Pilakusumi-Puspalli-Forest Road	18.325198	82.099481	Infrastructure
2017	Nabarangpur	Maidalpur- Gudpanipadar-Culvert	19.474506	82.610964	Infrastructure
2017	Rayagada	Durgi-Colvote	19.369733	83.609296	Infrastructure
2017	Rayagada	Fanching-Elephant Trench	19.871083	83.505274	Infrastructure
2017	Bonai	Forest Road-Forest Road Boneikela to Kulijhar	21.913067	84.823395	Infrastructure
2017	Bonai	Forest Road-Road	22.009033	84.589618	Infrastructure
2017	Keonjhar	Causeway-Causeway	21.329739	85.511879	Infrastructure
2017	Keonjhar	Forest Road Similipal to Sankoi-Road	21.329606	85.511989	Infrastructure
2017	Sundargarh	cause way-Causeway	22.170757	83.836708	Infrastructure
2017	Sundargarh	Culvert- Didigajharan to Gundiadihi-Culvert	22.17468	83.841132	Infrastructure
2017	Sundargarh	Forest Road Didigajharan to Gundiadihi-Road	22.171463	83.837237	Infrastructure
2017	Bargarh	Chuhapali to suklipahad-Forest road mntn	20.991865	82.4433	Infrastructure
2017	Bargarh	Chuhapali to sukulipahad-Cause way	21.079136	82.885518	Infrastructure
2017	Bargarh	Chuhapali-Culvert	21.039697	82.844449	Infrastructure
2017	Hirakuda WL	DK to mp-Forest road	21.489165	83.771935	Infrastructure
2017	Jharsuguda	Amdarah - Badjob Forest road-culvert	21.85664	83.87692	Infrastructure
2017	Rairakhol	kuakhol-Bhatra FRd Causeway-Causeway	21.0572	84.15948	Infrastructure
2017	Rairakhol	kuakhol-Bhatra FRd-Culvert	21.062521	84.153759	Infrastructure
2017	Sambalpur	Barikpali - Thuntikatarbaga Forest Rd.-Causeway	21.650597	84.008313	Infrastructure
2017	Sambalpur	Jhankarpali to Jhankarbahali Forest Road-Culvert	21.385598	84.040616	Infrastructure
2017	Sambalpur	Near Deer park-Boundry wall	21.47267	83.9951	Infrastructure

2017	Angul	FG Quarter, Kumunda-Tubewell	20.98600	85.01987	Infrastructure
2017	Angul	kanheijena-Water body	21.06259	85.10188	Infrastructure
2017	Angul	Krushnachandragarh PRF C/2-water body	20.74540	84.90650	Infrastructure
2017	Angul	Kulasingha PRF C/1-water body	20.76624	84.95765	Infrastructure
2017	Angul	Patharbandh PRF-Waterbody	20.80516	84.90106	Infrastructure
2017	Athagarh	BAULA RF-water body	20.53308	85.81778	Infrastructure
2017	Athmallik	Northern RF C/23-Water body	20.99475	84.62088	Infrastructure
2017	Athmallik	Northern RF C/24-water body	21.008449	84.637863	Infrastructure
2017	Athmallik	Tileswar village-tube well	20.88401	84.62489	Infrastructure
2017	Balliguda	Tube well in Range office-Tube well	20.200979	83.914049	Infrastructure
2017	Bamara WL	Govindpur DFO office campus-Tube well	22.053207	84.29007	Infrastructure
2017	Bargarh	Melchamunda-Tube well	21.093954	83.240274	Infrastructure
2017	Baripada	Boghejhran RF-waterbody	"21.50'49"""	"86.56'21"""	Infrastructure
2017	Baripada	Kabataghai 2-Waterbody	21.796427	86.272403	Infrastructure
2017	Baripada	Waterbody jenabil-waterbody jenabil	"21.51'38"""	"86.37'34"" "	Infrastructure
2017	Bolangir	Kapsila-Tubewell	20.474129	83.477241	Infrastructure
2017	Bonai	Tube well Rengali-Tube well	21.614517	85.085305	Infrastructure
2017	Chandaka WL	Bhola RF-Waterbody	20.333119	85.737255	Infrastructure
2017	Dhenkanal	Kai RF-Waterbody	20.65400	85.26437	Infrastructure
2017	Dhenkanal	Kapilash RF-Maintenance of Water body	20.6846065	85.736023	Infrastructure
2017	Dhenkanal	Mahulpal Beat-Tubewell	20.88314	85.90270	Infrastructure
2017	Ghumsur (S)	dharakote-tubewell	19.6430	84.5779	Infrastructure
2017	Ghumsur (S)	Madangandapalli-Maintenance of Waterbody	19.731694	84.607755	Infrastructure
2017	Ghumsur (S)	Tangrai RF-Maintenance of Water body	19.782718	84.704635	Infrastructure
2017	Hirakuda WL	Old dhodrokusum-maintenance of water body	21.512769	83.769667	Infrastructure
2017	Hirakuda WL	WACC-Bore well	21.473296	83.993993	Infrastructure
2017	Jeypore	Chitra RF-Pond	19.112111	82.444518	Infrastructure
2017	Jeypore	Kotpad-Tubewell	19.141038	82.336342	Infrastructure
2017	Kalahandi (N)	kesinga Range office Campus-Tubewell	20.11'19"	83.13'16"	Infrastructure
2017	Kalahandi (N)	Urladani-Waterbody	20.0909	83.3109	Infrastructure
2017	Kalahandi (S)	Inside Range office karlapat campus , Bhawanipatna-Tubewell	19.55 47.0	83.10 05.0	Infrastructure
2017	Kalahandi (S)	Waterbody Nehela RF-40 x 30	19.791143	83.115035	Infrastructure
2017	Karanjia	Tube well Ghantiadar-Tube Well	21.44723	86.210801	Infrastructure
2017	Keonjhar WL	Tube Well-Tube Well	21.285031	86.2411	Infrastructure
2017	Keonjhar WL	waterbody-Waterbody	21.31328	85.95140	Infrastructure

2017	Koraput	Kilua-Pond	18.527042	82.739377	Infrastructure
2017	Mahanadi WL	Senepari Beat Quarter-Tubewell	20.4709718	84.7816422	Infrastructure
2017	Malkangiri	Bhaliamba-Water body	18.602722	82.298295	Infrastructure
2017	Nabarangpur	Jogipara-Pond	19.829234	82.240802	Infrastructure
2017	Nabarangpur	Koilari-Water body	19.501213	82.345052	Infrastructure
2017	Nabarangpur	Raighar-Tubewell	19.894534	82.072786	Infrastructure
2017	Nayagarh	Bahadajhola inside section office campus-Boundary wall	20.076384	84.914914	Infrastructure
2017	Nayagarh	MI Colony-Tubewell	20.135443	85.093068	Infrastructure
2017	Paralakhemundi	Narayanpur-Perculation Tank	18°53' 8"	"84° 11' 4"""	Infrastructure
2017	Paralakhemundi	Nuagada-Tubewell	19.102263	84.046908	Infrastructure
2017	Paralakhemundi	Tiniamba - Staggered trench-staggered trench	19.35519	84.327713	Infrastructure
2017	Phulbani	Badagada-Waterbody	19.92345	83.94974	Infrastructure
2017	Puri WL	Kurujanga FS-Creation of waterbody	19.89243	86.134938	Infrastructure
2017	Rairangapur	Waterbody Burudihi-Waterbody	22.263735	86.284271	Infrastructure
2017	Rajnagar WL	Charigheria-Water body	20.673988	86.877205	Infrastructure
2017	Rajnagar WL	kansaripatia-water body	20.244742	86.628245	Infrastructure
2017	Sambalpur	Jhankarpali-Tube well	21.40287	84.02305	Infrastructure
2017	Sambalpur	Ladladi, Oram pada-waterbody	21.375465	84.207806	Infrastructure
2017	Satkosia WL	Jagannathpur-Tube well	20.723123	84.867463	Infrastructure
2017	Satkosia WL	Kholabasa Rf-Water body C/5	20.596388	84.898086	Infrastructure
2017	Satkosia WL	Kumuri-Tube Well	20.723677	84.790429	Infrastructure
2017	Satkosia WL	Nardaghai-Water body	20.580961	84.859192	Infrastructure
2017	Subarnapur	Waterbodies, Patrapali-40 x 35	21.129884°	83.885751°	Infrastructure
2017	Subarnapur	Waterbody 17-18-40x30	20.64889°	83.81111°	Infrastructure
2017	Subarnapur	waterbody-Waterbody	20.939365	84.200376	Infrastructure
2017	Sundargarh	Tube Well-Tube Well	22.233768	84.03454	Infrastructure
2017	Sundargarh	waterbody-Waterbody	22.141486	84.154084	Infrastructure
2017	Angul	Nukhuripada	20.69072	85.05511	AR
2017	Balliguda	Dupi ANR with gap	19.894047	83.661905	AR
2017	Boudh	Badarahajor KF Block Plantation	20.758023	83.94788	AR
2017	Cuttack	Inside Karanji PRF	20.65621	85.90946	AR
2017	Ghumsur (S)	Maraisuni	19.802869	84.94601	AR
2017	Jeypore	Badiguda	18.863007	82.61831	AR
2017	Jeypore	Porli	19.107482	82.565487	AR
2017	Jharsuguda	ullap PRF	21.899331	83.927965	AR
2017	Keonjhar	A R Block Plantation	21.55599	85..43076	AR
2017	Khariar	Padarbhata	20.087428	82.677054	AR
2017	Khordha	Bhaleri	19 .753291	85.137322	AR

2017	Malkangiri	Siadimal	18.344069	81.846983	AR
2017	Nabarangpur	Dishariguda	19.422808	82.52407	AR
2017	Nabarangpur	Papadahandi RF	19.333988	82.524837	AR
2017	Nayagarh	Barabanka PRF near Raghunathpur	20.20466	85.263327	AR
2017	Rairangapur	Kashiabadi R.L Fruit and Fodder	22.07829	86.082835	AR
2017	Rayagada	Gurtuli PRF	19.39752	83.30762	AR
2017	Rourkela	Bald hill Plantation Balanda DPF	22.193705	84.74741	AR
2017	Satkosia WL	Satyajayapur	20.56177	84.91129	AR
2017	Sundargarh	AR plantation Kanika	21.8975	83.739478	AR
2017	Sundargarh	Mundharkhet KF	22.065536	83.633961	AR

2019

List of works inspected and studied					
Year	**Division**	**Name of work**	**Latitude**	**Longitude**	**Type of Work**
2019	Balasore WL	Ambatumba ANR without gap	21.83837	87.14024	ANR Without GAP
2019	Balasore WL	Saralibasa	21.89571	87.15201	ANR Without GAP
2019	Balliguda	Adipadar EDC	19.85193°	083.79031°	ANR Without GAP
2019	Balliguda	Bandaguda	20°0645.4	083°5929.7	ANR Without GAP
2019	Balliguda	Dengamaha EDC	19.848888	83.7902778	ANR Without GAP
2019	Balliguda	Pateri VSS	19.90711	84.09072	ANR Without GAP
2019	Bolangir	Barikpali	20.569792	83.201906	ANR Without GAP
2019	Bolangir	Sanbanki	20.420215	82.776	ANR Without GAP
2019	Bonai	ANR without Gap Saplata (AJY)	21.968855	84.797571	ANR Without GAP
2019	Khariar	Boirgaon	20.232887	82.527478	ANR Without GAP
2019	Khariar	Ghardhara	20.358499	82.6847	ANR Without GAP
2019	Khariar	Jholapada	20.232887	82.527478	ANR Without GAP
2019	Malkangiri	Gadiput	18.42363	82.231009	ANR Without GAP
2019	Malkangiri	Godiali	18.563611	82.222389	ANR Without GAP
2019	Malkangiri	Machhaguda	18.392281	81.215665	ANR Without GAP
2019	Malkangiri	Mundiguda	18.453875	82.228781	ANR Without GAP
2019	Malkangiri	Telamiguda URL	18.213559	81.574458	ANR Without GAP
2019	Nabarangpur	Gaibandha	19.680157	82.530583	ANR Without GAP
2019	Nabarangpur	Karlapada	19.790079	82.35728	ANR Without GAP
2019	Paralakhemundi	Gotha	19.253704	84.109657	ANR Without GAP
2019	Rairakhol	Landimala RF compartment -1	21.9460	84.47991	ANR Without GAP
2019	Rourkela	ANR Without Gap AJY 4th VSS	22.203247	84.988537	ANR Without GAP
2019	Rourkela	ANR Without Gap Brahamani RF	22.283773	84.803523	ANR Without GAP
2019	Satkosia WL	Baghamunda	20.70304	84.792715	ANR Without GAP

2019	Satkosia WL	Tainsi AJY	20.64535	84.82414	ANR Without GAP
2019	Angul	ANR with gap Kanheijena RF	21.05315	85.14391	ANR With GAP
2019	Angul	ANR with gap Para PRF	20.7543	84.819304	ANR With GAP
2019	Angul	Dhanakaili RF	20.847131	84.82011	ANR With GAP
2019	Angul	Dhankuili RF	21.170096	85.08226	ANR With GAP
2019	Angul	Dhankuili RF ANR plantation	21.16753	85.10117	ANR With GAP
2019	Angul	Kanheijena RF	21.16613	85.10226	ANR With GAP
2019	Angul	Pathuria petachira RF	21.05092	85.14565	ANR With GAP
2019	Athagarh	Baniabandha RF C/9 ANR with gap	20.98242	85.20111	ANR With GAP
2019	Athmallik	Kusumkhuri RF	20.607111	85.78505	ANR With GAP
2019	Athmallik	Kusumkuhuri RF	20.64812	84.69343	ANR With GAP
2019	Cuttack	Inside Daitari DPF	20.64781	84.67495	ANR With GAP
2019	Dhenkanal	Aswakhola RF C/3	20.64958	84.67955	ANR With GAP
2019	Dhenkanal	jirala	20.65518	84.68662	ANR With GAP
2019	Dhenkanal	Kandhara RF C/18	21.073503	85.74184	ANR With GAP
2019	Dhenkanal	kankili RF	21.07397	85.742001	ANR With GAP
2019	Dhenkanal	siarimali RF	21.08015	85.74276	ANR With GAP
2019	Dhenkanal	Siarimalia RF	20.83313	85.769615	ANR With GAP
2019	Dhenkanal	Sunajhari RF	20.833652	85.77347	ANR With GAP
2019	Baripada	ANR With Gap Plantation	20.85220	85.60444	ANR With GAP
2019	Karanjia	ANR Gap Plantation Taramara RF	20.54283	85.33028	ANR With GAP
2019	Keonjhar WL	ANR with Gap patilo RF	20.869247	85.40509	ANR With GAP
2019	Keonjhar WL	Sikabadi ANR	20.874122	85.409064	ANR With GAP
2019	Chilika WL	Nandhighar DPF	20.88072	85.410185	ANR With GAP
2019	Khordha	Bhusandpur	20.935255	85.43498	ANR With GAP
2019	Khordha	Katual	20.91260	85.41717	ANR With GAP
2019	Nayagarh	Nachhipur	20.92175	85.43121	ANR With GAP
2019	Balliguda	ANR with GAP - Paduguda	20.85220	85.60621	ANR With GAP
2019	Balliguda	Dupi	2166535	8070509	ANR With GAP
2019	Balliguda	Jhariapada	21.463322	86.14683	ANR With GAP
2019	Balliguda	Karlangi ANR With Gap	21.12094	86.08492	ANR With GAP
2019	Balliguda	Langespadar	21.42896999	86.09231	ANR With GAP
2019	Balliguda	Saramuli	19.487879	85.123958	ANR With GAP
2019	Balliguda	Sasimaha	19.998728	85.506872	ANR With GAP
2019	Balliguda	Tetragaon	19.852667	85.0622	ANR With GAP
2019	Berhampur	Khalikot	20.096397	85.202137	ANR With GAP
2019	Berhampur	Narayani	19.71728	83.91880	ANR With GAP
2019	Berhampur	Rampalli	19.89447222	83.6623333	ANR With GAP
2019	Berhampur	Srirampur	19.963616	83.6870712	ANR With GAP
2019	Boudh	ANR Aragarh Comp No-06	19.86696167	83.56184500	ANR With GAP
2019	Boudh	ANR Plantation, Arakhpadar, Compt no-04	20.26250	83.97791	ANR With GAP

2019	Boudh	BANKAMUNDI RF-C/6	19.68378	83.97122	ANR With GAP
2019	Boudh	Mundeswar	20.07275	84.15200	ANR With GAP
2019	Ghumsur (N)	Baibali RF C/6	20°0426.8	84°0904.8	ANR With GAP
2019	Ghumsur (N)	Tiliki RF C/3	20.23019°	84.06561°	ANR With GAP
2019	Ghumsur (N)	Tiliki RF C/4	19.605638	85.086344	ANR With GAP
2019	Paralakhemundi	Jangala	19.682836	85.165209	ANR With GAP
2019	Paralakhemundi	Lanjipadar	19.22278	84.7	ANR With GAP
2019	Paralakhemundi	Siali	19.643276	85.578457	ANR With GAP
2019	Paralakhemundi	Subhadrapur	20.63846°	084.525770°	ANR With GAP
2019	Phulbani	Dedigunda -ANR	20.56611°	084.63410°	ANR With GAP
2019	Phulbani	Linepada RF	20.735751	84.306489	ANR With GAP
2019	Phulbani	Mularujangi-ANR	20.41839°	084.55244°	ANR With GAP
2019	Phulbani	Pukulingia RF	19.99160	84.41618	ANR With GAP
2019	Phulbani	Talabalumaha ANR Gap Plantation	19.893361	84.500478	ANR With GAP
2019	Bolangir	Tankapani	19.88979	84.51168	ANR With GAP
2019	Kalahandi (N)	ANR Gap Pltn Rajnapur	19.88982	84.8451054	ANR With GAP
2019	Kalahandi (N)	ANR with Gap Fukjodi	18.934138	84.041305	ANR With GAP
2019	Kalahandi (N)	Fukjodi ANR with gap	18.90389	84.16778	ANR With GAP
2019	Kalahandi (N)	Gochhakhola	18.904168	84.167826	ANR With GAP
2019	Kalahandi (S)	ANR Ghoda Bandha Singari RF	18.921203	83.870542	ANR With GAP
2019	Kalahandi (S)	ANR with Gap Pltn Balangi	18.934628	84.301892	ANR With GAP
2019	Kalahandi (S)	Tenganbahali	20.38278	84.26889	ANR With GAP
2019	Kalahandi (S)	Tengnabahali	20.322611	84.298500	ANR With GAP
2019	Khariar	Sitilikhalia	20.445376	84.231265	ANR With GAP
2019	Subarnapur	Kutmenda ANR with gap	20.147332	84.374656	ANR With GAP
2019	Jeypore	Baghbeda	20.20354500	84.40666000	ANR With GAP
2019	Jeypore	Chipakur	20.686101	82.730793	ANR With GAP
2019	Jeypore	Dirbiguda	20.11726	82.96176	ANR With GAP
2019	Jeypore	Hatipakhana	19.236626	83.082668	ANR With GAP
2019	Koraput	Ambliput	19.938243	83.084215	ANR With GAP
2019	Koraput	Jhirjhira	19.885173	83.100444	ANR With GAP
2019	Koraput	Pipalpadar	19.630612	82.921923	ANR With GAP
2019	Malkangiri	Kolaguda	19.48194	82.893918	ANR With GAP
2019	Malkangiri	Singalbancha	19.772699	83.190762	ANR With GAP
2019	Nabarangpur	Anr with gap Palpur 50 ha	19.773663	83.189616	ANR With GAP
2019	Nabarangpur	Haldiguda	20.139936	82.746621	ANR With GAP
2019	Rayagada	Aguru	21.019654	83.879285	ANR With GAP
2019	Rayagada	ANR kodinga CA	18.66555	82.265107	ANR With GAP
2019	Rayagada	Nimagiri	18.66555	82.265107	ANR With GAP
2019	Rayagada	Pidishika Kalanga	18.897344	82.476708	ANR With GAP

2019	Rayagada	Pidishika Kolango	18.706498	82.369751	ANR With GAP
2019	Rayagada	podalpadar	19.088872	83.268598	ANR With GAP
2019	Bonai	Ambrudi PRF ANR with gap	18.985633	82.968661	ANR With GAP
2019	Bonai	ANR Plantation	19.108388	83.169107	ANR With GAP
2019	Bonai	ANR Sirigida RF	18.308365	81.946326	ANR With GAP
2019	Bonai	Ulsura RF - ANR with gap	18.536217	82.165444	ANR With GAP
2019	Keonjhar	Barabanka RF ANR with gap	19.291844	82.4713	ANR With GAP
2019	Keonjhar	Majhiduna	19.548443	82.34916	ANR With GAP
2019	Keonjhar	Pipilia RF	19.274238	83.380059	ANR With GAP
2019	Rourkela	CA-PCA plantation	19.05659	83.06007	ANR With GAP
2019	Rourkela	Rutkupedi RF	19.08157	83.06918	ANR With GAP
2019	Sundargarh	ANR Athkosia R.F (Putudihi)	19.48866	83.37316	ANR With GAP
2019	Sundargarh	ANR Gap Plantaion Kuntipani	19.343808	83.317072	ANR With GAP
2019	Sundargarh	ANR Singaribahal R. F	19.343803	83.317047	ANR With GAP
2019	Sundargarh	Towerline ANR Plantation, Bauridihi	19.194216	83.713085	ANR With GAP
2019	Bamara WL	Balasinga KF	21.856024	85.005953	ANR With GAP
2019	Bamara WL	Khajuria RF C/17	21.010803	84.609895	ANR With GAP
2019	Bargarh	Jhanjapahad PRF	22.01382	84.36910	ANR With GAP
2019	Jharsuguda	Ghagdumri RF	22.017873	84.3737	ANR With GAP
2019	Jharsuguda	Ghagdungri RF	21.77697	84.26862	ANR With GAP
2019	Jharsuguda	Lariapali DPF	21.776335	84.26176	ANR With GAP
2019	Jharsuguda	Loriapali DPF	21.09263	84.34109	ANR With GAP
2019	Rairakhol	Kholgarh RF C/32	21.092972	84.367897	ANR With GAP
2019	Sambalpur	Jaduloising -Gunjaghara RF	21.2981044	83.012181	ANR With GAP
2019	Sambalpur	Jarang DPF	21.21493	84.18678	ANR With GAP
2019	Angul	Badakathia R.F.	21.00464	84.98489	Bamboo AR
2019	Angul	Bulajhara Rf	21.10345	85.16963	Bamboo AR
2019	Athagarh	Brahamanabasti RF	20.524285	85.76171	Bamboo AR
2019	Athmallik	hatidhara C/10	20.760407	84.675795	Bamboo AR
2019	Dhenkanal	Kai RF	20.6516208	85.169004	Bamboo AR
2019	Balliguda	Karjandi	20.01588889	83.53622222	Bamboo AR
2019	Berhampur	Makundapur	19.540306	85.017154	Bamboo AR
2019	Paralakhemundi	Rajamba	19.060435	84.094848	Bamboo AR
2019	Khariar	Ghantiguda	20.090785	82.701753	Bamboo AR
2019	Subarnapur	Polbandh Bamboo plantation	20.600811	83.617523	Bamboo AR
2019	Jeypore	Kota	18.768358	82.512773	Bamboo AR
2019	Rayagada	Bamboo plantation. pandrapada	19.47085	83.26097	Bamboo AR
2019	Bonai	A R Bamboo Plantation Lunga R. F	21.683493	85.039387	Bamboo AR
2019	Deogarh	Bamboo Plantation Kansar RF	21.480702	84.473609	Bamboo AR

2019	Sundargarh	Garjanpahad Bamboo plantation	21.8794433	83.6724650	Bamboo AR
2019	Bamara WL	Haldibahal	21.468835	84.211535	Bamboo AR
2019	Bargarh	Dechuan RF	21.631196	83.565601	Bamboo AR
2019	Sambalpur	Jaduloisingh Gunjaghar RF	21.343465	84.032961	Bamboo AR
2019	Boudh	Aragarh R. F C/10	20.66806°	84.49924°	Bamboo SSO
2019	Boudh	Dankengarh B/C-B	20.82917	83.92528	Bamboo SSO
2019	Boudh	Hatidhara RF B/C-A, C/3	20.47034°	084.639175°	Bamboo SSO
2019	Boudh	jamukhol BAMBOO SSO	20.65972	84.26255	Bamboo SSO
2019	Boudh	Jamukhol BAMBOO SSO-C /5	20.626149	84.240951	Bamboo SSO
2019	Boudh	Mundeswar RF-compartment no-1	20.59556	84.02694	Bamboo SSO
2019	Ghumusar south	Ghazalbadi B/C B	19.85714	084.26414	Bamboo SSO
2019	Phulbani	Sudrukumpa RF compartment No-6	20.582597	84.229916	Bamboo SSO
2019	Samablpur	Jaduloising	20.307308	84.023268	Bamboo SSO
2019	Subarnapur	Singhasan RF, Degreded Bamboo 'B'	21.14666°	83.89081°	Bamboo SSO
2019	Angul	Bulajhar-Culvert	21.09701	85.19237	Infrastrcuture
2019	Angul	Manikjodi to sitikoili-Causeway	20.756484	84.885966	Infrastrcuture
2019	Angul	RF-culvert	20.754809	84.660626	Infrastrcuture
2019	Athagarh	badakhola katurighasa Nala Road-Forest Road	20.51958	85.065343	Infrastrcuture
2019	Athagarh	Murjanala to Sankrida Road-Road	20.51958	85.065343	Infrastrcuture
2019	Cuttack	Kumutibahali-Couseway	21.10114	85.74370	Infrastrcuture
2019	Cuttack	RO - Residence-Building	20.631932	86.032802	Infrastrcuture
2019	Dhenkanal	Mahulpunji to Tenua-Maintenance of forest Road	20.550645	85.474841	Infrastrcuture
2019	Mahanadi WL	Gochabari to Buriapaju-Forest Road	20.4708477	84.781938	Infrastrcuture
2019	Satkosia WL	Fire line at culvert (Musamara to majhipada 12)-Culvert	20.672527	84.07524	Infrastrcuture
2019	Satkosia WL	Labangi to Rosanda-Forest Road	20.642718	84.983703	Infrastrcuture
2019	Satkosia WL	Raigoda-Culvert Tersingh	20.604999	85.054054	Infrastrcuture
2019	Balasore WL	Bhaliaposhi to Kaimahudi Road-Forrst Road	21.45306	86.56761	Infrastrcuture
2019	Balasore WL	kuldiha sanctuary-Causeway	"21.25'14"""	"86.31'50"""	Infrastrcuture
2019	Baripada	Andharitota C-PP16-Cause Way	21.86056	86.62611	Infrastrcuture
2019	Baripada	Culvert-Culvert	"22.8'45"""	"86.40'33"""	Infrastrcuture
2019	Karanjia	Culvert Bisipur RF-Culvert	21.723648	86.109513	Infrastrcuture
2019	Karanjia	kumbalor-causeway	21.37358	086.23574	Infrastrcuture
2019	STR (North) WL, Jashipur	Forest Road -Bhandadhara-Forest Road	21.907477	86.446631	Infrastrcuture
2019	STR (North) WL, Jashipur	Forest Road Nawana-Forest Road	21.90349	86.38104	Infrastrcuture
2019	Nayagarh	Gochhabari -Sampada Frd.-causeway	20.22132	85.042395	Infrastrcuture

2019	Nayagarh	Gochhabari Sampada-Culvert	20.210909	85.07211	Infrastrcuture
2019	Rajnagar WL	Bhitarkanika-Lili Pond	20.710296	86.867088	Infrastrcuture
2019	Rajnagar WL	Kalibhanjadia-Forest road	20.777862	86.92684	Infrastrcuture
2019	Balliguda	Karjandi Cause way-Cause way	19.999712	83.527403	Infrastrcuture
2019	Ghumsur (S)	Flush Causeway at Andharinala-Causeway	19.815378	84.887273	Infrastrcuture
2019	Paralakhemundi	Allada to Baijhal Forest Road-Causeway	18.97885	83.87672	Infrastrcuture
2019	Paralakhemundi	Allada-Culvert	18.978434	83.872347	Infrastrcuture
2019	Bolangir	Dengpadar to Satbahani-Cause way	20.386969	83.090917	Infrastrcuture
2019	Bolangir	Siker to Gulmi Forest road-Road	20.368433	83.178162	Infrastrcuture
2019	Kalahandi (N)	Golamunda to Bokrasil-Forest Road	20.0244	82.4603	Infrastrcuture
2019	Kalahandi (N)	Sikuan to Ramchandrapur-Causeway	20.098658	82.966394	Infrastrcuture
2019	Kalahandi (S)	karlapat causeway-Causeway	19.44 43.3	83.06 30.5	Infrastrcuture
2019	Kalahandi (S)	karlapat culvert-culvert	19.40 49.1	83.08 39.1	Infrastrcuture
2019	Kalahandi (S)	karlapat RF-Forest Road Jakam to karlapat	19.41 30.0	83.08 19.0	Infrastrcuture
2019	Khariar	Kholi to Redhamal-Road (6 km)	20.417472	82.562573	Infrastrcuture
2019	Khariar	Kholi-Redhamal-Road	20.417472	82.562573	Infrastrcuture
2019	Koraput	Ambaguda-Causeway	18.967836	83.179471	Infrastrcuture
2019	Koraput	Nandapur-Culvert	18.55195	82.755205	Infrastrcuture
2019	Malkangiri	Pitatung Forest Road-Culvert	18.492381	82.01428	Infrastrcuture
2019	Malkangiri	Pitatung-Causeway	18.495248	82.00893	Infrastrcuture
2019	Nabarangpur	Jharigaon-Causeway	19.733819	82.377459	Infrastrcuture
2019	Rayagada	Durgi-Coseway	19.373162	83.609462	Infrastrcuture
2019	Bonai	Culvert Jhiripani to Pitagaon road-Culvert	21.977723	84.80191	Infrastrcuture
2019	Bonai	Culvert- S Balang to Kareiput-Culvert	21.681629	84.831042	Infrastrcuture
2019	Bonai	Forest road S. Bolang to Kareiput-Road	21.696334	84.810489	Infrastrcuture
2019	Deogarh	Cause way-Cause way	21.728776	84.648241	Infrastrcuture
2019	Deogarh	Culvert-Culvert	21.792223	84.648376	Infrastrcuture
2019	Karanjia	Culvert Bhimkund to Baiganpal forest road-Culvert	21.726541	84.647995	Infrastrcuture
2019	Keonjhar	Causeway at Bhimkund to Baiganpal forest road-Causeway	21.732061	84.651436	Infrastrcuture
2019	Keonjhar	Culvert Near Similipal Village-Culvert	21.54035	85.986931	Infrastrcuture
2019	Keonjhar	Tanda- Banamahuldiha-Road	21.536629	85.988249	Infrastrcuture
2019	Rourkela	bagdega to rutkupedi Forest road-Forest road	21.329994	85.511281	Infrastrcuture
2019	Rourkela	Cause way-Cause way	21.53007	85.985729	Infrastrcuture

2019	Rourkela	Culvert-Culvert	22.178376	84.789431	Infrastrcuture
2019	Sundargarh	Causeway-Causeway	22.120790	84.73585	Infrastrcuture
2019	Bamara WL	Badbahal Loimura Forest road-Culvert	22.1485	84.785603	Infrastrcuture
2019	Bamara WL	Ballam Khalasuni Forest Rd Causeway-Causeway	22.1769383	84.786123	Infrastrcuture
2019	Bargarh	Chuhapali-Culvert	22.16162	83.842324	Infrastrcuture
2019	Bargarh	Chuhapali-Forest road mnt	21.745660	84.618026	Infrastrcuture
2019	Bargarh	Narsingnath to kapildhar-Cause way	21.310186	84.483180	Infrastrcuture
2019	Hirakuda WL	Tangarghat Nallah-RCC Bridge and 9 box cell culvert	21.079248	82.885565	Infrastrcuture
2019	Sambalpur	Near Galchira-culvert	21.099741	82.871877	Infrastrcuture
2019	Sambalpur	Sapne -Istapali Forest Rd.-Causeway	20.888273	82.838837	Infrastrcuture
2019	Angul	Balanga C/13-water body	20.637659	85.000196	Infrastrcuture
2019	Angul	Bulajhar-Waterbody	21.09333	85.22575	Infrastrcuture
2019	Angul	Nuakheta RF C/2-Waterbody	20.63140	85.106653	Infrastrcuture
2019	Angul	phuljhari RF-Water body	21.19110	85.04366	Infrastrcuture
2019	Athagarh	Barakhola Rf-Water body	20.510901	85.073848	Infrastrcuture
2019	Athmallik	Taleipathar RF C/6-Waterbody	20.848617	84.504609	Infrastrcuture
2019	Athmallik	West Bareni RF C/2-Waterbody	20.912423	84.308745	Infrastrcuture
2019	Bargarh	inside chardapali PRF-Maintenance of water body	21.115759	83.015733	Infrastrcuture
2019	Bargarh	Jadamunda-waterbody	21.51725	83.44846	Infrastrcuture
2019	Chandaka WL	Mulijhar-Water body	20.365973	85.704117	Infrastrcuture
2019	Dhenkanal	Bampa-water body creation.	20.664447	85.419118	Infrastrcuture
2019	Ghumsur (N)	Creation of Waterbody at Durgamadhabpur (Blackbuck)-Waterbody	19.99159	84.70292	Infrastrcuture
2019	Ghumsur (N)	Kaliamba RF C/6-Water Body	19.867397	84.569398	Infrastrcuture
2019	Ghumsur (N)	Kamasaragada-Waterbody	20.03732	84.85023	Infrastrcuture
2019	Ghumsur (N)	Keutapalli near Banatumba-Creation of Waterbody	19.90737	84.63776	Infrastrcuture
2019	Ghumsur (N)	Ragada RF C/2-Creation of Waterbody	19.8340	84.4759	Infrastrcuture
2019	Ghumsur (S)	Dantaribagada-Creation of Waterbody	19.673158	84.615953	Infrastrcuture
2019	Ghumsur (S)	Kadapada RF-Construction of Water body	19.898413	84.75754	Infrastrcuture
2019	Hirakuda WL	Debrigarh RF-Water body	21.570788	83.576857	Infrastrcuture
2019	Hirakuda WL	Magargada-Water body	21.582959	83.615908	Infrastrcuture
2019	Hirakuda WL	Teteldhipa pond-Mntn of fruit and fooder species	21.573331	83.744865	Infrastrcuture
2019	Hirakuda WL	WACC-Water body	21.470645	83.99073	Infrastrcuture
2019	Jeypore	Tallur-Water body	18.893219	82.206375	Infrastrcuture
2019	Jharsuguda	Bhimjor-water body	21.975438	84.146972	Infrastrcuture
2019	Jharsuguda	Pitamal PRF-water body	21.951838	84.139353	Infrastrcuture
2019	Kalahandi (N)	Urladani-Waterbody	20.0805	83.3003	Infrastrcuture

2019	Kalahandi (S)	Tubewell-Tubewell	19.931883	83.401414	Infrastrcuture
2019	Keonjhar	Waterbody Kalapat R. F near Similipal Village-Waterbody	21.35015	85.523385	Infrastrcuture
2019	Keonjhar WL	Tubewell -Dalki near Dam-Tube Well	21.319862	86.275172	Infrastrcuture
2019	Khariar	Khaira-Tube Well	20.325797	82.62591	Infrastrcuture
2019	Koraput	Chilam-Waterbody	18.439227	82.671603	Infrastrcuture
2019	Nabarangpur	Jiraguda-Pond	19.571109	82.199491	Infrastrcuture
2019	Phulbani	Dahisara RF-Water body	20.360877	84.119333	Infrastrcuture
2019	Phulbani	RANABA RF COMPARTMENT 3-Good	19.877248	84.42924	Infrastrcuture
2019	Puri WL	Bhagabati FS-Water body	19.869143	86.066702	Infrastrcuture
2019	Puri WL	Gadhialata-waterbody	19.864295	86.026005	Infrastrcuture
2019	Puri WL	Guhalpur FS-Creation of water body	19.895629	86.151205	Infrastrcuture
2019	Puri WL	Ishaneswar FS-2nd year maintenance of fruit and fodder	19.886329	86.119556	Infrastrcuture
2019	Puri WL	Ishaneswar FS-Maintenance of Water body	19.887505	86.120794	Infrastrcuture
2019	Puri WL	Konark manguleswar FS-Maintenance of Water body	19.884012	86.085622	Infrastrcuture
2019	Puri WL	mangaleswar FS-3rd year Fruit and fodder maintenance	19.873400	86.078939	Infrastrcuture
2019	Puri WL	manguleswar FS-Creation of water body	19.868181	86.076697	Infrastrcuture
2019	Puri WL	Ramchandi FS-Water body	19.869356	86.062775	Infrastrcuture
2019	Rairangapur	waterbody-Waterbody	22.19922	86.36627	Infrastrcuture
2019	Rajnagar WL	Hawakhana-waterbody mnt	20.05549	86.427013	Infrastrcuture
2019	Rajnagar WL	sahadabedi-water body	20.085065	86.46096	Infrastrcuture
2019	Satkosia WL	Gandhianali-water body	20.58955	84.82046	Infrastrcuture
2019	Satkosia WL	Raigoda panchaphutia C/3-Water body	20.61465	85.05748	Infrastrcuture
2019	Satkosia WL	Raigoda RF C/6-Water body	20.605030	85.073045	Infrastrcuture
2019	Subarnapur	Gadgadbahal Waterbody-waterbody	20.954492	83.782983	Infrastrcuture
2019	Subarnapur	Tube well in forest Guard quarter-tube well	21.028976	83.825528	Infrastrcuture
2019	Subarnapur	Waterbodies Sighijuba RF-40 X 30	21.067528°	83.74744°	Infrastrcuture
2019	Subarnapur	waterbody-Waterbody	20.921359	84.233999	Infrastrcuture
2019	Berhampur	Nunilathi(Palaspur)	19.435931	84.562096	AR
2019	Berhampur	Prayagi	19.654327	85.157904	AR
2019	Bolangir	Mundomahul	20.639092	83.15994	AR
2019	Bonai	Mendhamaruni PRF Block Plantation	21.948733	85.259345	AR
2019	Boudh	Patuapali AR	20.664890	84.087750	AR
2019	Cuttack	Kaliamba PRF	20.61464	85.99122	AR
2019	Cuttack	Mahagiri DPF	21.06009	85.84022	AR
2019	Cuttack	mahavinayak	20.69160	86.10680	AR

2019	Deogarh	Paunsia KF AR Block Plantation	21.19881	85.22905	AR
2019	Dhenkanal	Anantapur RF	21.07811	85.25584	AR
2019	Jharsuguda	Barpali VF	21.899071	83.928025	AR
2019	Kalahandi (S)	Kandulguda Baldhill Plantation	19.54605	83.242341	AR
2019	Karanjia	Pahadpur	22.018305	86.023457	AR
2019	Khariar	Lanji	20.25142	82.646737	AR
2019	Khordha	Biswanath Hill	20.080224	85.741625	AR
2019	Koraput	Entabari	18.406439	82.763203	AR
2019	Koraput	Jhirijhira	18.9879	82.965618	AR
2019	Koraput	Siprujholla	18.3779	82.608843	AR
2019	Nabarangpur	Deopali	19.264141	82.807472	AR
2019	Nabarangpur	Tandaguda 'A' RF	19.334137	82.508888	AR
2019	Nayagarh	Koshadhipi RL	20.041523	84.884799	AR
2019	Puri WL	Tikana	19.861633	86.060914	AR
2019	Rayagada	Bald Hill plantation ,Hatikhaman	19.29897	83.01308	AR
2019	Rayagada	Bald Hill Plantation, Jadaamba	19.298948	83.013101	AR
2019	Rayagada	Chuchukona	19.15666	83.24165	AR
2019	Rayagada	pandrapada	19.46108	83.26055	AR
2019	Rourkela	AR plantation Rangamati RF	22.042208	84.830473	AR
2019	Subarnapur	Chandili Bald hill plantation	20.898869	84.127862	AR
2019	Subarnapur	Sulia RF Block plantation	21.10415	83.963972	AR

2020

List of works inspected and studied					
Year	**Division**	**Name of work**	**Latitude**	**Longitude**	**Type of Work**
2020	Angul	Kalapat PRF	20.81761	84.91107	ANR Without GAP
2020	Bamara WL	Bgimkhunda, Tikra PRF	21.303378	84.447376	ANR Without GAP
2020	Bamara WL	Bhimkund, Tikra PRF	21.296612	84.4639804	ANR Without GAP
2020	Bolangir	Bhoirpada	20.342888	83.328528	ANR Without GAP
2020	Bolangir	Govindpur	20.429738	83.122385	ANR Without GAP
2020	Bolangir	Kanakpur	20.608534	83.415214	ANR Without GAP
2020	Bolangir	Kusmel	20.421628	83.22839	ANR Without GAP
2020	Bolangir	Muribahal	20.430786	82.704204	ANR Without GAP
2020	Kalahandi (S)	ANR without Gap Pindapadar	19.60978	82.94922	ANR Without GAP
2020	Khariar	Podapadar	20.14463	82.471109	ANR Without GAP
2020	Malkangiri	Sudhakhunta	18.003136	81.788503	ANR Without GAP
2020	Malkangiri	Supal	18.189199	81.72782	ANR Without GAP
2020	Nabarangpur	Bandiguda	19.269344	82.332967	ANR Without GAP
2020	Nabarangpur	Garkhabandh	19.823216	82.424096	ANR Without GAP
2020	Nabarangpur	Mundiguda AJY	19.414148	82.392309	ANR Without GAP

2020	Nabarangpur	Murtuma	19.739243	82.164373	ANR Without GAP
2020	Paralakhemundi	Durgam UDPF	18.811356	84.25215	ANR Without GAP
2020	Paralakhemundi	Ustapada	19.475631	84.275208	ANR Without GAP
2020	Rairakhol	Rahan RF C/3	20.960928	84.232802	ANR Without GAP
2020	Subarnapur	Duleswar	20.91924	84.24027	ANR Without GAP
2020	Angul	ANR with gap Kanheijena RF	21.04120	85.15304	ANR With GAP
2020	Angul		21.04276	85.15626	ANR With GAP
2020	Athagarh	Durgapur RF	20.93080	84.94486	ANR With GAP
2020	Athagarh	Chandragiri RF C/3	20.48861	85.22350	ANR With GAP
2020	Athagarh	Ranibania	20.56538	85.68060	ANR With GAP
2020	Athagarh	Tareiganda RF C/2	20.428926	85.330831	ANR With GAP
2020	Cuttack	Tareiganda RF C/3	20.428898	85.330772	ANR With GAP
2020	Cuttack	Mahulkhal RF	21.00719	85.75289	ANR With GAP
2020	Dhenkanal	Nalida PRF	20.69344	86.01957	ANR With GAP
2020	Dhenkanal	Jirdamali RF	20.97039	85.62045	ANR With GAP
2020	Balasore WL	jiridamali RF	20.97165	85.61990	ANR With GAP
2020	Karanjia	Matiali	21.56653	86.70817	ANR With GAP
2020	Karanjia	ANR with gap plantation Digposi RF	22.08747	85.83133	ANR With GAP
2020	Rairangapur	Jadbil RF ANR with Gap	21.609688	86.10084	ANR With GAP
2020	Chilika WL	ANR karanjharandhushara	22.197868	86.280202	ANR With GAP
2020	Khordha	Nandighar	19.487879	85.123958	ANR With GAP
2020	Khordha	Barunei	20.153508	85.643936	ANR With GAP
2020	Nayagarh	Bhusandpur	19.945254	85.448782	ANR With GAP
2020	Nayagarh	Nariamba DPF	20.104289	84.889978	ANR With GAP
2020	Nayagarh		20.104914	84.89751	ANR With GAP
2020	Puri WL		20.105945	84.897544	ANR With GAP
2020	Balliguda	Palva RF C/1	20.20255	84.86272	ANR With GAP
2020	Balliguda		20.203492	84.8634	ANR With GAP
2020	Balliguda	Palva RF C/7	20.160535	84.921407	ANR With GAP
2020	Berhampur	Ramchandi FS	19.87875	86.061059	ANR With GAP
2020	Berhampur	Batabadi	20.024225	83.708415	ANR With GAP
2020	Berhampur	Kadapana	19.91473500	83.61031000	ANR With GAP
2020	Berhampur	Morenj	19.95763	83.91645	ANR With GAP
2020	Boudh	Baniamari	19.245825	84.685245	ANR With GAP
2020	Boudh	Burubandha	19.606523	85.082569	ANR With GAP
2020	Boudh	Kenduguma	19.189719	84.463467	ANR With GAP
2020	Ghumsur (N)	Tamana	19.257028	84.703383	ANR With GAP
2020	Ghumsur (N)	Aragarh RF-ANR-C/5	20.63778	84.52528	ANR With GAP
2020	Ghumsur (S)	Mundeswar R. R Comp no-39	20.57371°	84.50382°	ANR With GAP
2020	Ghumsur (S)	Sulia R. F	20.67349	83.81382°	ANR With GAP
2020	Paralakhemundi	Chandragiri RF C/3	20.14091	84.61565	ANR With GAP

2020	Paralakhemundi	Kamasargada	20.01994	84.84370	ANR With GAP
2020	Phulbani	Balarampur	19.609795	84.440568	ANR With GAP
2020	Phulbani	Sunadei	19.672969	84.852686	ANR With GAP
2020	Phulbani	S.Bhaliasahi	18.992351	84.157542	ANR With GAP
2020	Phulbani	Tarangada	19.067751	84.063967	ANR With GAP
2020	Phulbani	ANR GAP plantation Inside Balandapada south Prf Near Kalampada	20.43942500	83.824133	ANR With GAP
2020	Phulbani	Pakanagaan-ANR	20.42389	84.24417	ANR With GAP
2020	Bolangir	Pakhalakhia ANR with gap	20.29445	84.430834	ANR With GAP
2020	Bolangir	Pukulinigia RF ANR With RET	20.14818167	84.38797500	ANR With GAP
2020	Bolangir	Ranipathara R.F	20.52511°	084.30434°	ANR With GAP
2020	Bolangir	Retudi ANR PLANTATION	20.12362667	84.41918500	ANR With GAP
2020	Kalahandi (N)	Debhuin	20.835938	83.111212	ANR With GAP
2020	Kalahandi (N)	Kantapali	20.94871	83.616483	ANR With GAP
2020	Kalahandi (N)	Muribahal	20.443666	82.70335	ANR With GAP
2020	Kalahandi (S)	Sunadei	20.811326	83.373033	ANR With GAP
2020	Kalahandi (S)	ANR Sukunabhata VSS	19.993667	83.331085	ANR With GAP
2020	Kalahandi (S)	Phoiripani	20.35806	82.76694	ANR With GAP
2020	Khariar	Turchi- ANR with gap	20.248992	83.456091	ANR With GAP
2020	Khariar	ANR Gap Pltn Pindapadar	19.606	82.98694	ANR With GAP
2020	Khariar	ANR Kolkipadar	19.519429	82.661128	ANR With GAP
2020	Subarnapur	ANR Seleijore	19.447025	82.711645	ANR With GAP
2020	Subarnapur	Budharaja	20.370892	82.709243	ANR With GAP
2020	Sunabeda WL	Haldikhol	20.019967	82.683022	ANR With GAP
2020	Sunabeda WL	Tankamal	20.056477	82.457788	ANR With GAP
2020	Koraput	ANR Beheramal	21.09368°	83.60526°	ANR With GAP
2020	Koraput	Gulunda -ANR with Gap	21.019536	83.781015	ANR With GAP
2020	Koraput	Siletpani	20.61181	82.53486	ANR With GAP
2020	Malkangiri	Thelkobeda	20.526788	82.487621	ANR With GAP
2020	Malkangiri	Jayantagiri	18.574458	82.417948	ANR With GAP
2020	Nabarangpur	Kesili	18.754052	83.223545	ANR With GAP
2020	Nabarangpur	Mirialpadu	18.532497	82.99486	ANR With GAP
2020	Nabarangpur	Badenguda	18.128426	81.616355	ANR With GAP
2020	Nabarangpur	Doduguda	18.22247	81.73656	ANR With GAP
2020	Rayagada	Attigam	19.272481	82.281688	ANR With GAP
2020	Rayagada	Nuaguda	19.589477	82.519544	ANR With GAP
2020	Rayagada	Nuaguda Anr with gap plantation	19.590633	82.519514	ANR With GAP
2020	Rayagada	Phutanada	19.942483	82.198037	ANR With GAP
2020	Rayagada	ANR Gap Plantation upper sajja	19.421585	83.354491	ANR With GAP

2020	Rayagada	ANR Gap Plantation , Maligaon	19.87632	83.49915	ANR With GAP
2020	Rayagada	ANR Gap Plantation ,Dalmaeridi	19.72096	83.47578	ANR With GAP
2020	Rayagada	ANR Gap Plantation Khuntabadi	19.69629	83.46929	ANR With GAP
2020	Bonai	ANR Gap Plantation, Bhitarjhola	19.38227	83.34931	ANR With GAP
2020	Bonai	ANR With Gap	19.095326	83.086862	ANR With GAP
2020	Deogarh	ANR With Gap Aribi	19.30908	83.51158	ANR With GAP
2020	Deogarh	Garanda	19.064373	83.706006	ANR With GAP
2020	Keonjhar	ANR East Dandpart	21.66714	84.89492	ANR With GAP
2020	Keonjhar	ANR with gap -Balai RF	21.97087	84.62122	ANR With GAP
2020	Rourkela	ANR Pradhanpat RF near brundabanpur	21.56095	84.80248	ANR With GAP
2020	Rourkela	ANR without Gap Kantapali	21.59647	84.77048	ANR With GAP
2020	Sundargarh	ANR plantation gandhamardan	21.604842	85.496227	ANR With GAP
2020	Sundargarh	Ghatagaon RF ANR with gap	21.38470	85.88103	ANR With GAP
2020	Sundargarh	Rutkupedi RF	22.1238983	84.757393	ANR With GAP
2020	Sundargarh	South Champajharan	22.014887	84.900096	ANR With GAP
2020	Sundargarh	ANR gap plantation	22.218655	84.202976	ANR With GAP
2020	Sundargarh	Lakraghara	22.218103	83.746213	ANR With GAP
2020	Bargarh	Gandhamardhan PRF	20.842503	82.831231	ANR With GAP
2020	Bargarh	Gandhamardhan RF	20.94267	82.941148	ANR With GAP
2020	Bargarh	Palasendunguri RF	21.035727	82.960098	ANR With GAP
2020	Bargarh	Rajpur PRF and Amdarah VF	21.86844	83.90616	ANR With GAP
2020	Rairakhol	Kholgarh RF comp-32	21.093483	84.361369	ANR With GAP
2020	Sambalpur	Tabla A RF NLC	21.511881	84.055916	ANR With GAP
2020	Angul	Balanga RF C/4	20.69929	85.00410	Bamboo AR
2020	Athagarh	Brahmanabasti RF	20.52559	85.74549	Bamboo AR
2020	Athmallik	hatidhara C/10	20.75117	84.67838	Bamboo AR
2020	Paralakhemundi	Satabhauni	18.907167	84.310153	Bamboo AR
2020	Bolangir	Sialbehal	20.516346	83.348202	Bamboo AR
2020	Khariar	Khairpadar	20.101218	82.549948	Bamboo AR
2020	Sunabeda WL	Godhus	20.665612	82.434937	Bamboo AR
2020	Jeypore	Jhadanga	18.850922	82.451621	Bamboo AR
2020	Malkangiri	Jakalgundi	18.007576	81.736541	Bamboo AR
2020	Malkangiri	Jhileriguda	18.475426	81.890538	Bamboo AR
2020	Bargarh	Adhual PRF	21.0445	82.55168	Bamboo AR
2020	Angul	Katada RF C/7	20.88243	84.81141	Bamboo SSO
2020	Bargarh	Bijadhuda	21.644661	83.570093	Bamboo SSO
2020	Kalahandi North	Ramud B/C-D	20.25542	83.55640	Bamboo SSO
2020	Phulbani	RANABA RF	19.87581	84.43137	Bamboo SSO
2020	Samablpur	Jhankarbahali B/C- D Desankhol	21.356317	84.033625	Bamboo SSO

2020	Angul	Forester quarter-Forester quarter	20.74209	84.67712	Infrastructure
2020	Athmallik	F.G Quarter Rainali-boundary wall	20.86185	84.77688	Infrastructure
2020	Athmallik	Hatidhara RF C/38-Wire mesh check dam	20.469606	84.699395	Infrastructure
2020	Athmallik	Hatidhra RF C/28-Causeway	20.64973	84.69949	Infrastructure
2020	Athmallik	kamrei - dimridihi-Forest road	20.98047	84.62696	Infrastructure
2020	Cuttack	Berana to Manjhiamana-Cause way	20.61608	85.87002	Infrastructure
2020	Cuttack	Forester quarter-building	20.998008	85.985061	Infrastructure
2020	Dhenkanal	Kadua to Tapoban-Maintenance of Forest Road	20.67235	85.72846	Infrastructure
2020	Mahanadi WL	Dahikhai Nallah-Culvert	20.5712047	84.7148341	Infrastructure
2020	Mahanadi WL	Rajiv Taila-Causeway	20.588955	84.697721	Infrastructure
2020	Satkosia WL	FRH campus Pampasar-Forester Quarter	20.700004	84.947223	Infrastructure
2020	Satkosia WL	Jocub-Forest Guard Quarter	20.670733	84.962477	Infrastructure
2020	Balasore WL	kanjipani-Causeway	"21.25'14"""	"86.31'50"""	Infrastructure
2020	Baripada	Causeway Ghagara-Causeway	21.549257	86.352766	Infrastructure
2020	Baripada	Kalkam-Cause Way	21.743458	86.217514	Infrastructure
2020	Baripada	Near Nimia Camp-Cause Way	21.726867	86.200297	Infrastructure
2020	Baripada	Nimia Manchan-Causeway	21.727471	86.203971	Infrastructure
2020	Baripada	Rusibasa-Causeway	21.743458	86.217514	Infrastructure
2020	Keonjhar WL	Hadagarh Near Dam-Solar Fencing	"21.16'28"""	"86.17'50"""	Infrastructure
2020	Rairangapur	Forest Road, Kusumghaty to Dahupani-Forest Road	22.37199	86.31005	Infrastructure
2020	STR (North) WL, Jashipur	causeway Saguanbagan-causeway	21.999121	86.273948	Infrastructure
2020	STR (North) WL, Jashipur	Forest road-Forest road	21.50796	86.444340	Infrastructure
2020	Nayagarh	Pokharigochha RF C/3-Cement concrete Check dam	20.237866	84.800122	Infrastructure
2020	Rajnagar WL	Bhandua to satabhaya-petrolling path	20.643613	86.873118	Infrastructure
2020	Rajnagar WL	Bhitarkanika Jetty to Temple-Forest road	20.73171	86.870032	Infrastructure
2020	Rajnagar WL	Dangamala gate to Jetty-Forest road	20.732279	86.871404	Infrastructure
2020	Rajnagar WL	Dobandhi to barunei-Petrolling path	20.525997	86.777991	Infrastructure
2020	Ghumsur (S)	Forest Road from Talasara to Nadiamba-Maintenance of Forest Road	19.835104	84.867482	Infrastructure
2020	Paralakhemundi	LBCD didinguda-LBCD	18.989056	83.838193	Infrastructure

2020	Bolangir	Gaindimal to Kandei-Causeway	20.523303	82.751924	Infrastructure
2020	Bolangir	Naikensita to Lamkani Forest road-Culvert	20.504503	83.329353	Infrastructure
2020	Bolangir	Siker to Narikota Forest Road-Road	20.357064	83.221985	Infrastructure
2020	Bolangir	Tentulikhunti-Boundary wall	20.384485	83.0177	Infrastructure
2020	Subarnapur	Culvert-Culvert	21.0688	83.976509	Infrastructure
2020	Jeypore	Malchama- Gupteswar-Causeway- 2	18.948861	82.24427	Infrastructure
2020	Jeypore	Malchama- Gupteswar-Forest Road	19.003993	82.244635	Infrastructure
2020	Jeypore	Malchama-Gupteswar-Causeway	18.952855	82.244418	Infrastructure
2020	Koraput	Kuambo-Forest road	19.745759	82.575138	Infrastructure
2020	Malkangiri	Nuagaon-LBCD	18.225554	82.066132	Infrastructure
2020	Nabarangpur	Charakabana-Culvert	19.271706	82.53696	Infrastructure
2020	Nabarangpur	Jharigaon-Culvert	19.733033	82.376114	Infrastructure
2020	Nabarangpur	Maidalpur-Gudpanipadar-Causeway	19.476028	82.628348	Infrastructure
2020	Nabarangpur	Podagada-Check dam	19.591322	82.188824	Infrastructure
2020	Rayagada	durgi-causeway	19.373162	83.609462	Infrastructure
2020	Rayagada	durgi-culvert	19.369733	83.609296	Infrastructure
2020	Rayagada	Forest Road, Rodangi to Lingaguda over 6km-Forest Road	19.249127	83.530343	Infrastructure
2020	Rayagada	Rodangi to lingagdua-Forest Road	19.249127	83.530343	Infrastructure
2020	Deogarh	Forest Road Chhuriabahal to Tusula 10.3 k. m-Road	21.57378	84.770192	Infrastructure
2020	Deogarh	Forest road Churiabahal to Tusula 4.7 K. M-Forest Road	21.524385	84.843965	Infrastructure
2020	Deogarh	Panibhandari to punjipathar forest road-Forest road	21.71781	84.662681	Infrastructure
2020	Keonjhar	Causeway-Cause way	21.716701	85.584700	Infrastructure
2020	Keonjhar	Culvert-Culvert	21.716376	85.584796	Infrastructure
2020	Rourkela	Cause way-Cause way	22.162758	85.004306	Infrastructure
2020	Sundargarh	Colvote-Colvote	153000	153000	Infrastructure
2020	Bargarh	Budhipali-culvert	21.598638	83.493579	Infrastructure
2020	Bargarh	Chuhapali-Cause way	21.068588	82.874574	Infrastructure
2020	Bargarh	Chuhapali-Forest road mntn	20.991865	82.824433	Infrastructure
2020	Hirakuda WL	DK to mp-maintenance of Forest road	21.489165	83.771935	Infrastructure
2020	Hirakuda WL	Lakhanpur to Dhodrokusum FR-Forest Road	21.564353	83.642316	Infrastructure
2020	Angul	Badakathia RF-Waterbody	21.006813	84.991778	Infrastructure

2020	Angul	Durga pur Rf-Water body	20.934338	84.981675	Infrastructure
2020	Angul	Jindal-Water whole	20.90314	85.00601	Infrastructure
2020	Angul	Kankurpal RF-Waterbody	21.100581	84.929595	Infrastructure
2020	Athagarh	Baniabandha RF C/8-water body	20.651067	85.805208	Infrastructure
2020	Athmallik	Nuagaon RF C/2-Waterbody	20.822703	84.456765	Infrastructure
2020	Athmallik	Nuagaon RF C/4-Waterbody	20.836254	84.45703	Infrastructure
2020	Bamara WL	Kudamkhol-Tube well	21.451329	84.249398	Infrastructure
2020	Bargarh	Bankigud-maintenance of Waterbody	21.474248	83.375245	Infrastructure
2020	Bargarh	Dava-Tube well	21.099741	83.6877	Infrastructure
2020	Bargarh	Sankhulia-waterbody	21.526134	83.41418	Infrastructure
2020	Baripada	Dakisole-Water Body	"21.51'38"""	"86.37'32"""	Infrastructure
2020	Baripada	Fhulajhari-Water Body	"21.39'54"""	"86.42'19"""	Infrastructure
2020	Baripada	Hatikote-Waterbody Hatikote	"21.50'49"""	"86.56'21"""	Infrastructure
2020	Baripada	Inside Suliapada RF Near Bhandarisal-Water Body	22.8'45"	"86.40'33"""	Infrastructure
2020	Baripada	Sorasole-Water Body	"21.39'54"""	"86.42'19"""	Infrastructure
2020	Baripada	waterbody-Matiachua-waterbody	21.367859	86.298063	Infrastructure
2020	Baripada	waterbody-Waterbody	21.834822	86.835599	Infrastructure
2020	Bolangir	Dhanpur-Tube Well	20.388598	83.646447	Infrastructure
2020	Dhenkanal	Bhuban Section-Tubewell	20.88304	85.83349	Infrastructure
2020	Dhenkanal	Talaganda waterbody-waterbody	20.559982	85.225806	Infrastructure
2020	Ghumsur (N)	Jagannath Prasad RF C/7-Maintenance of Waterbody	20.02998	84.71286	Infrastructure
2020	Ghumsur (N)	Jagannath Prasad RF C/9-Creation of Waterbody	20.002552	84.68839	Infrastructure
2020	Ghumsur (N)	Paichelia C/5-Water Body	20.09636	84.76367	Infrastructure
2020	Ghumsur (S)	Garabaganda-Waterbody	19.5274	84.5389	Infrastructure
2020	Hirakuda WL	Dhadrokusum C/14-Water body	21.512769	83.769667	Infrastructure
2020	Hirakuda WL	Jhagadabehra water body-water body	21.562337	83.64317	Infrastructure
2020	Hirakuda WL	old dhodrokusum-Mntn of water body created previous year	21.512769	83.769667	Infrastructure
2020	Jeypore	Bakulpada-Pond	18.681794	82.478665	Infrastructure
2020	Jharsuguda	Katikela RF-water body	21.792712	84.075864	Infrastructure
2020	Jharsuguda	Kumrapali-waterbody	21.826971	84.062845	Infrastructure
2020	Karanjia	Nada Beat Campus-Tubewell	21.27883	086.18845	Infrastructure
2020	Keonjhar	Tubewell-Tubewell	21.451776	85.904808	Infrastructure

2020	Keonjhar WL	waterbody-Waterbody	21.117675	86.07551	Infrastructure
2020	Khordha	Pangarsingh RF-Waterbody(WHS)	20.274662	85.493621	Infrastructure
2020	Koraput	Chatua-Tube well	18.346544	82.773927	Infrastructure
2020	Koraput	Kakiriguma-Tubewell	18.9253	83.015331	Infrastructure
2020	Malkangiri	Challanguda-Tube Well	18.38365	81.822763	Infrastructure
2020	Nabarangpur	Padeiguda-Water Body	19.392453	82.47577	Infrastructure
2020	Nabarangpur	Ponduguda-Water Body	19.27448	82.27374	Infrastructure
2020	Nabarangpur	Tandaguda 1-Water body-1	19.326499	82.514357	Infrastructure
2020	Nayagarh	Banigochha section office campus-Boring/Tube well	20.398191	84.585551	Infrastructure
2020	Nayagarh	Hadakata beat Haus-tubewell	20.361067	84.98131	Infrastructure
2020	Paralakhemundi	Khandava-staggered trench	18.995811	83.828741	Infrastructure
2020	Phulbani	Mallickpada-Tubewell	20.40466	84.20854	Infrastructure
2020	Phulbani	Mallikpada-Tube well	20.404657	84.208537	Infrastructure
2020	Puri WL	Inside sanctuary-water body	19.814376	85.873567	Infrastructure
2020	Puri WL	Ramchandi FS-Waterbody	19.869711	86.061581	Infrastructure
2020	Rairangapur	Tubewell-Tubewell	22.16791	86.42776	Infrastructure
2020	Rajnagar WL	Kalibhanjadia-Water body	20.777819	86.92686	Infrastructure
2020	Rayagada	Ramanaguda-Tube Well	19.210231	83.661191	Infrastructure
2020	Rourkela	Tubewell-Tubewell	22.242183	84.825775	Infrastructure
2020	Satkosia WL	Katrang RF C/8 juriutha-Water body	20.573967	84.868224	Infrastructure
2020	Satkosia WL	katrang RF C/9 ranibandha-Second year maintenance of fruit bearing	20.567184	84.864268	Infrastructure
2020	Satkosia WL	Raigoda Tersingh-maintenance of water body	20.585519	85.043645	Infrastructure
2020	STR (North) WL, Jashipur	Eco Tourism-Tube Well	21.9510716	86.0719850	Infrastructure
2020	Subarnapur	Dumerkhol-waterbody	"20.52'25"""	"83.37'31"""	Infrastructure
2020	Sundargarh	Tube Well-Tube Well	22.286309	83.877925	Infrastructure
2020	Angul	AR block plan Malibramhani RF	20.91636	85.00643	AR
2020	Athagarh	Phulabadi PRF	20.46749	85.63625	AR
2020	Balasore WL	Begunia	21.563447	86.803493	AR
2020	Balliguda	Maskaguda	20.0770250	83.577000	AR
2020	Bamara WL	AR Block Plantation, At Padelpadar	19.86037	83.75571	AR
2020	Berhampur	Basudevpur	19.345484	84.635326	AR
2020	Berhampur	Narayani	19.685312	85.169275	AR
2020	Berhampur	Tamana	19.243768	84.704941	AR
2020	Bhadrak WL	kalei	21.001598	86.477945	AR

2020	Bolangir	Bakti	20.940749	83.571179	AR
2020	Bolangir	Jamchuan	20.669156	82.763881	AR
2020	Bonai	Babunuagaon AR	21.812301	84.899846	AR
2020	Boudh	Kadampal VF	20.75179°	83.95802°	AR
2020	Cuttack	Anjira	20.81300	86.03029	AR
2020	Cuttack	Panasia	21.01662	85.79435	AR
2020	Dhenkanal	kandhara RF compartment 15	20.55061	85.29777	AR
2020	Ghumsur (N)	Kamasargada	20.02127	84.84387	AR
2020	Ghumsur (S)	Bhaliamala	19.79002	84.92751	AR
2020	Ghumsur (S)	Sankuru	19.941666	84.808334	AR
2020	Jeypore	Janiguda	19.067671	82.508204	AR
2020	Jeypore	Pindapadar	18.99416	82.69444	AR
2020	Kalahandi (N)	Block Plantation-Kashrupada	20.27766	83.33297	AR
2020	Kalahandi (S)	Mardiguda Bald hill plantation	19.56733	83.043342	AR
2020	Kalahandi (S)	Teliguda AR Block plantation	19.58876	82.604817	AR
2020	Keonjhar	AR plantation upar birkala	21.56238	85.33811	AR
2020	Keonjhar	Bald hill padampur RF AR	21.72596	85.78828	AR
2020	Keonjhar	Tall tree plantation Sidhamatha RF	21.985436	85.343912	AR
2020	Khariar	Barakothi	20.027227	82.677116	AR
2020	Khariar	Jogibahal	20.120273	82.710366	AR
2020	Khariar	Malpada	20.147607	82.516681	AR
2020	Khordha	Solori	19.830442	85.228553	AR
2020	Koraput	Badapeta	18.741615	82.567582	AR
2020	Koraput	Dumuriguda	18.768951	82.701063	AR
2020	Koraput	Tikiraguda	18.912882	82.901279	AR
2020	Malkangiri	Badpadar AR	18.085769	82.172434	AR
2020	Malkangiri	Singalbencha	18.52867	82.171476	AR
2020	Nabarangpur	Nuaguda	19.600459	82.518509	AR
2020	Nabarangpur	Salmandri	19.43705	82.472638	AR
2020	Nayagarh	Bahadajhola RF	20.041505	84.884901	AR
2020	Nayagarh	kaliamba RL	20.041505	84.884901	AR
2020	Nayagarh	Mahulaberena	20.336162	85.225803	AR
2020	Paralakhemundi	Baladi	19.044998	84.270563	AR
2020	Paralakhemundi	Palapur	19.161279	84.005116	AR
2020	Phulbani	BALD HILL PLANTATION CHKAAPADA RF COMPARTMENT NO 18	20.25292	84.48906	AR
2020	Puri WL	Balighai PRF	19.828772	85.944246	AR
2020	Rayagada	Block plantation Bandhamandi	19.37367	83.26131	AR

2020	Rayagada	Fruit and Fodder Plantation- milkaponga	19.314027	83.921704	AR
2020	Rourkela	AR Plantation At Gudgudjore	22.228868	84.982165	AR
2020	Rourkela	Block Plantation Banglowpahad RF	22.440032	84.959156	AR
2020	Rourkela	Fruti and fodder Gamlei	21.831949	84.92292	AR
2020	Rourkela	Relaposh	22.09226	84.46431	AR
2020	Subarnapur	Anandpur RF Bald hill plantation	20.97046	83.696325	AR
2020	Subarnapur	Bhalusukha	20.659769	83.666403	AR
2020	Sundargarh	Kushapada Fruit and Fodder plantation	22.607756	84.092372	AR

9. List of stakeholders consulted

Sl. No.	Date of consultation	Type of consultation	Name of stakeholder	Designation	Circle	Division
1	2022-05-17T11:34:47	FGD	Saherapali	VSS	Sambalpur	Bargarh
2	2022-05-26T16:44:52	FGD	Baneikala	VSS	Baripada	Rairangapur
3	2022-08-05T16:26:10	FGD	Jamjharia VSS	VSS	Rourkela	Sundargarh
4	2022-06-11T14:28:25	FGD	Nalakhan-Ganthiasahi EDC	VSS	BBSR	Puri WL
5	2022-08-03T18:09:35	FGD	Chilipadar	VSS	Koraput	Malkangiri
6	2022-06-29T19:33:23	FGD	Barghat	VSS	Sambalpur	Bamara WL
7	2022-06-09T12:14:50	FGD	kontola VSS	VSS	Rourkela	Deogarh
8	2022-06-19T10:32:55	FGD	Mundatola vss	VSS	Rourkela	Rourkela
9	2022-08-10T12:49:16	FGD	Unlajodi VSS	VSS	Koraput	Rayagada
10	2022-05-11T17:32:30	FGD	EDC Dhodrokusum	VSS	Sambalpur	Hirakuda WL
11	2022-08-04T17:38:42	FGD	Bandhaguda	VSS	Koraput	Malkangiri

12	2022-05-02T09:51:47	FGD	Sorosapali VSS	VSS	Baripada	Balasore WL
13	2022-05-18T09:14:22	FGD	Balidhol	VSS	Baripada	Karanjia
14	2022-08-06T09:32:09	FGD	Jadaput	VSS	Koraput	Jeypore
15	2022-06-03T17:32:40	FGD	Budhabuin VSS	VSS	Rourkela	Bonai
16	2022-08-06T09:27:14	FGD	Gumaguda	VSS	Koraput	Koraput
17	2022-05-08T18:44:20	FGD	Pitaguda	VSS	Koraput	Koraput
18	2022-05-29T11:20:18	FGD	Rajulkonda	VSS	Koraput	Malkangiri
19	2022-08-06T13:01:50	FGD	Phuligodi VSS	VSS	Rourkela	Sundargarh
20	2022-05-23T14:52:06	FGD	Ghayalmunda VSS	VSS	Baripada	Keonjhar WL
21	2022-06-29T19:37:15	FGD	Rengalbahal	VSS	Sambalpur	Bamara WL
22	2022-08-05T15:57:37	FGD	Bhagattola VSS	VSS	Rourkela	Rourkela
23	2022-08-06T11:27:13	FGD	Koshala Koshanali VSS	VSS	Angul	Angul
24	2022-05-05T10:31:20	FGD	Maa Barukhanda VSS	VSS	Baripada	Baripada
25	2022-05-21T12:44:56	FGD	Siraguda	VSS	Koraput	Nabarangpur
26	2022-05-18T16:37:53	FGD	Kenduguda	VSS	Koraput	Nabarangpur
27	2022-04-17T18:45:42	FGD	Kutugaon VSS	VSS	Angul	Athmallik
28	2022-08-04T17:50:04	FGD	Kamalapadar	VSS	Koraput	Malkangiri
29	2022-08-10T13:04:09	FGD	Patapadara VSS	VSS	Koraput	Rayagada

30	2022-06-22T19:45:20	FGD	khemla VSS	VSS	Rourkela	Deogarh
31	2022-08-06T11:16:48	FGD	Chunaragadi VSS	VSS	Angul	Dhenkanal
32	2022-05-19T17:18:19	FGD	Tablei	VSS	Sambalpur	Sambalpur
33	2022-08-10T10:53:09	FGD	Heselgada VSS	VSS	Baripada	Rairangapur
34	2022-08-10T11:33:46	FGD	Dhanpur	VSS	Koraput	Nabarangpur
35	2022-06-02T10:17:11	FGD	Solguda Goudapada VSS	VSS	Rourkela	Bonai
36	2022-08-10T11:25:30	FGD	Banaguda	VSS	Koraput	Nabarangpur
37	2022-08-05T16:59:02	FGD	Jamukhanjari VSS	VSS	Rourkela	Keonjhar
38	2022-05-21T18:50:18	FGD	Jharanpali	VSS	Sambalpur	Sambalpur
39	2022-08-05T11:54:43	FGD	Mahulmunda VSS	VSS	BBSR	Nayagarh
40	2022-08-10T13:08:37	FGD	Gailkons VSS	VSS	Koraput	Rayagada
41	2022-08-08T18:32:56	FGD	kandulguda VSS	VSS	Bhawanipatna	Kalahandi (S)
42	2022-06-08T22:42:23	FGD	Nunbhet	VSS	Sambalpur	Bamara WL
43	2022-08-02T17:18:41	FGD	Kanimusa	VSS	Koraput	Koraput
44	2022-08-06T11:22:27	FGD	Kathagoda Juangsahi	VSS	Angul	Dhenkanal
45	2022-06-08T21:24:03	FGD	Jagatipali	VSS	Sambalpur	Bargarh
46	2022-04-30T10:38:06	FGD	Gobindpura VSS	VSS	Baripada	Balasore WL
47	2022-06-06T08:52:34	FGD	Bankula EDC	VSS	BBSR	Rajnagar WL

48	2022-08-05T16:50:51	FGD	Badakeadon	VSS	Baripada	Rairangapur
49	2022-08-06T13:39:32	FGD	Sanda VSS	VSS	Rourkela	Sundargarh
50	2022-06-01T12:58:27	FGD	Bhulikucha VSS	VSS	Rourkela	Bonai
51	2022-06-21T11:42:34	FGD	Angarpada VSS	VSS	Rourkela	Rourkela
52	2022-05-07T11:24:34	FGD	Uperbeda VSS	VSS	Baripada	Baripada
53	2022-08-04T17:57:01	FGD	Muriapalli	VSS	Koraput	Malkangiri
54	2022-05-27T20:10:12	FGD	Haldi	VSS	Koraput	Nabarangpur
55	2022-08-06T11:24:54	FGD	Laxmidharpur	VSS	Angul	Angul
56	2022-06-08T22:30:48	FGD	krishbahali	VSS	Sambalpur	Jharsuguda
57	2022-08-05T16:14:49	FGD	kusummunda VSS	VSS	Rourkela	Sundargarh
58	2022-08-06T11:14:11	FGD	Rankia VSS	VSS	Angul	Dhenkanal
59	2022-08-06T11:19:53	FGD	Dangarasahi VSS	VSS	Angul	Dhenkanal
60	2022-08-06T11:10:38	FGD	Labangi	VSS	Angul	Angul
61	2022-06-29T10:14:23	FGD	Bhaludungri	VSS	Sambalpur	Bargarh
62	2022-05-26T10:27:02	FGD	Bhejiguda	VSS	Koraput	Nabarangpur
63	2022-06-29T19:26:10	FGD	Bhimjor	VSS	Sambalpur	Jharsuguda
64	2022-08-10T11:12:23	FGD	Kadomali	VSS	Koraput	Nabarangpur
65	2022-08-06T12:38:48	FGD	kaptipada VSS	VSS	Baripada	Baripada

66	2022-05-15T11:06:08	FGD	Dhaneswar	VSS	Sambalpur	Bargarh
67	2022-08-10T10:57:07	FGD	Kalatama VSS	VSS	Baripada	Rairangapur
68	2022-06-05T12:11:04	FGD	Raikela VSS	VSS	Rourkela	Bonai
69	2022-08-05T12:38:07	FGD	Maa Basundhara VSS	VSS	Sambalpur	Sambalpur
70	2022-05-04T12:23:38	FGD	Ramchandrapur VSS	VSS	Baripada	Baripada
71	2022-08-05T12:14:02	FGD	Patalaswara VSS	VSS	BBSR	Nayagarh
72	2022-08-03T18:17:14	FGD	Bandhaguda	VSS	Koraput	Malkangiri
73	2022-08-05T12:01:07	FGD	Thungidera VSS	VSS	Sambalpur	Jharsuguda
74	2022-05-21T15:14:35	FGD	Kathakata EDC	VSS	Baripada	Keonjhar WL
75	2022-08-05T12:18:58	FGD	Chhamunda VSS	VSS	BBSR	Nayagarh
76	2022-08-03T18:02:07	FGD	Singalbencha	VSS	Koraput	Malkangiri
77	2022-05-17T11:03:04	FGD	Kusansahi VSS	VSS	Baripada	Karanjia
78	2022-05-08T11:17:45	FGD	Mudrajodi VSS	VSS	Baripada	Baripada
79	2022-06-09T08:50:44	Interview	Jayshree Murmu, Ranger	Range Officer	Rourkela	Deogarh
80	2022-05-17T09:18:28	Interview	Gajendra Ku. Andaja, F.R.O	Range Officer	Sambalpur	Bargarh
81	2022-05-16T00:11:59	Interview	Tarakant Udgata, RO	Range Officer	Berhampur	Ghumsur (N)
82	2022-04-24T10:53:26	Interview	Atmaram Mohananda, Ranger	Range Officer	Bhawanipatna	Kalahandi (S)
83	2022-06-02T11:53:36	Interview	Dillip kumar khandwal	Range Officer	Sambalpur	Bamara WL

84	2022-05-31T16:59:43	Interview	Laxmi Narayan Nayak, Dy. Ranger	Range Officer	Sambalpur	Bamara WL
85	2022-05-19T08:31:21	Interview	Prabir Kumar Murmu, Ranger	Range Officer	Baripada	Karanjia
86	2022-05-15T22:24:40	Interview	Pramod Panda	Range Officer	Berhampur	Ghumsur (S)
87	2022-04-18T10:27:05	Interview	Santosh Bhoi, RO	Range Officer	Angul	Athmallik
88	2022-04-28T16:38:10	Interview	Purna chandra Parida, FRO	Range Officer	Baripada	Balasore WL
89	2022-04-22T12:30:29	Interview	Suresh Kumar Sarangi, Range Officer	Range Officer	Angul	Athagarh
90	2022-05-14T09:29:17	Interview	Rajesh kumar Nayak, FRO	Range Officer	Baripada	Baripada
91	2022-05-12T20:29:00	Interview	Shiba Sankar Samal, I/C R.O.	Range Officer	Baripada	Baripada
92	2022-06-10T10:36:26	Interview	Chandrashekar GarNayak	Range Officer	Rourkela	Deogarh
93	2022-05-31T09:20:57	Interview	Rajashri Tirkey, F.R.O	Range Officer	Sambalpur	Bamara WL
94	2022-04-22T09:04:19	Interview	Pravat Kumar Rout, Dy. Ranger	Range Officer	Angul	Athagarh
95	2022-05-11T16:35:58	Interview	Jyoti Ranjan Senapati, Ranger Pithabhata South	Range Officer	Baripada	Baripada
96	2022-06-10T19:47:08	Interview	Pratap Ch. Mohanty, Range Officer	Range Officer	BBSR	Khordha
97	2022-05-15T19:35:39	Interview	Udit kumar Pradhan, Ranger	Range Officer	Berhampur	Balliguda
98	2022-06-04T16:57:39	Interview	Ram chandra Bhatra, Forester	Range Officer	Koraput	Jeypore
99	2022-05-12T08:01:17	Interview	Kulamani Puhan, DY. Range officer	Range Officer	Sambalpur	Hirakuda WL
100	2022-06-10T07:55:02	Interview	Debadatta Nanda, Ranger Deogarh	Range Officer	Rourkela	Deogarh
101	2022-05-15T22:45:33	Interview	Bimbadhar Sahu,FRO	Range Officer	Berhampur	Ghumsur (N)

102	2022-06-02T17:58:30	Interview	Prasan kumar Shety, Ranger	Range Officer	Rourkela	Bonai
103	2022-06-01T11:01:45	Interview	Mrutyunjaya Sethy,Forester	Range Officer	Koraput	Malkangiri
104	2022-05-26T17:25:24	Interview	Dharitri Murmu, FRO	Range Officer	Baripada	Rairangapur
105	2022-04-27T10:39:43	Interview	Sansar Bargia, FRO	Range Officer	Angul	Mahanadi WL
106	2022-06-11T18:17:45	Interview	Debasis Bhoi, Range Officer	Range Officer	BBSR	Khordha
107	2022-06-20T11:06:27	Interview	Archana Gomango, F.R.O	Range Officer	BBSR	Nayagarh
108	2022-06-17T15:31:03	Interview	Amrit ku. Sahu, F.R.O	Range Officer	BBSR	Nayagarh
109	2022-05-16T14:07:10	Interview	Tadit Kumar Swain, Range Officer	Range Officer	Koraput	Nabarangpur
110	2022-05-19T14:43:22	Interview	Surendra nath Hembram	Range Officer	Baripada	Keonjhar WL
111	2022-06-12T16:28:55	Interview	Narayan Alatia, Forest Guard	Forest Guard	BBSR	Chilika WL
112	2022-05-13T13:46:53	Interview	Biranchi Narayan Mohapatra, FRO	Range Officer	Baripada	Baripada
113	2022-04-24T11:51:57	Interview	Bibhuranjan Ray, FRO	Range Officer	Angul	Athagarh
114	2022-06-02T18:10:18	Interview	Robin kisku, F.R.O	Range Officer	Sambalpur	Bamara WL
115	2022-05-20T18:30:36	Interview	Mukunda Desari, Range Officer	Range Officer	Koraput	Nabarangpur
116	2022-05-27T10:30:23	Interview	Antaryami mohakud	Range Officer	Baripada	Rairangapur
117	2022-06-20T17:33:49	Interview	Sarat Ch. Satpathy, F.R.O	Range Officer	BBSR	Nayagarh
118	2022-05-21T09:27:21	Interview	Sumit Mohanty, Forest Range Officer	Range Officer	Baripada	Keonjhar WL
119	2022-05-15T13:24:37	Interview	Rajendra ku. Bhoi, F.R.O	Range Officer	Sambalpur	Bargarh
120	2022-05-17T11:47:57	Interview	Prithwiraj Behera, DY. RO	Range Officer	Sambalpur	Bargarh
121	2022-05-17T17:13:27	Interview	Subodh ku. Sahu, F.R.O	Range Officer	Sambalpur	Bargarh

122	2022-05-07T10:47:56	Interview	Badal kumar Mohanty, Dy Ranger	Range Officer	Koraput	Koraput
123	2022-05-19T09:51:21	Interview	Seturanjani Gomango, Range Officer, Dabugam Range	Range Officer	Koraput	Nabarangpur
124	2022-05-04T11:20:10	Interview	Prasanta kumar Behera	Range Officer	Baripada	Baripada
125	2022-05-15T22:34:59	Interview	Kumar Behera, RO	Range Officer	Berhampur	Ghumsur (N)
126	2022-05-26T18:36:10	Interview	pramod kumar Sethy, FRO	Range Officer	Baripada	Rairangapur
127	2022-05-08T12:28:57	Interview	Gopinath Pangi, Forester	Range Officer	Koraput	Koraput
128	2022-06-14T16:49:58	Interview	Prasanna Parida, I/C Cuttack, Phulnakhra	Range Officer	BBSR	City Forest
129	2022-04-22T11:43:08	Interview	Bishnu chandra patri, Forester jaipatna	Forester	Bhawanipatna	Kalahandi (S)
130	2022-05-18T12:48:32	Interview	Satish kumar , Ranger.	Range Officer	Berhampur	Berhampur
131	2022-05-25T08:34:03	Interview	Manmath Kumar Khuntia,FRO	Range Officer	Baripada	STR (North) WL, Jashipur
132	2022-04-23T17:01:39	Interview	sudarsan dehury, FRO Incharge , Th Rampur South	Range Officer	Bhawanipatna	Kalahandi (S)
133	2022-05-25T10:41:17	Interview	Sailendra Das, FRO	Range Officer	Baripada	STR (North) WL, Jashipur
134	2022-06-06T08:43:30	Interview	Manas ku. Das, F.R.O	Range Officer	BBSR	Rairangapur
135	2022-06-09T10:45:50	Interview	Duryodhan Jerai, Ranger	Range Officer	Rourkela	Deogarh
136	2022-05-22T17:26:22	Interview	Suman Majhi, Ranger	Range Officer	Baripada	Keonjhar WL
137	2022-05-15T10:19:50	Interview	Hari Shankar Naik, F.R.O	Range Officer	Sambalpur	Bargarh
138	2022-04-27T09:03:36	Interview	Rukmana Bariha, FRO	Range Officer	Angul	Mahanadi WL
139	2022-05-12T15:51:18	Interview	Sishir kumar Behera	Range Officer	Baripada	Baripada

140	2022-06-02T12:56:01	Interview	Akshya Chhatriya, Ranger Sole & Tamra	Range Officer	Rourkela	Bonai
141	2022-05-10T10:51:22	Interview	Kumar Khora, Range Officer	Range Officer	Koraput	Koraput
142	2022-06-05T11:04:06	Interview	N C Pradhan, Deputy Ranger	Range Officer	Rourkela	Bonai
143	2022-05-15T22:28:42	Interview	Sachin Kumar Pradhan	Range Officer	Berhampur	Ghumsur (S)
144	2022-05-12T12:55:01	Interview	Gautam Balua, Forester (in charge).	Range Officer	Sambalpur	Hirakuda WL
145	2022-05-15T08:03:35	Interview	Raj krishna Bhoi, F.R.O	Range Officer	Sambalpur	Bargarh
146	2022-05-28T11:07:39	Interview	Subash Ch. Mahapatra, F.R.O	Range Officer	Sambalpur	Jharsuguda
147	2022-05-17T15:45:57	Interview	Kameswar Achary, Range Officer	Range Officer	Koraput	Nabarangpur
148	2022-05-26T13:10:39	Interview	Sharat ku. Panda, RO Kolabira	Range Officer	Sambalpur	Jharsuguda
149	2022-05-18T21:14:34	Interview	Suryakanta Behera, Ranger	Range Officer	Berhampur	Balliguda
150	2022-04-26T14:26:35	Interview	Dileswar Pradhan, FRO	Range Officer	Angul	Mahanadi WL
151	2022-05-17T09:51:42	Interview	pitamber sethi , RO Satkosia	Range Officer	Baripada	Karanjia
152	2022-05-19T18:38:10	Interview	Alok ku. Sadangi, F.R.O	Range Officer	Sambalpur	Sambalpur
153	2022-05-18T20:54:40	Interview	Shibaram Nayak, Dy. RO	Range Officer	Berhampur	Ghumsur (N)
154	2022-04-18T13:26:40	Interview	Chaitanya Behera, Range Officer	Range Officer	Angul	Athmallik
155	2022-05-14T18:12:15	Interview	Madan Mohan Mahanta, Ranger	Range Officer	Baripada	Baripada
156	2022-06-12T15:22:27	Interview	Tikeswar Mahanta Ranger	Range Officer	Rourkela	Keonjhar
157	2022-05-19T20:43:44	Interview	Lalit kumar Naik, FRO	Range Officer	Baripada	Baripada

158	2022-05-07T17:17:50	Interview	rasmita panigrahi	Range Officer	Koraput	Koraput
159	2022-04-22T14:39:33	Interview	pradip kumar Bhoi , Range officer	Range Officer	Bhawanipatna	Kalahandi (S)
160	2022-05-12T19:50:37	Interview	Dilip ku. Dhal, F.R.O	Range Officer	Sambalpur	Hirakuda WL
161	2022-06-19T17:15:24	Interview	Nutan kumar Hembram	Range Officer	Rourkela	Rourkela
162	2022-06-12T13:10:58	Interview	Kusha Ch. Singh	Range Officer	BBSR	Bhadrak WL
163	2022-05-21T09:34:16	Interview	Harihar Patra, F.R.O	Range Officer	Sambalpur	Sambalpur
164	2022-05-15T18:55:41	Interview	Lalit kumar Nayak, Ranger	Range Officer	Berhampur	Balliguda
165	2022-05-27T11:29:55	Interview	Ramesh Ch. Nath, Dy. Ranger	Range Officer	Sambalpur	Jharsuguda
166	2022-06-13T09:00:32	Interview	Sanjib Kumar Rout, Ranger Champua and Barbil	Range Officer	Rourkela	Keonjhar
167	2022-06-22T16:03:42	Interview	Sudarshan Dehury, Ranger	Range Officer	Bhawanipatna	Kalahandi (S)
168	2022-05-22T10:43:55	Interview	Tanuja Kartik, Range Officer	Range Officer	Koraput	Nabarangpur
169	2022-05-29T17:52:04	Interview	Ramakanta Majhi, FRO	Range Officer	Baripada	Rairangapur
170	2022-05-15T20:06:54	Interview	Arun kumar Sahoo	Range Officer	Berhampur	Balliguda
171	2022-05-02T15:09:44	Interview	Laxmikant Behera, Range officer	Range Officer	Baripada	Baripada
172	2022-05-28T12:15:16	Interview	Fadindra ku. Meher, Dy. Ranger	Range Officer	Sambalpur	Jharsuguda
173	2022-05-16T00:03:52	Interview	Umakant Das, RO	Range Officer	Berhampur	Ghumsur (N)
174	2022-05-22T10:52:37	Interview	Pabitra Mohan Majhi, F.R.O	Range Officer	Sambalpur	Sambalpur
175	2022-06-18T16:49:52	Interview	Nikhilesh Mallick, DY. RO	Range Officer	BBSR	Nayagarh

176	2022-05-17T08:24:52	Interview	kishor kumar Panigrahi	Range Officer	Baripada	Karanjia
177	2022-06-21T12:36:52	Interview	Ajay Xess, Ranger	Range Officer	Rourkela	Rourkela
178	2022-06-06T18:03:51	Interview	Sandeep Kumar Panigrahi, Range Officer	Range Officer	Koraput	Jeypore
179	2022-05-09T12:35:33	Interview	Rasmi Prasad Biswal	Range Officer	Koraput	Koraput
180	2022-05-05T09:56:53	Interview	Arun kumar Behera, Range officer	Range Officer	Baripada	Baripada
181	2022-04-24T12:02:47	Interview	Padmanav Kumbhar, I/c Range Officer, Bhawanipatna.	Range Officer	Bhawanipatna	Kalahandi (N)
182	2022-06-08T08:05:44	Interview	Ranjan ku. Mishra, DY.RO	Range Officer	BBSR	Rajnagar WL
183	2022-04-24T12:33:45	Interview	Prafulla Kumar Dehury, FRO	Range Officer	Angul	Athagarh
184	2022-06-20T16:15:23	Interview	Sushant ku. Swain, F.R.O	Range Officer	BBSR	Nayagarh
185	2022-06-11T08:25:59	Interview	Manas kumar Murmu, Ranger	Range Officer	Rourkela	Keonjhar
186	2022-04-13T10:59:44	Interview	Satyabrata Pradhan, RO	Range Officer	Angul	Angul
187	2022-05-02T09:07:57	Interview	Babita Soren, Range Officer Soro	Range Officer	Baripada	Balasore WL
188	2022-06-20T09:42:21	Interview	Manikeshwari Hansda, Ranger	Range Officer	Rourkela	Rourkela
189	2022-06-12T16:00:01	Interview	Ranjit Mohanty, F.R.O	Range Officer	BBSR	Bhadrak WL
190	2022-06-05T17:10:23	Interview	kajal kumari Nayak, Ranger	Range Officer	Rourkela	Bonai
191	4/30/2022 8:50:58	Interview	Abhimanyu Sethi	Snake rescuer		Baleswar WL
192	5/7/2022 12:59:05	Interview	Sambhunath Kar	Forest Protection Squad		Baripada
193	5/11/2022 13:52:44	Interview	Rajat Kumar Nayak	Wildlife Tracker		Similipal South WL
194	5/14/2022 17:12:59	Interview	Dilip ku. Badhei,sudhira pradhan	Wildlife Tracker		Bargarh

195	5/17/2022 9:31:24	Interview	kshamashine pradhan, Radheshyam bhue	Critically Endangered squad		Bargarh
196	5/17/2022 15:06:07	Interview	Harish Chandra Dehury	Fire Protaction Squad		Karanjia
197	5/17/2022 15:21:59	Interview	Bidyadhar Pradhan	Forest Protection Squad		Karanjia
198	5/17/2022 15:29:47	Interview	Raising Ho	Wildlife Tracker		Karanjia
199	5/17/2022 17:46:50	Interview	Manobhanjan Sahu	Para forest squad		Bargarh
200	5/22/2022 10:34:24	Interview	Manoranjan Mahananda	Critical Squad		Sambalpur
201	5/26/2022 16:02:39	Interview	Udayanath Hansdah	Wildlife Tracker		Rairangpur
202	5/27/2022 19:21:48	Interview	Ganga Purti	Wildlife Tracker		Sambalpur
203	6/2/2022 18:33:46	Interview	Bipin ku. Dila	Anti-depredation Squad		Bamra WL
204	6/17/2022 16:05:26	Interview	Ashok Kumar Sahu	Forest protection squad		Nayagarh
205	6/18/2022 14:12:00	Interview	Padmnabha Panigrahi	Forest protection squad		Nayagarh
206	8/6/2022 10:22:29	Interview	Sanka ho	Anti-depredation Squad		Sundargarh
207	8/6/2022 10:24:18	Interview	Khageswar Mahanta	Wildlife Tracker		Rourkela
208	8/6/2022 10:25:48	Interview	Alok ku. Pradhan	Anti Poaching squad		Bamra WL
209	8/6/2022 10:28:14	Interview	Ranjan ku. Kalo	Anti Poaching Squad		Bamra WL
210	8/6/2022 10:39:50	Interview	Jagamohan Das	Anti Poaching Squad		Rajnagar WL
211	8/6/2022 12:15:59	Interview	Manoranjan Deoram	Wildlife Tracker		Rairangpur
212	8/6/2022 12:20:14	Interview	Ranju Bidika	Anti-depredation Squad		Rayagada
213	8/6/2022 12:22:51	Interview	Niranjan Patra	Anti-depredation Squad		Rayagada
214	3/25/2022 20:01:53	Interview	Santosh Nayak	Wildlife Tracker		Ghumsur North

215	3/26/2022 16:12:04	Interview	Ramesh Sabar	Forest Protection Squad		Paralakhemundi
216	3/26/2022 16:13:55	Interview	Krishna Sabar	Forest Protection Squad		Paralakhemundi
217	4/16/2022 13:03:58	Interview	Saroj Nag	Fire Protection Squad		Kalahandi North
218	4/16/2022 18:06:37	Interview	Susanta Bag	Fire Protection Squad		North kalahandi
219	4/28/2022 16:55:34	Interview	Karitick chandra parida	Forest Protection Squad		Baleswar
220	4/28/2022 17:00:38	Interview	Samresh Das	Forest Protection Squad		Baleswar wldlife
221	4/28/2022 18:24:23	Interview	JAGANNATH PATRA	Fire Protection Squad		Baleswar
222	4/29/2022 17:47:14	Interview	Satyabrata mandal	Forest Protection Squad		Baleswar WL
223	4/30/2022 9:19:19	Interview	Kanhu Singh	Fire Protection Squad		Baleswar WL
224	4/30/2022 9:28:41	Interview	Ratikanta Hansdah	Forest Protection Squad		Balesore Wildlife
225	4/30/2022 22:44:14	Interview	Sundar Singh Naik	Fire Protection Squad		Nuapada
226	5/2/2022 9:45:43	Interview	Devendra Rout	Forest Protection Squad		Baleswar WL
227	5/2/2022 10:10:09	Interview	Basanta Sethi	Fire Protection Squad		Baleswar WL
228	5/4/2022 16:29:51	Interview	Utkal Kumar dehury	Fire Protection Squad		Baripada
229	5/11/2022 13:42:08	Interview	Subarna Singh	Fire Protection Squad		Simlipal South (WL)
230	5/17/2022 16:11:45	Interview	Birendra Patel, Nirad pradhan	Fire Protection Squad		Bargarh
231	5/18/2022 10:46:38	Interview	Kirti dhani Phalsa, Manoranjan sahu	Forest Protection Squad		Bargarh
232	5/18/2022 10:54:00	Interview	Sachikanta Chhatar	Fire Protection Squad		Bargarh

233	5/18/2022 17:12:58	Interview	Naresh chandra Tanti	Forest Protection Squad		Karanjia
234	5/18/2022 19:54:54	Interview	Sunil kumar Pradhan	Fire Protection Squad		Baliguda
235	5/18/2022 19:56:39	Interview	BANMALI GOUDA	Forest Protection Squad		Baliguda
236	5/19/2022 12:49:02	Interview	Prasanta Bag	Fire Protection Squad		Sambalpur
237	5/19/2022 16:26:49	Interview	SUDARSHAN mohapatra	Fire Protection Squad		Keunjhar WL
238	5/25/2022 12:53:39	Interview	Santosh ku. Kisan	Fire Protection Squad		Jharsuguda
239	5/26/2022 13:02:34	Interview	Bhagan Naik	Fire Protection Squad		Rairangpur
240	5/26/2022 13:41:09	Interview	Vijay Chardia, Nishikanta bhoi	Forest Protection Squad		Jharsuguda
241	5/27/2022 10:47:40	Interview	Munaram Naik	Fire Protection Squad		Rairangpur
242	5/27/2022 14:08:10	Interview	Ramchandra Soran	Fire Protection Squad		Rairangpur
243	5/28/2022 12:31:06	Interview	Jugesh Dehery	Forest Protection Squad		Jharsuguda
244	5/28/2022 14:52:07	Interview	Lakshiram Munda	Fire Protection Squad		Rairangpur
245	6/2/2022 18:54:06	Interview	Biswanbar Mahakud	Fire Protection Squad		Bamra WL
246	6/14/2022 11:21:05	Interview	Prakash Kumar Nayak, Saroj Kumar Lenka	Forest Protection Squad, Fire Protection Squad		CITY FOREST
247	6/14/2022 11:22:44	Interview	Utkal Keshari Behera	Forest Protection Squad		Bhubaneswar City
248	6/16/2022 11:28:33	Interview	BHUSAN MUNDA	Forest Protection Squad		Rairangpur
249	6/16/2022 11:32:29	Interview	Abhinsundar sahu	Forest Protection Squad		Sundargarh

250	6/16/2022 16:40:25	Interview	Tikeswar Sa	Forest Protection Squad		Sundargarh
251	6/18/2022 12:56:23	Interview	Arun Kaudi	Forest Protection Squad		Sundargarh
252	8/4/2022 10:24:23	Interview	Pitambar Dansena	Forest Protection Squad		Bargarh
253	8/4/2022 22:15:29	Interview	Jagmohan Sahoo	Forest Protection Squad		Bargarh
254	8/6/2022 9:02:18	Interview	Ghanashyam Bhoi	Fire Protection Squad		Bargarh
255	8/6/2022 9:06:02	Interview	Thakit Naik	Fire Protection Squad		Jharsuguda
256	8/6/2022 9:13:22	Interview	Tularam Baria	Fire Protection Squad		Bamra WL
257	8/6/2022 9:17:30	Interview	Sanjay Patel	Forest Protection Squad		Bamra WL
258	8/6/2022 10:28:25	Interview	Manoranjan Deoram	Fire Protection Squad		Keunjhar
259	8/6/2022 10:30:22	Interview	BAHANAI PINGUA	Forest Protection Squad		Deogarh
260	8/6/2022 10:31:13	Interview	Manomohan Singh	Forest Protection Squad		Bamra WL
261	8/6/2022 10:35:18	Interview	Kishor Chandra Meher	Forest Protection Squad		Bamra WL
262	8/6/2022 10:42:26	Interview	Chandramani Sadangi	Forest Protection Squad		Nayagarh
263	8/6/2022 10:44:43	Interview	Jitendra ku. Dakua	Forest Protection Squad		Nayagarh
264	8/6/2022 10:47:42	Interview	Pradeep ku. Jena	Forest Protection Squad, Fire Protection Squad		Pradeep ku. Jena
265	8/6/2022 10:50:34	Interview	Shraban Naik	Fire Protection Squad		Angul
266	8/6/2022 10:52:07	Interview	Bipin Behera	Forest Protection Squad		Angul

267	8/6/2022 10:56:44	Interview	Niranjan dehury	Forest Protection Squad		Dhenkanal
268	8/6/2022 10:59:37	Interview	Binod Mallick	Fire Protection Squad		Dhenkanal
269	8/6/2022 12:32:33	Interview	Bijay Kumar barik	Fire Protection Squad		Rairangpur
270	8/6/2022 12:34:40	Interview	Indrajit singh	Forest Protection Squad		RAIRANGPUR
271	8/6/2022 12:43:38	Interview	Laxman tudu	Forest Protection Squad		Similipal south
272	2022-04-15T14:03:21		Dinabandhu Bag (F.G) Borda Section		Bhawanipatna	Kalahandi (N)
273	2022-05-16T11:45:34		Khela Priya sahu, Forester		Sambalpur	Bargarh
274	2022-05-21T09:11:37		Rabindra ku. Behera, Forester		Sambalpur	Sambalpur
275	2022-05-31T13:12:15		Sasanka Ku.dash (FG)		Koraput	Malkangiri
276	2022-05-17T13:39:51		Chandrabhanu Mohanta (Forester) Kendumundi Section		Baripada	Karanjia
277	2022-06-19T11:30:13		Bijay Kumar Kothi, Forester Kalanga		Rourkela	Rourkela
278	2022-06-17T11:39:12		Sabyasachi Kalo Forester		Rourkela	Sundargarh
279	2022-06-11T15:39:19		Joytsnarani Behera, Forester,Palasama		Rourkela	Keonjhar
280	2022-03-16T06:30:47		Arun Kumar sahoo, Range officer, Belghar		Berhampur	Balliguda
281	2022-05-01T19:33:54		Sudipti Mohapatra, Forest Range Officer		Angul	Satkosia WL
282	2022-04-21T16:10:39		Tanmaya Behera, Forest guard		Angul	Athagarh
283	2022-06-19T09:19:42		Bijay Kumar Kothi, Forester Kalanga		Rourkela	Rourkela
284	2022-04-18T17:56:08		Chaitanya Behera, R.O Handappa		Angul	Athmallik
285	2022-06-17T11:35:52		Sabyasachi Kalo(Forester)		Rourkela	Sundargarh

286	2022-05-07T11:22:42		Balaram Pradhan,Forest guard		Sambalpur	Rairakhol
287	2022-06-05T10:20:34		Damburdhar Senapati (FORESTER)		Koraput	Rayagada
288	2022-05-08T19:27:56		Goutam Beniya, Forester		Koraput	Koraput
289	2022-04-20T13:44:01		Padman Gahir (Forester) Karlapat section		Bhawanipatna	Kalahandi (S)
290	2022-05-16T13:17:11		Khela Priya sahu, Forester Paikmal		Sambalpur	Bargarh
291	2022-04-08T11:07:55		Padma lochan bhoi, Forester, Kharapura section		Bhawanipatna	Subarnapur
292	2022-05-02T10:59:31		Ranjan Kalo, Forest Ranger officer		Angul	Satkosia WL
293	2022-05-25T14:37:33		Umakanta Pattanaik, Forester		Koraput	Nabarangpur
294	2022-03-27T16:26:25		kabita karjee fg		Berhampur	Paralakhemundi
295	2022-04-18T14:36:08		Praphula mahapatra Forester		Angul	Athmallik
296	2022-04-11T15:43:14		Harmohan Pradhan, forester		Angul	Angul
297	2022-04-30T09:54:15		Maguni Behera, R.O Tikarpada		Angul	Satkosia WL
298	2022-05-10T11:50:24		Dillip kumar Dhala, Forest Ranger		Sambalpur	Hirakuda WL
299	2022-05-11T10:40:53		Rohita bag, forest gaurd		Sambalpur	Hirakuda WL
300	2022-05-04T16:39:45		Jagadish Kumar Sahu		Baripada	Baripada
301	2022-05-01T19:19:46		Sudipti Mohapatra, Forest Range Officer		Angul	Satkosia WL
302	2022-03-27T16:51:33		B. R. Misal		Berhampur	Paralakhemundi
303	2022-05-21T12:08:40		Ananta Kumar Parida (Forester, Kathakata Section)		Baripada	Keonjhar WL

304	2022-04-18T17:40:40		Chaitanya Behera, R.O Handappa		Angul	Athmallik
305	2022-06-20T09:47:13		Maheswar Dhala, Forester Dalakudar		Rourkela	Rourkela
306	2022-04-20T13:19:14		Arjuna Behera, Forester		Angul	Athmallik
307	2022-05-14T10:38:12		Govinda Nayak,Forester		Koraput	Nabarangpur
308	2022-05-22T11:10:53		Kedar Patra, Forester		Baripada	Keonjhar WL
309	2022-05-16T08:45:47		Basanta Kumar Bagh,FG Gangei		Sambalpur	Bargarh
310	2022-06-05T10:12:42		Subash Chandra Behera Fg		BBSR	Rajnagar WL
311	2022-05-10T17:16:34		Rohita bag , forest gaurd		Sambalpur	Hirakuda WL
312	2022-06-05T10:12:02		Damburdhar senapati(forester.section		Koraput	Rayagada
313	2022-05-27T17:35:35		Surendra Ku Dihudi ,F.G		Koraput	Malkangiri
314	2022-05-01T12:20:52		Parmanand, Forester		Baripada	Balasore WL
315	2022-05-20T09:33:04		Basanta kumar Barik, Forest Guard		Sambalpur	Sambalpur
316	2022-05-16T12:59:44		Khela Priya sahu, Forester Paikmal		Sambalpur	Bargarh
317	2022-05-31T13:01:29		Sasanka Ku.dash (FG)		Koraput	Malkangiri
318	2022-06-01T12:31:20		Akshya Chhatriya (Range Officer, Tamra Range)		Rourkela	Bonai
319	2022-05-22T11:55:43		Bikash Kumar Bhoi, Forester		Sambalpur	Sambalpur
320	2022-04-09T12:10:50		Bipin sahoo Forester		Bhawanipatna	Bolangir
321	2022-04-08T18:00:36		Tikeswar Nayak Forester		Angul	Angul

322	2022-03-28T12:28:37		Rashmi Ranjan Das, Forest Guard		Angul	Dhenkanal
323	2022-04-25T11:52:21		Naresh Kumar Tudu, Forester		Angul	Cuttack
324	2022-03-15T00:11:53		Hemant Kumar Patra, Forest Guard		Berhampur	Ghumsur (S)
325	2022-06-04T12:35:27		Mihirkant Pradhan, Forester		Koraput	Jeypore
326	2022-06-04T12:16:08		Debendra Nayak, Forester		Koraput	Jeypore
327	2022-04-20T23:13:40		Sushant Kumar Das (F. G) Sagada Section		Bhawanipatna	Kalahandi (S)
328	2022-04-13T10:57:53		Anand Bihari Swain,Forest Guard		Bhawanipatna	Bolangir
329	2022-04-22T10:23:42		Manas Ranjan Nayak, Forester		Angul	Athagarh
330	2022-05-12T08:03:59		Jayalal Prasad Sukla,Forester		Bhawanipatna	Khariar
331	2022-06-09T10:52:22		Prasanna Kumar Mishra (Forester) Dantaribahal Section		Rourkela	Deogarh
332	2022-04-17T18:02:45		Dipak Kumar Behera		Angul	Athmallik
333	2022-04-20T13:58:55		Padman Gahir (Forester) Karlapat Section		Bhawanipatna	Kalahandi (S)
334	2022-05-31T10:37:10		Banishree Manaswini Devi, Forester		Koraput	Malkangiri
335	2022-06-01T18:23:28		Purnachandra Sethi (Forester, Gurundia Section)		Rourkela	Bonai
336	2022-06-06T11:58:31		Sunil Ranjan Routray FG		BBSR	Rajnagar WL
337	2022-06-05T10:19:48		Damburdhar senapati(forester,section.durgi)		Koraput	Rayagada
338	2022-06-09T09:22:30		Chabila Kumar Behera, Forester, laimura		Rourkela	Deogarh
339	2022-04-27T09:54:26		Pratap Kumar Sethi, FG		Angul	Mahanadi WL

340	2022-04-26T16:18:18		Santosh Kumar Sahoo Forester		Angul	Mahanadi WL
341	2022-05-12T08:46:33		Ghanashyam Prasad, Forester		Bhawanipatna	Bolangir
342	2022-06-20T10:02:44		Sushanta Kumar Sahio,Forester		BBSR	Khordha
343	2022-06-04T12:39:17		Debendra Nayak, Forester		Koraput	Jeypore
344	2022-06-05T16:29:51		Kartikeswar Khandei,Dy R.O		Koraput	Jeypore
345	2022-06-06T16:15:36		Pradeep Kumar Behera, Forester		BBSR	Rajnagar WL
346	2022-04-27T09:02:57		Sanjeeb Baipai,Forester		Angul	Cuttack
347	2022-05-14T13:41:22		Prakash Biswal (STPF -F. G) Nekedanacha section		Baripada	Baripada
348	2022-05-10T08:04:39		Jayalal Prasad Sukla		Bhawanipatna	Khariar
349	2022-05-01T19:10:56		Sudipti Mohapatra, Forest Range Officer		Angul	Satkosia WL
350	2022-04-27T08:43:49		Sanjeeb Baipai,Forester		Angul	Cuttack
351	2022-06-01T10:32:43		Pradyumna kumar Behera(Forester,Section.komtelpeta)		Koraput	Rayagada
352	2022-05-24T17:10:54		Sukra Bindhani,Range officer,Nawana North		Baripada	STR (North) WL, Jashipur
353	2022-05-19T12:06:21		Harelal Nial,Forester		Koraput	Nabarangpur
354	2022-06-12T12:57:54		Chittaranjan Parida (Forester, Patna section)		Rourkela	Keonjhar
355	2022-05-01T19:15:15		Sudipti Mohapatra, Forest Range Officer		Angul	Satkosia WL
356	2022-05-01T19:17:26		Sudipti Mohapatra,Forest Range Officer		Angul	Satkosia WL
357	2022-04-09T11:49:27		Prafulla Kumar Jena		Bhawanipatna	Bolangir

358	2022-05-09T13:24:49		Rasmi Prasad Biswal, Forester		Koraput	Koraput
359	2022-03-27T12:26:07		Banapaspu Redi		Berhampur	Paralakhemundi
360	2022-04-12T14:09:06		Sunil chhatria fr.dangabanji section		Bhawanipatna	Bolangir
361	2022-06-17T13:15:25		Sabyasachi Kalo		Rourkela	Sundargarh
362	2022-05-01T19:11:31		Sudipti Mohapatra, Forest Range Officer		Angul	Satkosia WL
363	2022-06-09T09:50:07		Shyam Sundar Behera (Forester) Ballam Section		Rourkela	Deogarh
364	2022-03-28T12:39:23		Rashmi Ranjan Das, Forest Guard		Angul	Dhenkanal
365	2022-06-13T07:08:00		Chabila Kumar Behera, Forester laimura		Rourkela	Deogarh
366	2022-03-14T11:28:05		Prabhat Kumar Dora , Forester, Kotagarh		Berhampur	Balliguda
367	2022-05-12T17:21:22		Sishir kumar Behera		Baripada	Baripada
368	2022-04-27T09:03:11		Sanjeeb Baipai,Forester		Angul	Cuttack
369	2022-06-11T15:43:14		Jyotsnarani Behera, Forester,Palasama		Rourkela	Keonjhar
370	2022-05-16T16:10:01		Khela Priya sahu, Forester Paikmal		Sambalpur	Bargarh
371	2022-05-21T08:53:13		Ravindra ku. Behera, Forester		Sambalpur	Sambalpur
372	2022-05-27T16:07:32		Kashinath Hamsdah (Forester, Gorumahisani section)		Baripada	Rairangapur
373	2022-05-31T12:41:57		Sasanka Ku.dash (FG)		Koraput	Malkangiri
374	2022-05-12T13:06:40		Rajendra Kumar Sahu (Forester) Andharitota Section		Baripada	Baripada
375	2022-05-10T12:57:08		Dilip kumar Dhal, FRO		Sambalpur	Hirakuda WL
376	2022-06-04T14:44:19		Arati Nayak (Forest Guard, Sivnathpur beat)		Rourkela	Bonai

377	2022-05-01T19:30:39		Sudipti Mohapatra, Forest Range Officer		Angul	Satkosia WL
378	2022-05-09T13:14:41		Rasmi Prasad Biswal		Koraput	Koraput
379	2022-05-01T11:46:31		paramanand Nayak , Forester		Baripada	Balasore WL
380	2022-06-19T09:31:05		Kailash Pradhan, Foretser		BBSR	Nayagarh
381	2022-06-09T09:27:20		Chabila Kumar Behera, Forester, laimura		Rourkela	Deogarh
382	2022-06-17T11:22:49		Sabyasachi Kalo (Forester)		Rourkela	Sundargarh
383	2022-03-30T18:05:46		Prabhakar Pradhan		Berhampur	Paralakhemundi
384	2022-03-26T13:36:52		Indu Bhusan Bhanja, Forester		Angul	Dhenkanal
385	2022-04-17T12:47:11		Subrat Kumar Satpathy, Forester		Angul	Angul
386	2022-05-15T15:50:04		Debendra padhan, Forest gaurd		Sambalpur	Bargarh
387	2022-04-12T17:24:54		Jyotiranjan Bagarti,Forest Guard		Bhawanipatna	Bolangir
388	2022-05-12T13:34:40		Rajendra Kumar Sahu (Forester) Andharitota Section		Baripada	Baripada
389	2022-06-19T12:00:13		Susanta Kumar Swain, FRO		BBSR	Nayagarh
390	2022-04-22T11:36:05		Manas Ranjan Nayak		Angul	Athagarh
391	2022-06-05T16:45:16		Suresh Kumar Patra ,forester, Sec-Ambadola		Koraput	Rayagada
392	2022-05-17T11:36:19		Biswajit Mohanta Forester		Baripada	Karanjia
393	2022-05-31T17:10:58		D .K.Mahananda, Forester		Sambalpur	Bamara WL
394	2022-06-19T11:43:58		Susanta Kumar Swain, FRO		BBSR	Nayagarh
395	2022-04-09T11:32:18		Janhabi Behera,Forest Guard		Bhawanipatna	Bolangir

396	2022-05-16T12:33:41		Khela Priya sahu, Forester		Sambalpur	Bargarh
397	2022-05-07T11:09:36		Balaram Pradhan, Forest guard		Sambalpur	Rairakhol
398	2022-04-26T17:59:00		Santosh Kumar Sahoo, Forester		Angul	Mahanadi WL
399	2022-05-11T17:04:45		Kumar Khora, Range Officer		Koraput	Koraput
400	2022-06-12T13:07:09		Prajukta Jena (Forest Guard, Tanda beat)		Rourkela	Karanjia
401	2022-05-27T17:48:06		Surendra Kumar Dihudia,F.G		Koraput	Malkangiri
402	2022-05-13T11:01:53		Biranchi Narayan Mohapatra (Range Officer)		Baripada	Baripada
403	2022-06-11T10:40:53		Sushanta Kumar Sahoo,Forester		BBSR	Khordha
404	2022-05-24T13:04:00		Sushanta Kumar Murmu (Forester,Chahala)		Baripada	STR (North) WL, Jashipur
405	2022-06-01T10:56:31		Pradyumna Kumar Behera		Koraput	Rayagada
406	2022-05-16T16:34:50		Khela Priya sahu, Forester Paikmal		Sambalpur	Bargarh
407	2022-04-08T13:46:01		Ashutosh Mahakur,Forester		Bhawanipatna	Bolangir
408	2022-04-13T11:01:54		Anand Bihari Swain,Forest Guard		Bhawanipatna	Bolangir
409	2022-06-10T16:12:31		Purna Chandra Mohanta		Rourkela	Keonjhar
410	2022-06-19T09:45:18		Bijay Kumar Kothi, Forester Kalanga		Rourkela	Rourkela
411	2022-05-19T17:19:37		jashmirani kisku Forester malgam		Koraput	Koraput
412	2022-05-27T12:23:20		Harendra Kumar Sahu ,Forester		Sambalpur	Jharsuguda
413	2022-06-10T16:14:37		Purna Chandra Mohanta (Forester, Talapada Section)		Rourkela	Keonjhar
414	2022-06-19T11:53:44		Susanta Kumar Swain,FRO		BBSR	Nayagarh

415	2022-04-20T13:53:45		Padman Gahir (Forester) Karlapat section		Bhawanipatna	Kalahandi (S)
416	2022-06-12T12:47:56		Prajukta Jena (Forest Guard, Tanda beat)		Rourkela	Keonjhar
417	2022-05-19T12:33:18		Harelal Nial, Forester		Koraput	Nabarangpur
418	2022-06-06T10:20:43		Sabita behera, Forest gaurd		BBSR	Rajnagar WL
419	2022-04-15T10:45:31		Madhukar Putel , Forester		Bhawanipatna	Kalahandi (N)
420	2022-05-01T09:50:21		paramanda nayak Fr		Baripada	Balasore WL
421	2022-03-27T16:29:06		Kabita Karjee		Berhampur	Paralakhemundi
422	2022-03-27T17:45:25		Sasmita Swain, Forester		Angul	Dhenkanal
423	2022-03-30T16:53:23		Prabhakar Pradhan		Berhampur	Paralakhemundi
424	2022-03-31T08:53:21		Ramesh Chandra Sahu, Forester		Angul	Dhenkanal
425	2022-05-21T11:25:35		Sthiti pragyan Tripathy, Forester		Koraput	Nabarangpur
426	2022-05-08T17:20:17		R L Khillo,Forester		Koraput	Koraput
427	2022-05-05T13:57:47		K L Soren, Forester		Baripada	Baripada
428	2022-03-15T02:42:43		Hemant Kumar Patra, Forest Guard		Berhampur	Ghumsur (S)
429	2022-06-10T16:10:37		Purna Chamdra Mohanta (Forester, Talapada Section)		Rourkela	Keonjhar
430	2022-05-12T13:15:26		Rajendra Kumar Sahu (Forster) Andharitota Section		Baripada	Baripada
431	2022-05-12T13:38:08		Rajendra Kumar Sahu (Forester) Andharitota section		Baripada	Baripada
432	2022-04-30T16:58:46		Jitendra Kumar Nayak, Forester		Angul	Satkosia WL
433	2022-06-01T11:57:19		Nihar Ranjan Badapanda		Sambalpur	Bamara WL

434	2022-05-24T15:48:08		Sukuna Bindhani (Range Officer, Nawana North Range)		Baripada	STR (North) WL, Jashipur
435	2022-06-06T12:02:56		Sunil Ranjan Routray FG		BBSR	Rajnagar WL
436	2022-05-01T19:36:48		Sudipti Mohapatra, Forest Range Officer		Angul	Satkosia WL
437	2022-06-19T09:14:00		Bijay Kumar Kothi, Forester,Kalanga		Rourkela	Rourkela
438	2022-06-02T15:53:29		Akshya Chhatriya (Forest Range Officer)		Rourkela	Bonai
439	2022-04-21T16:12:03		Tanmaya Behera,Fg		Angul	Athagarh
440	2022-06-13T06:58:39		Chabila Kumar Behera, Forester laimura		Rourkela	Deogarh
441	2022-06-05T10:23:08		Damburdhar senapati(forester.section .durgi)		Koraput	Rayagada
442	2022-05-13T12:17:34		Biranchi Narayan Mohapatra (Range Officer)		Baripada	Baripada
443	2022-04-27T12:54:21		Brajaraj Biswal, Forester		Angul	Mahanadi WL
444	2022-06-04T14:25:30		Arati Nayak(Forest Guard, Sivnathpur beat)		Rourkela	Bonai
445	2022-06-19T11:35:17		Susanta Kumar Swain, FRO		BBSR	Nayagarh
446	2022-04-20T13:58:15		Atmaram Mahananda, Range Officer Karlapat Sanctuary Range		Bhawanipatna	Kalahandi (S)
447	2022-05-23T14:18:46		Jita Satpathy,Forester		Sambalpur	Sambalpur
448	2022-05-24T17:12:35		Sukura Bindhani (Range Officer, Nawana North Range)		Baripada	STR (North) WL, Jashipur
449	2022-04-27T13:05:57		Brajaraj Biswal, Forester		Angul	Mahanadi WL
450	2022-06-17T11:45:19		Sabyasachi Kalo		Rourkela	Sundargarh
451	2022-06-13T07:05:42		Chabila Kumar Behera ,Forester laimura		Rourkela	Deogarh
452	2022-05-19T08:35:57		Seturanjani Gomango, Range Officer		Koraput	Nabarangpur

453	2022-04-09T12:22:14		Bipin Sahoo,Forester		Bhawanipatna	Bolangir
454	2022-05-13T11:06:30		Biranchi Narayan Mohapatra (Range Officer)		Baripada	Baripada
455	2022-05-13T11:26:38		Biranchi Narayan Mohapatra (Range Officer)		Baripada	Baripada
456	2022-04-13T11:58:49		Bharat Bandhu Sabar , Forester		Bhawanipatna	Kalahandi (N)
457	2022-04-25T15:55:18		Chitaranjan Biswal, Forester		Angul	Cuttack
458	2022-04-17T12:30:50		subrat kumar Satpathy,forester		Angul	Angul
459	2022-05-21T12:12:59		Laxmidhar Kisku (Forester, Baidakhia Section)		Baripada	Keonjhar WL
460	2022-04-27T08:28:36		Sanjeeb Baipai, Forester		Angul	Cuttack
461	2022-04-27T17:47:33		Abhiram Jena, R.O Dalijora		Angul	Cuttack
462	2022-06-06T12:00:25		Sunil Ranjan Routray FG		BBSR	Rajnagar WL
463	2022-05-16T12:23:14		Khela Priya sahu, Forester		Sambalpur	Bargarh

10. Field data collected during study

The raw data has been provided in USB drive submitted along with this report.

11. Field Inspection Notes

Village relocation in Satkosia Tiger Reserve

Date of visit: 06 May 2022

Inspection Notes on Village relocation in Satkosia Tiger Reserve

Satkosia Tiger Reserve has been notified vide Notification No. 8/F(S) -32/2006/20807/F&E Dt 31.12.2007. It comprises of Satkosia Gorge Sanctuary and Baisipally Sanctuary. One of the major issues impacting the habitat and Wildlife here is human interphase. There are 131 villages dotting this Tiger

Reserve wit 5 village in the Core area which impact protection and conservation of wildlife in multiple ways. Consequent to issue of policy on village relocation in 2008, Raigod village that was in the core area, was relocated in 2017. This village is now reestablished on a revenue land of the Government and housing and other facilities have been provided to the villagers. While funds from NTCA were primarily utilised for this relocation, housing scheme and other developmental schemes (for providing employment opportunities were dovetailed and funds from CAMPA were utilised for development of the habitat that was vacated by the village settlement.

Efforts now are on for relocation of Asanbahal (V), a Forest Village located over 31.73 ha in Kuru Forest Block in the buffer area of Satkosia Tiger Reserve and inhabited by 89 families (170 individuals) with a livestock population of 222. All except 2 families belong to Scheduled Tribe (Kondho) are all others are non-tribals. Rights of these 2 Tribal families have been settled under the Forest Rights Act and they are now being compensated as part of village relocation.

93.361 ha of Revenue land of Forest Kissam (chhota jungle) has been identified near Dhauragoth Village of Tainsi Panchayat to create a land bank of which 16.40 Acre will be utilised for relocation of Asanbahal (V). Proposals for diversion of this extent of 93.361 Acres is currently under consideration of Government of India (as it attracts the Indian Forest (Conservation) Act 1980) and as informed, orders are expected shortly.

No formal plan for relocation has been prepared so far (as on the date of visit by the PwC Team). However, the villagers are entitled for Rs. 15.00 Lakh per family as relocation package (As per the guidelines of State Government in Forest & Environment Department Letter No. FE-WL-WLF-0021-2016/ 12390 Dt. 19.07.2021). So far, an amount of Rs. 10,00 Lakhs have been deposited with the District Collector Angul from CAMPA (APO of 2020-21).

During interaction with the villagers of Asanbahal (V), it was learnt that this village was established more than 100 years back basically to provide work force for forestry operations. At present the third generation of original inhabitants are residing here and they are keen to move out and relocate. Infact the elders and the women folk in the village enumerated a number of reasons for their eagerness to move out. The PwC team interacted with Chabi Sahu and Pandu Pradhan, the village elders. Villagers are of the view that being a Forest Village, and with very few households, civic amenities are limited. There is a primary school upto Class 3, a single teacher school nearby and for further education, children have to move out. The market and hospital are miles away to Jagannathapur of Angul. One has to walk more than 10 km to avail public transport facilities. Other than wage employment in forestry operations there are no viable and better livelihood options. Added to this, increasing Elephant menace and other human wildlife issues are not making things easy for the villagers.

After visiting Asanbahal (V), the team visited Raigod (V) that was already relocated. 78 families of Raigod (V) have since been relocated during 2017. The land so vacated has been included in the Tiger Reserve but still to be notified under Forest Act. The village location (the one that has been vacated) is a sprawling valley surrounded by woody hills rich in diverse flora. It was a happy site to see quite a few Cycas orixensis a rare species. A few prominent tree species noticed were: Terminalia alata, Madhuca indica and Anigeissus latifolia. While driving to this site, en route we noticed large herds of Axis axis commonly called Chital or Spotted Deer. Barking Deer (Muntiacus muntjak), generally a shy animal, was spotted multiple times. The are vacated by the village has now developed into a rich grass land and is providing excellent foraging ground for herbivora. We could spot quite a few herds of Spotted Deer though it was a very hot day (time of this visit was around 2 PM). Efforts are now being made to harvest water and this will certainly provide a fillip to the faunal diversity.

The visit to the relocated village of Raigod and interaction with the villagers there was quite an education. 78 families have moved out of the forests on a promise of a better life. They were compensated for the the land they surrendered (which is now an excellent habitat for wildlife as described above), they have been

provided 0.40 cents of land (per family) for construction of dwelling units and funds for the same have been provided by the Government of Odisha as additional incentive in addition to the relocation package provided by the Government of India in terms of NTCA guidelines. The point to be noted here is that the State has compensated the loss of Agricultural land by paying land value. Compensation of the dwelling units is in the form of land (0.40 cents per family) and money to construct houses from a State Government Housing scheme. In terms of guidelines of NTCA part of the relocation package has been paid to these families and the remaining money in a joint account held jointly by the family head and the District Collector. It was noticed during interaction with the villagers and visit to the village (relocated), that many families have spent money that they received as land value wards house construction as they have constructed much bigger units than what the Housing Scheme envisaged on the sentiment that "one buds a house once in a lifetime." They could not purchase Agricultural land as no and was available near the relocated village site and Government did not provide any Government land for Agriculture. Thus, they are now landless. Even the money they have spent and committed for the house construction is beyond their means. Infact one family made a request for release of balance amount of the relocation package for performing his son's marriage.

Had the Government compensated land for land and had built houses and provided to these families, these problems would not have arisen. Expecting these semi-literate poor to manage such huge financial resources and take such important financial decisions, was probably expecting too much from them. This is where the district administration should have stepped in and ensured proper hand holding. These are beyond the mandate and capacity of Forest Department managing Wildlife Sancturies, Tiger Reserves etc.,

Though relocation of Raigod (V) was not done using CAMPA funds, this visit was taken as a learning exercise as CAMPA funds are now being used for relocation of Asanbahal (V). Since Asanbahal case is in initial stage, it's important to draw lessons from Raigod experience so that results of Asanbahal relocation can be better. It is necessary for the Tiger Project to have a dedicated Social Development specialist. Though Asanbahal case is not very complicated as no land compensation is involved and that the villagers are eager to move out, it is essential to ensure that these villagers get better livelihood opportunities. While it will be the responsibility of the District Administration to take care of the livelihoods of these 89 families, it is equally essential for the Forest Department to coordinate this. It is for this reason that the Forest Department should engage a Social Development Specialist or a Livelihoods expert. This expert can also coordinate and salvage the livelihood issues of Raigod.

Expert field visit to Miyawaki Plantation

Date of visit: 07 May 2022

Inspection notes from visit to Miyawaki Plantation

Inspected plantation raised following Miyawaki technique in Mahisapat village in Dhenkanal Division over 1 ha along with the DFO Dhenkanal. The site is question has red soil and is a on a gentle slope. Planting has been done in strips and the strips are aligned along the slope (aligning the strips/trenches across the slope would have given better results). Each strip has 6 rows and planting is done at 1 MX 1M espacement. Totally 8800 plants have been planted. The topsoil has been excavated to a depth of 2' with the help of JCB and replaced with a mixture of Sand, Organic Manure, Silt and Paddy husk. Organic pesticides are added while preparing this mix. Species planted are Neem, Pongamia, Siris, Amla, Jamun, Arjuna, Mohwa etc., The area is fenced with metallic wire mesh and plants are flood irrigated. Plantation as on the date of visit is about a year and half old and growth and survival are phenomenal. During the visit all plants in every 6th row of the central strip /trench were enumerated. While average height was seen to be 2.71 M

(range being 0.5 M to 5 M), average collar girth is 17.06 cm (range being 4 cm to 37 cm), survival was 98% (only one plant among 54 enumerated had not survived).

Plantation is very impressive but is highly cost intensive. The total estimated cost of this plantation including three years of maintenance is Rs. 53.23 Lakh out of which material component alone is Rs. 41.16 Lakh. This includes Rs. 8 Lakh towards fencing and Rs. 8.86 Lakh towards site preparation and 12.87 Lakh towards watering. While survival and growth are very encouraging, it is suggested to reconsider scaling up this technique for the reasons enumerated hereunder.

Irrigating plantations on a large scale in interior forests is not practical. This technique can be adopted only in plain lands near urban agglomerations and gentle slopes and certainly cannot be adopted in hilly terrain and interior places. While irrigation will be provided in formative years, once this stage is over, performance of plants in such a high density is certainly uncertain. Many of the species planted are huge light demanders and there will be codominance of crown and huge competition for moisture and nutrition in the years to come. Phenomenon of natural selection may succeed, and only stronger plants may survive. But there is likelihood of survival of a very small proportion of initially planted plants posing a question mark on cost effectiveness of this approach. Even in natural forests under similar agroclimatic conditions such a high density is not seen.

With little modification of techniques, similar results can be ensured. Reducing plant density, proper tillage of ground, soil and moisture conservation, timely planting and appropriate interventions like mulching and soil working to provide aeration and conservation of moisture at root zone will ensure maximum utilization of rainwater and similar growth and survival with much reduced costs.

Inspection Notes of Dr. H.D. Kulkarni in Berhampur Circle, ANR Raogaon, Jarada Range, Berhampur Forest Division

- **Date of visit:** 5-5-2022
- **Location:** Raogaon, Berhampur, Odisa.
- **Area of ANR:** 50 ha
- **Elevation:** 50 MSL
- **GPS: 19**^{0} 04’ 35” NL, 84^{0} 29’ 56” EL
- **Year of ANR:** 2020 – 21
- **Age:** 2 years (on the day of visit)
- **No. of plants planted:** 10,000
- **Spacing:** 2.5 x 2.5 m

Persons met:

- Mr. Rajat Mishra (Range Forest Officers)
- Mr. Ratna Kumar Behera (Forester)
- Ms. Janki Pradhan (Beat in charge Jarada)
- Mr. Manguda Sabar (plot watcher)

Observations:

- Plantation area is located below the hillock and is adjacent to road.
- Plot is well fenced. This plot is surrounded by good forests on 3 sides and one side road.
- The main board of ANR plantation gave year of plantation and number of plants planted and it was on the base line.
- This was podu cultivation / encroached land and after vacating it the land was prepared for planting. Hence, there is hardly any natural regeneration in the plot. This ANR plantation therefore appears as a complete block plantation.

- The species planted are Gamhar, Sissoo, Neem, Karanj, Chakundi etc.
- Lantana and Eupatorium weeds were observed in this plot. These weeds are not very high (sparse) but removal of these invasive weeds now itself is required to promote natural regeneration.
- Under silvicultural operations, climber cutting was done.
- Grazing and Fire damage is nil. Plot is free of grazing and fire incidence.
- Under Soil and Moisture conservation staggered trench of 240 (L) x 60 (W) x 50 (D) were measred (actual size is 250 x 50 x 50 cm).
- Root stock regeneration / coppice growth of natural trees observed for species Tendu (Diospyros melanoxylon), Karada (Cleistanthus collinus), Dubuduba (Glycosmis pentaphylla), Patuli (Stereospermum suaveolens), Giridi (Indigofera pulchella / Indigofera cassiodes), Jandamari (Dyospyros montana), Ankul (Alangium salvifolium), Peepal (Ficus religiosa), Kudchi / Kurei / Kurchi (Holarrhena antidysenterica) and Baula / Bakul/ Baila / Molsari (Mimusaps elangi). Patoli / Sidha / Sinha (Lagerstroemia parviflora , Lagerstroemia lanceolate).
- Other important plants such as Aswagandha (Withania somnifera), Anantamala (Hemidesmus indicus), orchids like Vandaka (Vanda tessellate),
- Seed based profuse regeneration was observed for Neem.
- Natural big sized trees like Mahul (*Madhuca Longifolia*), Peepal (*Ficus religiosa*) and Neem (*Azadirachta indica*) were found in the plot which are not disturbed during planting.

Measurement of Natural trees outside sample plot:

Species	Girth (cm)	Height (m)	No of trees
Peepal	400	14	2
Mahula	400	12	1
Neem	40	10	4
Neem	31	8	1
Neem	14	6	1
Neem	15	6	1

Regeneration (Grid) in sample plot:

Species	Trees	Pole	Seedlings
Tendu	-	-	8
Karada	-	-	2
Dubuduba	-	-	2
Patuli	-	-	1
Giridi	-	-	2
Jandamari	-	-	1
Ankul	-	-	1
Peepal	1	1	-
Kurchi	-	-	1
Baula	-	-	1
Patoli / Sidha	-	-	1

Neem	1	1	4

Measurement of survival and growth in sample plot:

(Sample plot 0.1 ha (32.5x32.5 = 1056.25 m²) 13 x 13 lines @ 2.5x2.5 m spacing)

	256	326	297	338	322	296	273	313	354	324	350	335	390	
Av.														**25.53**

- No. of plants= 169, No. of dead plants=4, Survival= 97.64%, Mortality= 2.36%, Average girth attained= 25.53 cm (Range= 9 to 47 cm), Average height of trees= 4 m
- Gamhar average growth= 29 cm girth and height= 5 m
- Sisoo average girth= 25 cm and height= 4 m

Performance of Species:

Grade	**Species**
Grade 1: Good growth	Gamhar *(Gmelina arborea*),
Grade 2: Medium growth	Sissoo (*Dalbergia sissoo*) Chakundi (*Cassia siamea*)
Grade 3: Poor growth	Nil

Remarks:

This ANR plantation has given higher rate of survival and growth. Therefore, the ANR / Afforestation efforts have succeeded.

Expert field visit to Permanent Nursery - Burupada, Samantiapalli Range. Berhampur Forest Division

Date of visit: 5-5-2022

Place: Burupada, Situated on Jarada to Forest Road

Location: GPS 19° 06' 18" NL 84° 32' 03" EL

Altitude: 50 MSL

Area: 0.7 ha.

Type of Nursery: Permanent Nursery

Funds received for establishment of Nursery: CAMPA 2012-13 year.

CAMPA funds and Green Mahanadi Mission for raising Nursery stock.

Persons met:

- Mr. Rajat Mishra (Range Forest Officer)
- Mr Ratan Kumar Behera (Forester)

Nursery Infrastructure:

Nursery area is well fenced with barbed wire and main gate. The nursery is located in forest area abutting hill range with forests.
There is a watchman shed and forest nursery office
There is a Bore well with overhead tank and a big sump for water storage.
Electricity supply is found.
Water quality is good.

Media and containers

Media is soil, sand and manure
Poly bag size 20 x 10 cm black colour bag.

Seed Source

Seed source: Seeds are collected from local area.

Nursery stock

The total Nursery stock of 376000 is raised from funds derived from 3 schemes.
CAMPA = 50000 number of plants - Old stock from last year kept in the nursery.
MNERGA = 100000 number of plants - Old stock from last year kept in the nursery.
GMM = 176000 number of plants – Plants raised this year 2022.
CAMPA = 50000 number of plants - Plants raised this year 2022.
The Nursery stock for 2022 year is 176000 + 50000 = 2.26 lac plants (Fresh stock) and well grown old stock is 50000 + 100000 = 150000 plants.

Species

The total stock of 376000 belongs to 24 species as follows.
Jamu (*Syzygium cumini*), Amla (*Emblica officinalis*), Tentuli / Imli (*Tamarindus indica*), Katha badam (*Terminalia catapa*), Gangasiuli (*Nyctanthes arbor-tristis*), False Ashoka (*Polyalthia longifolia*), Karanj (*Pongamia pinnata*), Simarouba (*Simarouba glauca*), Mango / Amba (*Mangifera indica*), Neem (*Azadirachta indica*), Kanchan (*Bauhinia variegata*), Sal (*Shorea robusta*), Kadamb (*Anthocephalus cadamba*), Sitaphal (*Anona squmosa*), Bahada (*Terminalia bellirica*), Mahaneem / Bakayan (*Melia azedarach*), Chatian / Satvan (*Alstonia schloris*), Kavita / Wood apple (*Feronia elephantum*), Ambada /

Amata (*Spondias pinnata*), Radha chuda (*Caesalpinia pulcherrima yellow colour flower*), Krishna chuda (*Caesalpinia pulcherrima red colour flower*), Sissoo (*Dalbergia sissoo*), Arjun (*Terminalia arjuna*), Gambhari (*Gmelinia arborea*).

Height

The average heigh is 1.7 m for the old plants and for young plants is 30 cms. Few plants are in mother beds and are being transplanted and their height is 10 cms.

Record inspection

The Nursery journal is maintained well. In the nursery journal various nursery operations and the expenditure incurred details are recorded.

Remarks:

This Burupada Nursery is located in a good site with good water availability. It is a well-developed nursery with all the infrastructure required to carry out the nursery operations. The nursery stock is healthy, and no diseases and pests are noticed on the plants. As the planting stock is of good quality with average height of 1.7 m when out planted will results in higher survival rate and good growth of plantation.

Expert field visit to Bamboo Plantation AR, P. Govindapur UDPF, Ambliamba Village, Berhampur Forest Division

Date of visit: 6-5-2022

Location: Ambliamba village, P. Govindapur UDPF, Odisa.

Area of ANR: 30 ha (Assigned gross area 36.10 ha and treated net area 30 ha)

Elevation: 580 MSL

GPS: 19° 31' 09" NL, 84° 20' 39" EL

Year of ANR: 2020 – 21

Age: 2 years (on the day of visit)

Species: Salai bamboo (*Dendrocalamus strictus*)

No. of plants planted- 12,000

Spacing: 5 x 5 m

Persons met:

- Mr. Subhash Ch. Behera (Range Forest Officers) Chardnogini
- Mr. Abhiram Karjee (Forester) Patigobindpurum section
- Mr. Kalia Pradhan (Forest Guard) Lohagudi Beat
- Mr. Bimal Kumar Gamanga (plot watcher)

Observations:

- Plantation area is located on the hillock slope and has both side (top & bottom) road.
- This 36.10 ha plot was previously encroached by local villagers. The encroachment was cleared and land prepared for bamboo plantation. The plot is well fenced.
- The main board of Bamboo ANR plantation gave year of plantation, area and other details.
- Soil is deep, Red loamy soil. This area has lot of termite mounds.
- Under silvicultural operations, climber cutting and weeding was done.
- Grazing and Fire damage is nil. Plot is free of grazing and fire incidence. Stray weed present.
- Under Soil and Moisture conservation 12000 number of staggered trench (Half-moon) were dug in the closer vicinity of the bamboo clump.

- Root stock regeneration / coppice growth of natural trees observed for species Kendu (*Diospyros melanoxylon*), *Pisal (Pterocarpus marsupium)* Palas *(Butea monosperma*) and Achu *(Motinda tomentosa*).
- Natural trees are left undisturbed, they are*:* Giridi (*Indigofera pulchella / Indigofera cassiodes*), Wild Mango (*Mangifera indica*), Jandamari (*Dyospyros montana*), Peepal (*Ficus religiosa*), Bana bhalia / Kala bhalia / marking nut / Kalabhalia (*Semecarpus anacardium*), Moi / Dupamoi /, Rajmohi / Mahi (*Lannea coromondelica*), Kalachua / Kala kaucha / Kalachua (*Glochidion zeylanicum*), Tentuli / imli / Tamarind (*Tamarindus indica*). Tody palm / wild date palm / Shindhi / Wild Khajur (*Phoenix sylvestris*).
- Trees planted in this plot are: *Kaju / Cashew (Anacardium occidentale*), Jackfruit (*Atrocarpus integrifolia*). Bara / Bud / Banyan / Baraghacha / Vat (*Ficus bengalensis*).
- Survival per cent: Bamboo cent per cent (100%). Healthy growth.
- Status of Natural regeneration in bamboo plantation: Good regeneration of miscellaneous local species.

Measurement on Bamboo plants in the plot

Random bamboo plant measurement	Clump Girth (cm)	Number of culms per clump	Culm Girth (cm)	Height (m)
1	200	6	4	3.0
2	180	5	5	2.5
3	250	7	7	3.0
4	210	6	6	2.5
5	160	4	5	2
6	180	5	5	2.5
Average	197	5 to 6	5.33	2.58

Remarks:

This Bamboo - ANR plantation has cent per cent survival with healthy growth. The clump girth is 200 cms with 5 to 6 culms measuring 2.58 cm in girth. Therefore, the Bamboo plantation ANR / Afforestation efforts have succeeded.

Expert field visit to Permanent Central Nursery. Parsurampur Farm, Devagiri Range, Paralakhemundi Forest Division

Date of visit: 6-5-2022

Place: Parsurampur farm, Devagiri Range, Paralakhemundi Forest Division, Situated on Jarada to Forest Road

Location: GPS 18° 50' 11.3" NL, 84° 02' 3.5" EL

Altitude: 106 MSL

Area: 12 ha

Type of Nursery: Permanent Nursery

Funds received for Nursery: CAMPA 2020-21 year.

For raising seedlings funds are derived from 3 sources such as CAMPA funds, Green Mahanadi Mission and MGNREGA.

Persons met:

12. Mr. Gouri Prasad Rath (Assistant Conservator of Forests)

13. Mr Shyam Sunder Kalingo (Forester)
14. Mr. R. Venkataraman Patnaik (Forest Guard and Nursery in-charge)
15. Mr. Surya Sabara (Para Forester)

Nursery Infrastructure:

Nursery area is with Brick compound wall all around. Earlier this land was under the custody of Raja of Paralakhemundi and later it is with the Government of Odisha Forest Department.
This is a well-planned nursery with the required infrastructure of office, security room, Storeroom, Seed store room, Compost sheds, Shade net (15 x 60 m size), Labour shed, Toilet facility, Seed drying cemented platform, cemented platform for keeping polybag seedlings, open well and 2 bore wells with sumps and overhead tank with laid out pipes, sand filters and sprinkler irrigation system.
Electricity supply is there.
Water quality is good.

Media and containers:
Media is soil, sand and manure (FYM)
Poly bag size 20 x 10 cm black colour bag. For Tall plants bag size is 25 x 30 cms.
Root trainers are not being used now.

Seed Source

Seed source: Seeds are collected from local area.

Nursery stock:

The total Nursery stock is 500000 plants. These seedlings are raised from 3 type of funds viz., CAMPA, Green Mahanadi Mission and MNREGA.
Nearly 44000 jackfruit seedlings are raised for Chief Minister's programme to promote Jackfruit in the Paralakhemundi Forest Division.
Balance 456000 seedlings are from other trees species.

Species:

The total stock of 376000 belongs to 39 species as follows.
Jackfruit / Kathal (*Atrocarpus integrifolia*), Jamu (*Syzygium cumini*), Amla (*Emblica officinalis*), Tentuli / Imli (*Tamarindus indica*), Pista badam (*Sterculia foetida*), Phanphani / Phonophonia / Sona patha (*Oroxylum indicum*), Punnanga / Polango (*Calophyllum inophyllum*), Sidha / Sinha / Patoli (*Lagerstroemia lanceolata*), Mahogany (*Swietenia mahagoni*), Salai bamboo (*Dendrocalamus strictus*), Teak / Sagwan (*Tectona grandis*), Aswastha / Pipal (*Ficus religiosa*), Peltophorum (*Peltophorum pterocarpum*), Kakopoi / Rain tree / Bada chakunda (*Samanea saman*), Bel / Bael (*Aegle marmelos*), Raktachandan (*Pterocarpus santalinus*), Gohala / Lausoda (*Cordia mixa*), Katha badam (*Terminalia catapa*), Gangasiuli (*Nyctanthes arbor-tristis*), Devadaru (*Polyalthia pendula*), Karanj (*Pongamia pinnata*), Simarouba (*Simarouba glauca*), Mango / Amba (*Mangifera indica*), Neem (*Azadirachta indica*), Kanchan (*Bauhinia variegata*), Sal (*Shorea robusta*), Kadamb (*Anthocephalus cadamba*), Sitaphal (*Anona squmosa*), Bahada (*Terminalia bellirica*), Mahaneem / Bakayan (*Melia azedarach*), Agathi, Agastya (*Sesbania grandiflora*), Chatian / Satvan (*Alstonia schloris*), Kavita / Wood apple (*Feronia elephantum*), Sissoo (*Dalbergia sissoo*), Arjun (*Terminalia arjuna*), Gambhari (*Gmelinia arborea*), Mahul, Mohula (*Madhuca indica*), Pahadi sissoo (*Dalbergia latifolia*), Juava (*Psidium guajava*).

Height:
The average height is 1.5 m and the maximum is 2.5 m and minimum is 1 m.

Record inspection:

The Nursery journal is maintained well. In the nursery journal various nursery operations and the expenditure incurred details are recorded.

Remarks:

This Parsurampur farm Nursery is located in a good site with good water availability. It is a well-planned and developed nursery with all the infrastructure required to carry out the nursery operations. The nursery stock is healthy and no diseases and pests are noticed (except gall disease Gohala / Lausoda (*Cordia mixa*) seedlings. As the planting stock is of good quality with average height of 1.5 m when out planted will results in higher survival rate and good growth of plantation.

Expert field visit to ANR – RET species conservation plot Pisal / Bija Sal, Durgam UDPF, Mohendra Range, Paralakhemundi Forest Division

Date of visit: 7-5-2022

Location: Gosani, Durgam UDFP, Odisa. Garabandha Section & Beat, Mohendra Range, Paralakhemundi Forest Division

Area of ANR: 30 ha

Elevation: 121 MSL

GPS: 18° 48' 40" NL, 84° 15' 4.2" EL

Year of ANR: 2020 – 21 CAMPA

Age: 2 years (on the day of visit)

Persons met:

II. Mr. Kabina Parija (Range Forest Officer) Mohendra Range
III. MS. Kabita Rani (Forest Guard) – Garabandha 192 Beat
IV. Mr. Duryodhan Jean (Forest Guard) – Kinchitiag Beat
V. Mr. A V S Prakash Rao (WLS)
VI. Mr. U. Papeya (Para Forester)
VII. Mr. Dhourba Charan Jena (Watcher – RET plot)

Observations:

- This RET – ANR plot is mainly created for protection and conservation of Pisal / Bija sal (*Pterocarpus marsupium*). The other RET species is Tangini / Kongra (*Xylia xylocarpa*) which is also found in this area and is naturally conserved along with Pisal. The total area of Durgam UDFP is 1418 ha. The RTE plot area is 2.11% only.
- The RET – ANR area is located below the hillock.
- The main board of RET - ANR plantation area was placed on the base line.
- This ANR plot is Pisal / Bija sal climatic climax mixed deciduous forests. The dominant species is Pisal followed by sub dominant species like Kendu and Tangini which naturally occur in the plot.
- For protection of this area, a watch tower with quarter facility is under construction.
- In this RET – ANR plot, gap planting was done with species like Karanj (*Pongamia pinnata*), Neem (*Azadirachta indica*), Chakunda (*Cassia siamea*), Teak (*Tectona grandis*), Amla (*Emblica officinalis*), Gambhari (*Gmelinia arborea*), Ankul (*Alangium salvifolium*) etc. However, natural regeneration of Kendu and Neem is high in this plot.
- Under Soil and Moisture conservation, staggered trench of 230 cm (L) x 60 cm (W) x 40 cm (D) were measured (actual size is 250 x 50 x 50 cm). Around 60 trenches per ha are taken up.
- Fire line work was undertaken as fire control measure. Grazing and Fire damage is nil. Plot is free of grazing and fire incidence.

Sample plot for Natural Regeneration study:

A.1) Measurement of Natural trees outside sample plot:

Species	No of trees	Girth (cm)	Height (m)
Pisal	7	190, 76, 73, 38, 80, 63, 40. Av = 80	14
Kendu	6	60, 75, 40, 50, 30, 20. Av = 45.83	10
Teak	3	45, 60, 50. Av. = 51.66	12
Neem	4	30, 25, 65, 60. Av = 45	10

A.2) Regeneration in sample plot – 1 (plot size 8 x 8 = 64 m²):

Species	Trees	Pole	Seedlings
Tendu	1	-	1 coppice
Pisal	2	1	2
Neem	1	-	-

A.3) Regeneration in sample plot – 2 (plot size 8 x 8 = 64 m²):

Species	Trees	Pole	Seedlings
Pisal	1	1	1

A.4) Regeneration in sample plot – 3 (plot size 8 x 8 = 64 m²):

Species	Trees	Pole	Seedlings
Pisal	-	1	0
Karanj	1	-	-

A.5) Regeneration in sample plot – 4 (plot size 8 x 8 = 64 m²):

Species	Trees	Pole	Seedlings
Pisal	2	1	1
Teak	1	-	-

During the study period, dry situation was prevailing and the undergrowth was almost covered with dry leaf litter. By separating the leaf litter in the sample plot, Pisal seedlings were spotted, and recruitment is recorded.

Total sample plot size was 64 m² x 4 plots = 256 m² = 4 seedlings and 4 pole were recorded. Hence, per hectare 156 seedlings and 156 poles are estimated and for 30 ha area 4688 seedlings (say 5000) and 4688 (say 5000) poles are estimated. The total mature (mother) Pisal trees occurred in 256 m² is 5 numbers and it works out to 195 trees per ha. For the 30 ha plot area nearly 5850 (say 6000) trees are estimated to occur.

Remarks:

The ANR – RET species conservation plot of Pisal / Bija Sal at Durgam UDPF has shown considerable recovery of the vegetation by providing adequate protection measures. Recruitment of seedlings of Pisal was observed. It is estimated that nearly 6000 trees, 5000 pole and 5000 seedlings of Pisal occur in this 30 ha area. The status of regeneration appears to be good.

Expert field visit to Permanent Central Nursery, Badaghati, Khallikote Range, Berhampur Forest Division.

Date of visit: 7-5-2022

Place: Bada ghati, Situated on NH Vizag to Berhampur

Location: GPS 19° 34' 57.4" NL 85° 06' 7.9" EL

Altitude: 50 MSL

Area: 1.5 ha.

Type of Nursery: Permanent Nursery

CAMPA funds received for raising plants in the Nursery
Target for 2021-22: 40,000 plants.

Persons met:

16. Mr. Sidharth Shankar Sahu (Range Forest Officer)
17. Mr Prashanth Kumar Karjee (Forester)
18. Mr. Manoj Sethi (Forest Guard)

Nursery Infrastructure:

Nursery area is well fenced with board displayed on the main gate. The nursery is located on NH Vizag to Bhubaneshwar (East coast Highway).
There is a Guard shed, Nursery office and a sit out (observation shed) with well-developed garden near the main gate.
Water source is from a big water body located near the Nursery.
Electricity supply is there.
Water quality is good.
On an average 20 to 30 persons are employed for Nursery work.

Media and containers:

Media is soil, sand and manure. Farm yard manure is procured and is a rich source of nutrients.
Poly bag size 12 x 8 cm black colour bag.

Seed Source:

Seed source: Seeds are collected from local area.

Nursery stock:

The total Nursery stock of 376000 is raised from funds derived from 3 schemes.
CAMPA = 70000 number of plants - stock Ready for planting.
MGNERGA = 113000 number of plants - stock Ready for planting.
GMM = 41000 number of plants – stock Ready for planting.
The total Nursery stock for 2022 year ready for planting is 241000
(0.7 + 0.41 + 0.17 +1.13 lac).

Species:

The total stock of 241000 belongs to 15 species as follows.
Jamu (*Syzygium cumini*), Tentuli / Imli (*Tamarindus indica*), Karanj (*Pongamia pinnata*), Neem (*Azadirachta indica*), Kanchan (*Bauhinia variegata*), Sal (*Shorea robusta*), Bahada (*Terminalia bellirica*), Kavita / Wood apple (*Feronia elephantum*), Sissoo (*Dalbergia sissoo*), Gambhari (*Gmelinia arborea*). Red sanders (*Pterocarpus santalinus*), Guava (*Psidium guajava*), Mahul (*Madhuca indica*), Bura / Bud / Banyan (*Ficus benglensis*). Ou / Rai (*Dillenia indica*)

Height:

The average height is 1.0 m for the old plants and for young plants is 30 cms.

Record inspection:

The Nursery journal is maintained well. In the nursery journal various nursery operations and the expenditure incurred details are recorded.

Remarks:

This Badaghat Nursery is located in a good site with good water availability. It is a well-developed nursery with all the infrastructure required to carry out the nursery operations. The nursery stock is healthy and no diseases and pests are noticed on the plants. As the planting stock is of good quality with average height of 1.5 m when out planted will results in higher survival rate and good growth of plantation.

Expert field visit to Permanent New Central Nursery, Pana Nuagam, Khallikote Berhampur Forest Division

Date of visit: 7-5-2022

Place: Pana Nuagam Situated near National Highway (Vizag to Berhampur)

Location: GPS 19° 35' 13.226" NL 85° 05' 15.317" EL **(Kesapur, Odisha)**

Altitude: 45 MSL

Area: 4 ha.

Type of Nursery: Permanent Central Nursery. Inaugurated by Shri. S S Srivastava IFS PCCF Odisha on 25-07-2017.

Persons met:

Mr. Sidharth Shankar Sahu (Range Forest Officer)
Ms. Pramila Sabat (Forester) Nursery in charge
Mr. Monaj Sethi (Forest Guard)

Nursery Infrastructure:

Nursery area is well fenced with brick compound wall and main gate with security room.
Well-developed vermicompost sheds , store, shade house with green net, labour shed, toilets, Watchman shed, inspection hut (sit-out) and forest nursery office
There is a Bore well with two tanks each with 1 lac liter capacity. A pond is made for water storage. Apart from the 2 tanks (sumps), there is also an overhead tank.
Electricity supply is there.
Water quality is good.

Media and containers:

Media is soil, sand and manure
Poly bag size 20 x 10 cm black colour bag.
(Root trainers – not used)

Seed Source:

Seed source: Seeds are collected from local area.

Nursery stock:

Nursery stock raised for the year 2019-20 under CAMPA scheme was 105100 and 101710 for the year 2020-21. The Nursery stock for 2022 year is healthy. The Average seedling height attained is 1 m.

Species:

The nursery stock belongs to 23 species as follows.

Jamu (*Syzygium cumini*), Amla (*Emblica officinalis*), Tentuli / Imli (*Tamarindus indica*), Katha badam (*Terminalia catapa*), Gangasiuli (*Nyctanthes arbor-tristis*), False Ashoka (*Polyalthia longifolia*), Karanj (*Pongamia pinnata*), Simarouba (*Simarouba glauca*), Mango / Amba (*Mangifera indica*), Neem (*Azadirachta indica*), Kanchan (*Bauhinia variegata*), Sal (*Shorea robusta*), Kadamb (*Anthocephalus cadamba*), Sitaphal (*Anona squmosa*), Bahada (*Terminalia bellirica*), Mahaneem / Bakayan (*Melia azedarach*), Chatian / Satvan (*Alstonia schloris*), Kavita / Wood apple (*Feronia elephantum*), Ambada / Amata (*Spondias pinnata*),), Sissoo (*Dalbergia sissoo*), Arjun (*Terminalia arjuna*), Gambhari (*Gmelinia arborea*), Teak (Tectona grandis).

Height:

The average height is 1 m for the old plants and for young plants is 30 cms. Few plants are in mother beds and are being transplanted and their height is 10 cms.

Record inspection:

The Nursery journal is maintained well. In the nursery journal various nursery operations and the expenditure incurred details are recorded

Remarks:

This Pana Nuagam New Central Nursery is located in a good site with good water availability. It is a well-developed nursery with all the infrastructure required to carry out the nursery operations. The nursery stock is healthy, and no diseases and pests are noticed on the plants. As the planting stock is of good quality with average height of 1 m when out planted will results in higher survival rate and good growth of plantation.

12.Boundary Pillars Details

Berhampura

Journal			Recorded			Difference (m)
No.	*Latitude*	*Longitude*	*No.*	*Latitude*	*Longitude*	
3	21.12678	84.23758	**A**	21.12672	84.23771	14.89
3	21.12678	84.23758	**B**	21.12681	84.23764	6.56
2	21.12711	84.23672	**C**	21.12726	84.23686	21.79
1	21.12736	84.23567	**D**	21.12729	84.23575	11.98
Average						**13.81**

Biripada

Journal			Recorded			Difference (m)
No.	*Latitude*	*Longitude*	*No.*	*Latitude*	*Longitude*	
4	19.63397	84.36761	**A**	19.63397	84.36761	0
1	19.63547	84.36600	**B**	19.63547	84.36600	0
Average						**0**

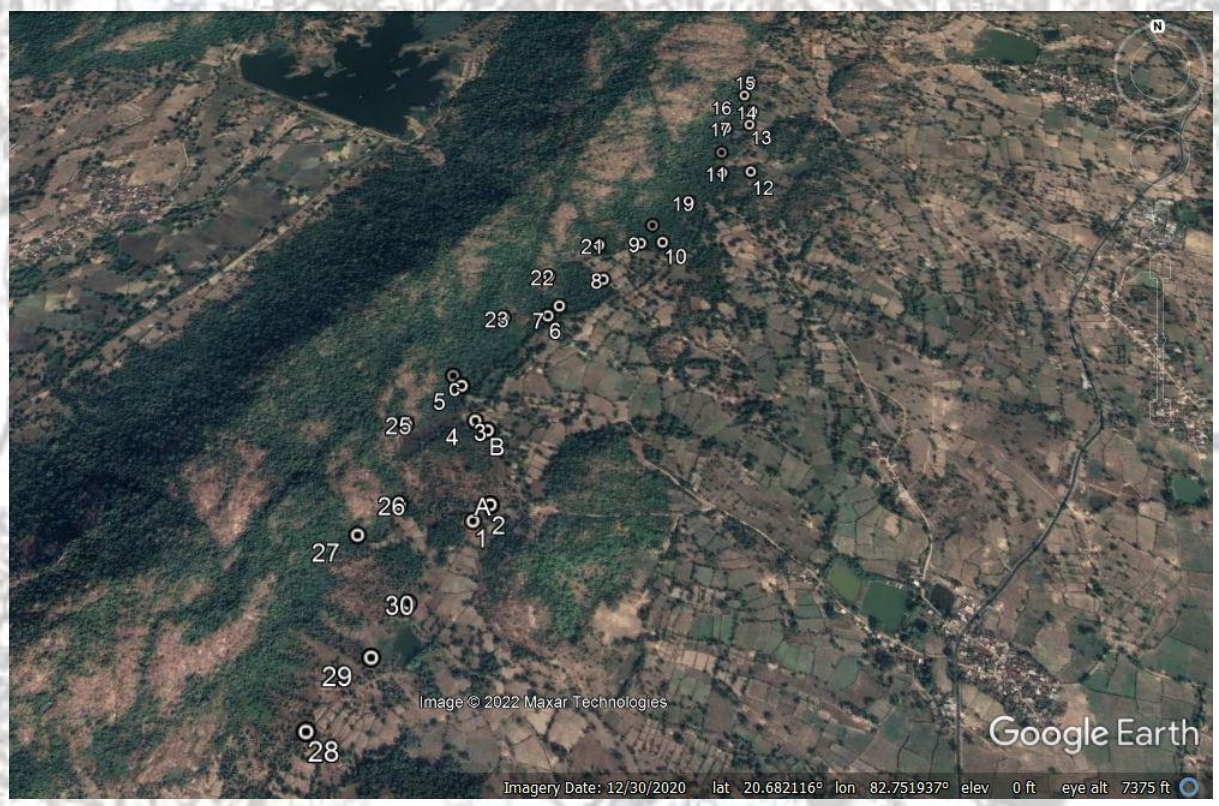
Betajharan

Journal			**Recorded**			**Difference (m)**
No.	Latitude	Longitude	No.	Latitude	Longitude	
3	19.42300	82.51856	**A**	19.42300	82.51847	9.01
5	19.42186	82.51761	**B**	19.42186	82.51761	0
Average						**4.51**

Debhuin

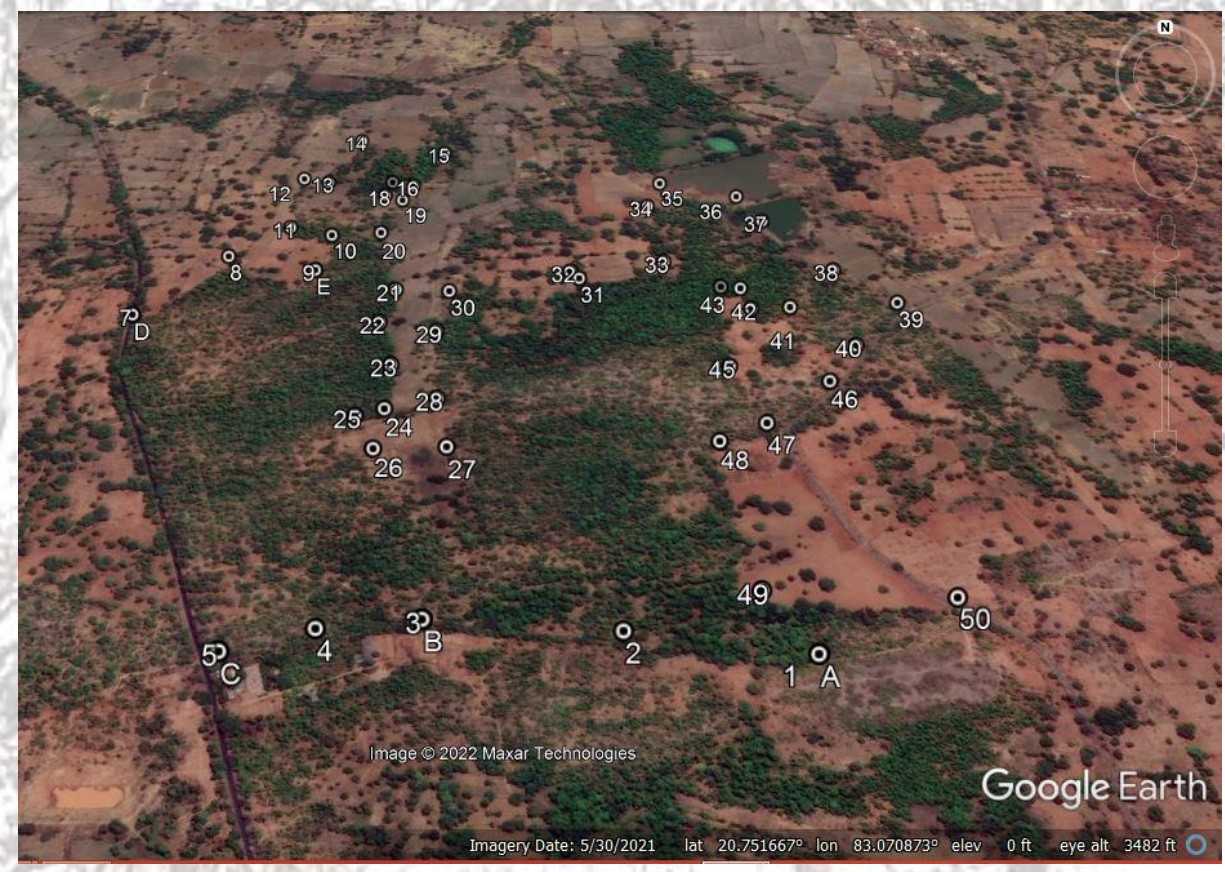
Journal			**Recorded**			**Difference (m)**
No.	Latitude	Longitude	No.	Latitude	Longitude	
1	20.83503	83.11075	**A**	20.83509	83.11087	15.37
Average						**15.37**

Jamchuan



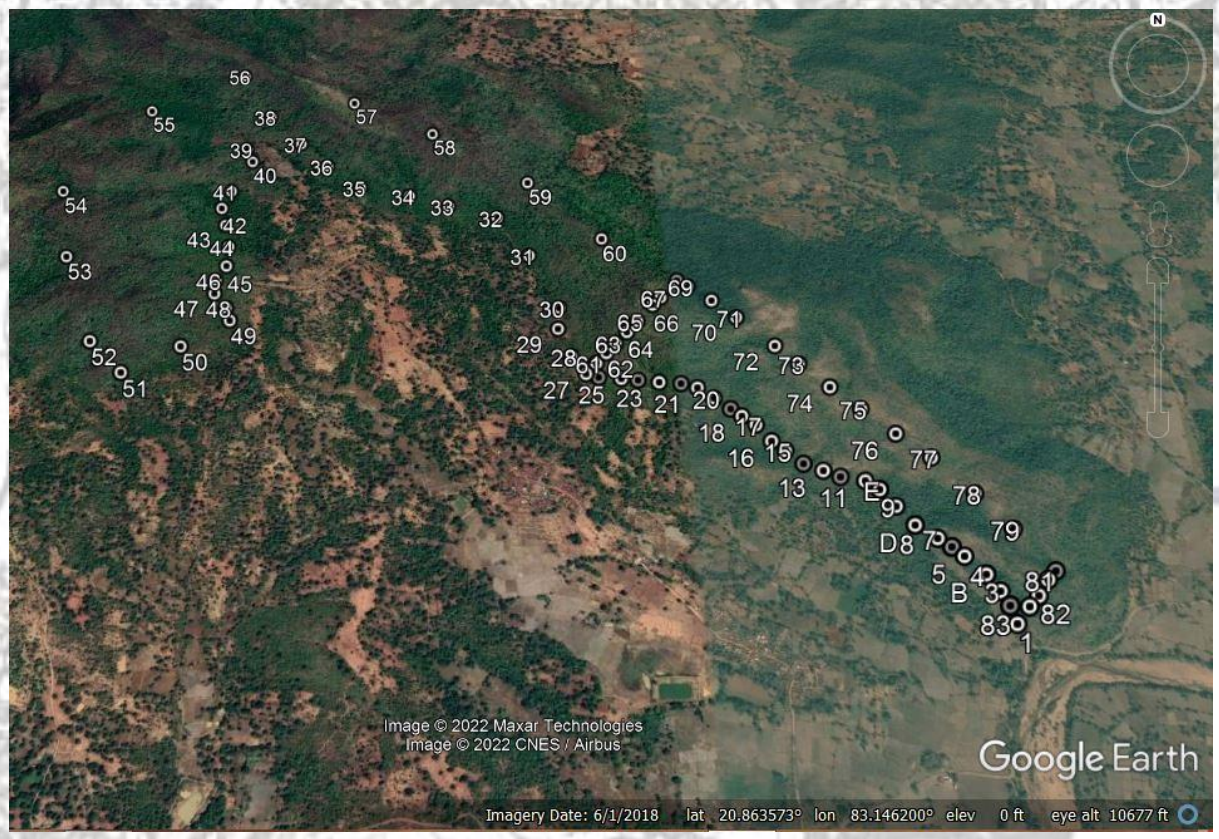
Journal			Recorded			Difference (m)
No.	Latitude	Longitude	No.	Latitude	Longitude	
2	20.66869	82.76389	**A**	20.66869	82.76389	0
3	20.67061	82.76389	**B**	20.67061	82.76389	0
5	20.67189	82.76331	**C**	20.67189	82.76331	0
Average						**0**

Pandaripani



Journal			**Recorded**			**Difference (m)**
No.	Latitude	Longitude	No.	Latitude	Longitude	
1	20.74867	83.07397	**A**	20.74866	83.07397	0
3	20.74906	83.07008	**B**	20.74905	83.07008	0
5	20.74869	83.06811	**C**	20.74869	83.06811	0
7	20.75350	83.06619	**D**	20.75350	83.06619	0
9	20.75436	83.06842	**E**	20.75436	83.06841	0
Average						**0**

Patnagarh



Journal			Recorded			Difference (m)
No.	Latitude	Longitude	No.	Latitude	Longitude	
2	20.83947	83.16392	**A**	20.83947	83.16392	0
4	20.84044	83.16347	**B**	20.84044	83.16347	0
6	20.84133	83.16267	**C**	20.84133	83.16267	0
8	20.84206	83.16172	**D**	20.84206	83.16172	0
10	20.84328	83.16089	**E**	20.84328	83.16089	0
Average						**0**

Tomake

Journal			Recorded			Difference (m)
No.	Latitude	Longitude	No.	Latitude	Longitude	
1	21.06161	85.83939	**A**	21.06167	85.83945	9.57
3	21.06111	85.83842	**B**	21.06119	85.83842	8.79
NA	NA	NA	**C**	21.06179	85.84108	NA
Average						**9.18**

13. Ecosystem Services

Defining Ecosystem Services

The ecosystem through its natural functioning provides various goods and services to human society. These goods and services, rendered free of cost, enhance societal well-being sometimes through direct routes, and sometimes through indirect channels. The supply chain of these goods and services are often not realized by humans, though their role in the human economy and society is fundamental and all-pervasive across the economic value chain. These direct and indirect benefits obtained and acquired by humans from ecosystems are delineated as the Ecosystem Services (ES) (Costanza et al 1997; MA 2005; TEEB 2011). It is the notion of ES that delineates the critical linkage between the ecosystems and human's social welfare (Fisher et.al, 2008). Being vital to the quality of life on the planet, ecosystem services play

a crucial role in the overall well-being of humans. Apart from these they also carry significant cultural, aesthetic and economic value.

As defined by the Millennium Ecosystem Assessment, ecosystem services *are "the benefits people obtain from ecosystems"*. Accordingly, the benefits obtained by humans are categorized into four different types of services as follows (Table 1):

Types of Ecosystem Services

Type of ES	About the Service
Regulating Services	Services are obtained due to the regulation of natural processes and the control or modification of biotic and abiotic factors. For Example, Air quality maintenance, climate regulation, water regulation, and erosion control, etc.
Provisioning Services	The direct material resources such as food, freshwater, fuelwood, etc., are obtained from the ecosystem.
Cultural Services	The intangible, non-material benefits obtained by the people in the form of spiritual and religious enrichment or recreation, etc.
Supporting Services	The services which serve as the basic necessity for the production of all the other ecosystem services fall under the category. For example, Primary Production, soil fertility, etc.,

While the above table presents primarily the MA (2005) classifications, the more recent TEEB (2011) assessments re-delineate supporting services as "habitat services", while keeping aside some as ecosystem functions that support the services. In this context, it is important to define two more concepts, namely, "ecosystem functions" and "natural capital", and their relation with ecosystem services. As defined by Costanza *et al* (1997: 254) ecosystem functions are "... the habitat, biological or system properties or processes of ecosystems". In other words, functions encompass the biological, geochemical and physical processes and components organically occurring within an ecosystem. These functions, while relating to the broader ecosystem structures (e.g. vegetation, water, soil, atmosphere and biota) emanate interactive forces within and across ecosystems. Due to this interactivity from within and across ecosystems, ecosystem functions are also called ecological processes.

Ecosystem Services of Forests

Forests provide a number of ecosystem services that range from provisioning to indirect regulating and supporting services, as also cultural services in the forms of tourism and religion. Traditionally, timber has been thought of as the most potent product from the forests (FAO 2019). Whereas in developed countries, wood finds its use as inputs in the manufacturing sector, building materials, newsprints, paper, packaging, industrial purposes etc, in large parts of the developing world, they find their uses in construction materials, pulpwood fuel woods and wood products very prominently. Most of the countries of Asia use some of the fruit trees as commercial timber; as per FAO (2019) in Kerala of India, 83% of all timber come from the homestead. Forests are a major source of the Non-Timber Forest Products (NTFPs) (e.g. leaf, flower, fruits, seeds, root, lac, bulb, brushwood, stem, nuts, honey, wax, citronella grass, etc) that are used for medicinal purposes, animal fodder, colouring etc.

The wildlife is supposedly a food contributor of forest fringes. NTFPs also have massive commercial uses and have provided livelihoods and employment through its forward linkage in the secondary sector. For

example, *tendu* leaves (Diospyros melanoxylon) in India are used as raw materials of *bidi*, which is traded in the local and regional market. The NTFPs also produce some valuable export commodities like tannin, resin, various oils, honey, bark, etc. This experience shows that the local users of NTFPs had much more impact on poverty alleviation and sustainable forest management.

Apart from these tangible benefits that occur in the forms of provisioning services, forests provide some intangible benefits in the forms of regulating services like regulating local and global climate, protecting watersheds, arresting soil erosion, etc. as also supporting services like nutrient cycling, and as an important source of biodiversity (MA 2005; TEEB 2011; Jenkins and Schaap 2018). The critical importance of bio-diversity in food, health, and livelihood security is now widely known to the people.

The valuation and mapping of ecosystem services are needed to undertake the implementation of environmental legislation, to integrate biodiversity objectives with sectoral policies and the development, forest management, sustainable agriculture and fishing (Maes et al., 2014). Further, the valuation and mapping can also be utilized to identify priority areas for habitat restoration and conservation; and green infrastructure development.

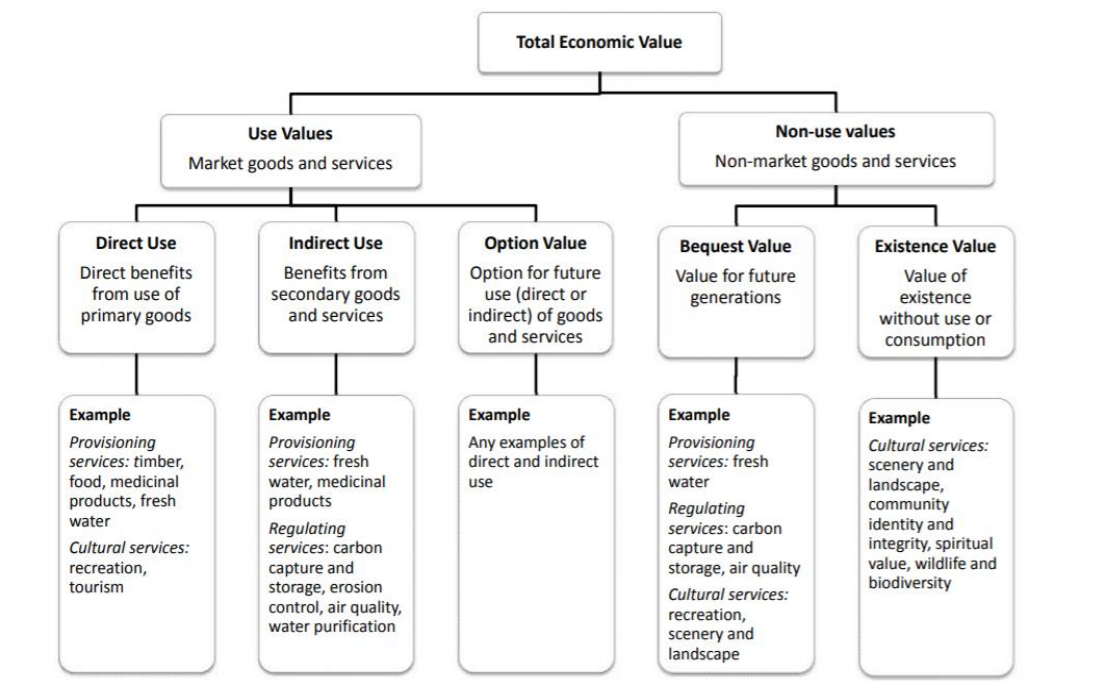
Importance Of Ecosystem Services And Total Economic Value

The value of the ecosystem service obtained from an environmental or natural resource or an ecosystem reflects on how important the resource or the ecosystem is to an individual or to a community, or to an economy, and therefore creates the imperative for conservation of the ecosystem for humanity in the longer run.

Total Economic Value (TEV)

Theoretically, the benefits flowing from a variety of direct and indirect ecosystem services, expressed in monetary terms, reflects on the total economic value (TEV). Some of these benefits are obtained through marketed goods and services (used directly or indirectly), while others provide non-market goods and services (value for future generations, or of purely existential value). TEV is divided into use value and non-use value (see Fig. 1). Use value is further divided into direct use value and indirect use value and option value. Again on the other side non-use value is sub divided into bequest value and existence value. Direct use values are derived when an individual makes actual use of a facility, for an example visiting a park, or, going to fishing etc.; indirect use value arises when we get the functional benefits such as, forest ecosystem etc., and option use value is an individuals willingness to pay (WTP) for the option of using an asset at some future date. Bequest value is derived from use and non-use values of environmental legacies, and existence value is value from knowledge of continued existence.

A variety of methods are used to estimate the monetary values of these ecosystem services. Some of these are straightforward to apply such as market price methods for calculating the value of direct use goods like timber; others such as replacement cost methods that estimate the 'opportunity benefits' e.g. using the cost of waste water treatment in the absence of an ecosystem that provides clean water. There also exist other "avoided cost" approaches in the forms of estimating the value on the basis of the cost of avoided damages due to the presence of the ecosystem such as flood control, strom surge regulation, coastal erosion caused due to absence of an ecosystem like the mangroves, etc. There are also others like the travel cost approaches, hedonic prcing methods, both of which are based on human's behaviour in real market situations, while there are also "hypothetical market" approaches that are essentially based on the "stated preference" approaches of utility theory in neoclassical economics.



Ecosystem services according to their valuation type

Key ecosystem services

The Odisha is a source of fruits, seeds and medicinal plants for the local population. The main resources collected include teak, neem, mahua, saal, beedi leaves and grass. Fruits and medicinal herbs are also sourced from the forest. Because of the newly planted forest, the availability of NTFPs in the forest is very Low in AR. Beedi leaf (used for wrapping traditional cigarettes), Mahua flower and seed, etc. are the important NTFPs available in the Odisha Forest. Both men and women collect these NTFPs from forest and sell them in the local market. Beedi leaf is sold to the Forest Department. No value addition is done for NTFPs like Mahua flower, is generally sold by the women in the retail market. Some of the medicinal plants are also extracted from the forest and sold to traders in Ranchi and other places.

A section of the local population depends on the forest for their livelihood via the extraction of fiber and fuels. However, availability of alternatives to fuelwood and fibers has brought down the collection. The local populations, especially the indigenous population, rely on the site derived biochemicals, natural medicines and pharmaceuticals for their livelihood, health, as well as the prevention of endemics.

The forest provides key regulating services in terms of site-based air quality regulation, climate regulation, water regulation (Water conservation, water quality and health maintenance), carbon sequestration, as well as regulation of natural hazards (storms, flooding, etc). Farmers and forest-based communities benefit from the enhanced forest and food productivity of the site-derived pest and disease regulation. The local population also benefits from erosion regulation that protects the vegetation cover and topsoil. The high magnitude benefit of pollination benefits everyone locally as well as regionally by supporting the richness in biodiversity.

In terms of cultural services, the forest provides the local population with avenues for eco-tourism and spiritual and religious tourism. Farmers and the local population, as well as everyone regionally benefit from the supporting services that occur on site. These include soil formation, primary production, nutrient cycling, and provision of habitat.

Methods of Valuation of ecosystem services in the context of the study

In this section, we talk of the methods that are proposed to be used in the context of the valuation of the various ecosystem services. Here, we want to take up the valuation of 22 selected ecosystem services that occur under the four classifications a> provisioning services in the forms of water for agriculture, water for urban-industrial use, food, medicinal plants, timber stock, timber flow, water for urban-industrial use, fuel, fodder, other NTFPs, and soil fertility; b> regulating services like water conservation, water purification, biological control, flood regulation and moderating extreme events, carbon sequestration, air pollution control, and erosion control; c> supporting services like gene-pool protection, pollination, habitat services of biodiversity; and d> cultural services like tourism and recreational values, and cultural and spiritual values. But due to non-availability of data ,we have estimated some of the items and provided the estimation procedure of other items, so that in future the department can do the valuation of forest ecosystem services.

- ***Water for agriculture: Production Function Approach***

One form of the multifunctional attributes of water is its contribution for agriculture. The production function approach will be considered for obtaining the estimate of the value of water in agriculture. The value of marginal product (VMP) of water is multiplied with the total water use to obtain the value of its contribution, i.e., the water provisioned for agriculture. It needs to be noted here that from an ecosystem service perspective, nature provides water through various sources: meteorological, hydrological, hydro-geological, etc. The marginal product of water is essentially reflected properly only when one takes the total water use, and not merely irrigation water. This model does not consider impacts of return flows, as that part is irrelevant from the perspective of total value of water provisioning service. It is being assumed in this framework that all water is provisioned from nature and reflects on the provisioning service.

The mathematical framework is as follows:

$Y_{ist} = \lambda . W_{ist}^{\ \alpha}$ ...(1)

Y_{ist} = production of the ith crop for season s in year t;

W_{ist} = Water use for the ith crop for season s in year t;

λ and α are the parameters.

Further, $W_{ist} = \omega_i . A_{ist}$ ... (2)

ω_i = Crop - Water Requirement for ith crop;

A_{ist} = Area under the ith crop for season s in year t;

The log - linear format of the production function is

$\ln Y_{ist} = \ln \lambda + \alpha . \ln W_{ist}$ ...(3)

$$or, \frac{\partial Y_{ist}}{\partial W_{ist}} = \alpha . \frac{Y_{ist}}{W_{ist}} = \frac{\alpha}{\omega} . \frac{Y_{ist}}{A_{ist}} \text{...(4)}$$

Estimate α from time - series data or through benefit transfer.

$$\text{Value of irrigation water will be} = \sum_i P_i . W_i . \frac{\partial Y_i}{\partial W_i} \text{...(5)}$$

The coefficients of slope and the intercept of the log-linear model will be estimated through an econometric fitting with fixed-effects panel data regression. The data considered will be those of the districts for the variables of production and area. Water-use estimates will be arrived at by multiplying area with crop-water requirement. This exercise will largely be based on secondary data from *Season and Crop Report,* Department of Economics and Statistics, of each state. Once the coefficients are

obtained, the slope coefficient of the log-linear model was multiplied with the average product of water to obtain the marginal product of water. This will firstly require considering the five most water-consuming crop in the landscape (in terms of crop-water information as per ICAR), and then taking data for the necessary econometric frameworks.

- ***Food and medicinal plants***

Generally, under the head of food, we will consider produced/harvested fruits, non-timber forest products and other forest based resources etc. The data will be obtained from questionnaire surveys. Ther market prices of these food items or their substitutes (surrogate markets) will be considered, and multiplied with the quantities to obtain the values of the various food items.

Even in the case of medicinal plants that are accessed free of cost by the communities, the same approach of valuation will be considered through surrogate market approaches.

- ***Timber flow and timber stock***

Flow of timber through licensed felling adds to the benefits. This value will be estimated with the local market price of timber by adjusting for for management and transportation costs. Further, the standing timber biomass represents the stock benefits. The same method of using the market prices and multiplying that by the quantity will give us the value of the timber stock.

- ***Water for urban-industrial use***

Since we will primarily consider the municipal water use, we will use the municipal operations and maintenance costs and add the economic cost of procurement and distribution per unit, and then add the environmental costs through benefit transfer approaches. Further, we propose to obtain the value of consumer surplus from past demand estimations for urban-industrial water as another application of benefit transfer, make the necessary adjustments with respect to the price subsidies offered by the municipality/ municipal corporation, and add the consumer surplus accordingly to the marginal costs (that are supposed to reflect the prices). The costs need to be adjusted with the Wholesale Price Index to arrive at the value of urban-industrial water.

- **Fuel, Fodder, other NTFPs, etc**

In case of each of the services like fuel, fodder, and various NTFPs we will collect primary data on quantities through unstructured interviews and questionnaire surveys. In case they are marketed, the market price will multiplied with the quantity, and if not marketed, surrogate market methods will be used to arrive at the values.

- ***Water conservation***

Water conservation can be stated to be a regulating service of the ecosystem, and reduces surface run-off. The value will be estimated through a combination of benefit transfer and surrogate market or alternative cost methods. While the amount of water conserved will be taken from past estimates in related sites, the economic cost of storage will be considered from alternative storage mechanisms that will entail the capital expenditure and the operations and maintenance costs.

- ***Gene-pool protection***

Gene-pool protection is a critical supporting service of the ecosystem. A meta-analysis will be conducted to obtain the value per area, and will be multiplied by the total landscape area to arrive at this value.

- ***Water purification***

Water purification is a regulating service of the ecosystem. This value will be obtained through estimation of water-use by obtaining population data from Census 2011, and making necessary projections, and then multiplying the population by average per capita water use in adjoining areas with data from municipality and local governments. In case certain data are not obtained, we will use average water per capita water consumtion estimates from various studies conducted in India.

- ***Biological Control***

Biological control is a very important regulating service of the natural ecosystems. They moderate the risk of spread of infectious diseases by regulating the populations of disease organisms, and agents that cause such diseases. Since site-specific studies for estimating the economic values are not available, the only options will be to go for benefit transfer mechanisms. The unit area values will be arrived at by deriving a mean value of various studies obtained through a meta-analysis, and will be multiplied by the total area to obtain the ecosystem service values.

- ***Pollination***

The role of forests in pollination as a supporting service of the ecosystem can be evaluated through meta-analysis only. This will entail obtaining means of estimates of the amount of pollination, getting alternate markets prices of creating pollinators, and multiplying them. The other way is through surrogate market methods, where essentially we look at alternate ways of increasing the quantity and quality of pollinator-dependent crops in absence of pollinators, and take those alternate costs. This will be decided in due course of conducting the exercise.

- ***Flood Regulation and moderating extreme events***

Forests help in regulating flood damages, by retaining excess rainwater, and preventing extreme run-offs. For estimating these, as stated earlier in section 5, we will consider the avoided costs of losses to property by taking the estimates of water retention capacity of the landscape and possible flooding scenarios without the forests. This has previously been conducted for Ghosh et al (2016) in other circumstances. Data not Available)

- ***Carbon Sequestration***

Carbon stock will be estimated with INVEST or otherwise in the ways as stated in section 5. The quantity will be multiplied with the price of carbon credits in voluntary markets or with VER credits. Though an underestimate as has been explained in later sections of this paper, this will give us an idea of the conservative estimate of the importance of carbon sequestration of these landscapes to humanity.

- ***Air Pollution control***

This study will consider SO2 and NOx, and consider past estimates on the control of pollutants, and multiply the same with prevailing prices of pollution control. This is akin to the surrogate market approach. This is another regulating service of the ecosystem.

- ***Soil fertility***

Forest vegetation increases the fertility of the land by adding nutrients. The impact is felt in agriculture. By considering the total area, and possible fertility enhancement capacity of the forest from existing estimates, we will arrive at the total fertility enhancement. This will be multiplied by the unit price of fertiliser to arrive at an estimate. (data not available)

- ***Tourism and other recreational values***

Travel cost method is proposed to be used here. A questionnaire survey, as proposed earlier, will be used to derive a tourism demand function. The sum of the average tourist spending and the consumer surplus will give us the value of the landscape from the perspective of tourism. If tourism purposes are found to be different for different respondents, multiple demand functions will be developed, and multiple values will be taken.

- ***Biodiversity as a habitat for species***

In a recent estimate by Costanza et al (2014), the value of the habitat services has been considered. Here, we will consider the benefit transfer approach, consider per unit value from existing literature base and multiply the same with the areas of the landscapes.

- ***Erosion Control***

Forests help in control of soil erosion. Had the forest been not there, basic erosion prevention techniques with plantations, shrubs, grass, mulch, etc needed to be put in place for controling erosion. Costs would have been incurred for that purpose. We will estimate the cost that would have been incurred in the process, and present that as the value of erosion control through the avoided cost approach because of the existence of the forest.

- ***Cultural and Spiritual Values***

Often, these services are difficult to be placed in the monetary metrics. The difficulty arises as often respondents feel that such services are irreplaceable and non-substitutable. However, "willingness-to-accept" measure for the loss of this service though it is apprehended that such a valuation might prove difficult (Data not Available)

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Value of Carbon Sequestration

	Landscape	Area	Forest Carbon in different categories of operation in Odisha State in different pools ((in '000 tonnes)						
			AGB in '000 tonnes	BGB in '000 tonnes	Total forest Carbon Biomass in '000 tonnes	CAMPA Treated Area (in ha)	Total forest carbon in Biomass per ha	Value of Carbon Sequestration (million INR)	Value of Carbon sequestration per hectare (000 INR)
AR	CA	2289.7	57.52	17.75	75.27	2289.7	32.87	182.91	79.88
	NPV	8360.32	210.01	64.82	274.83	8360.32	32.87	667.85	79.88
ANR With GAP	CA	12300.03	308.97	95.37	404.35	12300.03	32.87	982.56	79.88
	NPV	128526.95	3228.58	996.58	4225.15	128526.95	32.87	10267.13	79.88
ANR without GAP	CA	479	12.03	3.71	15.75	479	32.87	38.26	79.88
	NPV	39488	991.93	306.18	1298.12	39488	32.87	3154.42	79.88

Value of Growing Stock

		Forest Area in Ha	Growing Stock in Forest (Cum /ha)	Growing Stock in Tree outside Forest (Cum /ha)	Avg Growing Stock (CUM /Ha)	Total Growing Stock in Cum	Value of Timber in Forest (estimated at 45000/cum) in Rs	Value of Timber in Forest (estimated at 45000/cum) in million Rs
AR	CA	2289.7	45.22	11.91	28.565	65405.2805	2943237623	2943.237623

	NPV	8360.32	45.22	11.91	28.565	238812.5408	10746564336	10746.56434
ANR With GAP	CA	12300.03	45.22	11.91	28.565	351350.357	15810766063	15810.76606
	NPV	128526.95	45.22	11.91	28.565	3671372.327	165211754703.75	165211.7547
ANR without GAP	CA	479	45.22	11.91	28.565	13682.635	615718575	615.718575
	NPV	39488	45.22	11.91	28.565	1127974.72	50758862400	50758.8624

Value of Carbon Stock

	Landscape	Forest Carbon in the selected State in different pools (in '000 tonnes)							Total forest carbon in tonnes/ha	Value of Carbon Stock (million INR)	Value of Carbon stock per hectare (000 INR)
		Area in Ha	AGB in '000 tonnes	BGB in '000 tonnes	Deadwood in '000 tonnes	Litter in '000 tonnes	SOC in '000 tonnes	Total forest Carbon in '000 tonnes			
	Odisha	5215600	131015	40441	2252	7671	263451	444830	85.29	1080936.90	207.25
	Per ha forest carbon stock		0.03	0.01	0.00	0.00	0.05	0.085288837		0.21	0.00
AR	CA	2289.7	57.52	17.75	0.99	3.37	115.66	195.284771	85.29	474.54	207.25
	NPV	8360.32	210.01	64.82	3.61	12.30	422.30	713	85.29	1732.68	207.25
ANR With GAP	CA	12300.03	308.97	95.37	5.31	18.09	621.30	1,049	85.29	2549.19	207.25
	NPV	128526.95	3228.58	996.58	55.50	189.03	6492.17	10,962	85.29	26637.30	207.25
ANR without GAP	CA	479	12.03	3.71	0.21	0.70	24.20	41	85.29	99.27	207.25

	Landscape	Forest Carbon in the selected State in different pools (in '000 tonnes)							Total forest carbon in tonnes/ha	Value of Carbon Stock (million INR)	Value of Carbon stock per hectare (000 INR)
		Area in Ha	AGB in '000 tonnes	BGB in '000 tonnes	Deadwood in '000 tonnes	Litter in '000 tonnes	SOC in '000 tonnes	Total forest Carbon in '000 tonnes			
	NPV	3948	991.93	306.18	17.05	58.08	1994.62	3,368	85.29	8183.92	207.25
	Total	191444	4809.04	1484.43	82.66	281.57	9670.24	16327.95		39676.91	

Value of Air Pollution Control

	Division	Forest Area (in ha)	Total SO2 (in Kgs)	Total NO2 (in Kgs)	Total SO2 (in ton)	Total NO2 (in ton)	Price of SO2 in 2020	Price of NO2 in 2020	Total in Rs	Total in Million Rs
AR	CA	2289.7	24728.76	35719.32	25	36	2136499.258	5605249.768	7741749.026	7.74
	NPV	8360.32	90291.456	130420.992	90	130	7800942.254	20466297.66	28267239.91	28.27
ANR With GAP	CA	12300.03	132840.324	191880.468	133	192	11477051.57	30110818.14	41587869.71	41.59
	NPV	128526.95	1388091.06	2005020.42	1388	2005	119927385	314637575.5	434564960.5	434.56
ANR with out GAP	CA	479	5173.2	7472.4	5	7	446950.7554	1172605.424	1619556.179	1.62
	NPV	39488	426470.4	616012.8	426	616	36845911.13	96667730.64	133513641.8	133.51
	Total	191,444.00	2,067,595.20	2,986,526.40	2,067.60	2,986.53	178,634,739.92	468,660,277.17	647,295,017.09	647.30

Value of Genepool Protection

	CAMPA Evaluation Forest Type	Forest Area (in ha)	Value (million USD /year)	In Million Rs
AR	CA	2289.7	4.02	325.42
	NPV	8360.32	14.67	1188.19
ANR With GAP	CA	12300.03	21.58	1748.11
	NPV	128526.95	225.51	18266.56
ANR without GAP	CA	479	0.84	68.08
	NPV	39488	69.29	5612.13

Value of Water Purification

	CAMPA Evaluation Forest Type	Forest Area (in ha)	Population in 2022	total domestic water consumption (in litre/day)	total domestic water consumption (in litre/year)	10% of the total consumption (Nature support)	10% of the total consumption in Cum	Water Purification cost (in Rs)	Water Purification cost (in million Rs)
AR	CA	2289.7	618219	83459565	30462741225.00	3046274122.50	3046274.123	45694111.84	45.69
	NPV	8360.32	2257286.4	304733664	111227787360.00	11122778736.00	11122778.74	166841681.04	166.84
ANR With GAP	CA	12300.03	3321008.1	448336093.5	163642674127.50	16364267412.75	1636426 7.41	245464011.19	245.46
	NPV	128526.95	34702277	468480732 8	17099546745 37.50	1709954674 53.75	170995467.5	256493201 1.81	2564.93
ANR without GAP	CA	479	129330	17459550	6372735750.00	637273575.00	637273.575	9559103.63	9.56
	NPV	39488	10661760	143933760 0	525358224000.00	52535822400.00	5253582.4	788037336.00	788.04
	Total	191444	51689880	697813380 0	254701883700 0.00	254701883700.00	2547018 83.7	382052825 5.50	3820.53

Value of Timber, Fuel Wood and Non- Timber Forest Product

	Division	Forest Area (in ha)	value of Output of Industrial Wood(in lakhs) in 2022	value of Output of fuelwood (in lakhs) in 2022	value of Output of NTFPs (in lakhs) in 2022
AR	CA	2289.7	196.6462048	269.2318147	112.5514348
	NPV	8360.32	718.0089963	983.0388807	410.9560255
ANR With GAP	CA	12300.03	1056.362938	1446.285277	604.6145893
	NPV	128526.95	11038.27442	15112.69773	6317.811345
ANR without GAP	CA	479	41.13793601	56.3226795	23.54550259
	NPV	39488	3391.346174	4643.152334	1941.053876
	Total	191444	16441.77666	22510.72871	9410.532773

Value of Soil Conservation

	Division	Forest Area (in ha)	Total Value in Rs	Total Value in USD	Total value (million USD)	Total value (million Rs)
AR	CA	2289.7	73362182.19	905705.953	0.91	73.36
	NPV	8360.32	267865361.8	3306979.776	3.31	267.87
ANR With GAP	CA	12300.03	394094004.4	4865358.079	4.87	394.09
	NPV	128527	4118014378	50839683.68	50.84	4118.01
ANR without GAP	CA	479	15347200.62	189471.6126	0.19	15.35
	NPV	39488	1265198869	15619739.12	15.62	1265.20
	Total	191444	6133881997	75726938.23	75.73	6133.88

Value of water Conservation

	Division	Forest Area (in ha)	Total Value in USD	Total value (million USD)	Total value (million Rs)
AR	CA	2289.7	4733148.019	4.73	383.38
	NPV	8360.32	17282016.01	17.28	1399.84
ANR With GAP	CA	12300.03	25425978.35	25.43	2059.50
	NPV	128526.95	265684185.2	265.68	21520.42
ANR without GAP	CA	479	990163.7338	0.99	80.20
	NPV	39488	81627527.18	81.63	6611.83
	Total	191444	395743018.5	395.74	32055.18

Value of Eco-tourism

		Forest Area in hactare	value of Ecotourism in Rs in 2022	value of Ecotourism in Million Rs in 2020
AR	CA	2289.7	5503602.457	5.50
	NPV	8360.32	20095155.56	20.10
ANR With GAP	CA	12300.03	29564779.37	29.56
	NPV	128526.95	308931841.7	308.93
ANR without GAP	CA	479	1151341.039	1.15
	NPV	39488	94914728.5	94.91
	Total	191444	460161448.6	460.16

Value of Biological Control

		Forest Area	Total Value of Biological Control in USD	Total Value of Biological Control in Million USD	Value of Biological Control (million INR)
AR	CA	2289.7	3186037.983	3.186037983	258.07
	NPV	8360.32	11633094.76	11.63309476	942.28
ANR With GAP	CA	12300.03	17115064.32	17.11506432	1386.32
	NPV	128526.95	178840784.6	178.8407846	14486.10
ANR without GAP	CA	479	666511.8548	0.666511855	53.99
	NPV	39488	54946179.79	54.94617979	4450.64
	Total	191444	266387673.3	266.3876733	21577.40

Value of Pollination

		Forest Area	Total Value of pollianation in USD	Total Value of pollianation in Million USD	Value of Pollination (million INR)
AR	CA	2289.7	4914995.605	4.91	398.11
	NPV	8360.32	17945991.2	17.95	1453.63
ANR With GAP	CA	12300.03	26402844.65	26.40	2138.63
	NPV	128526.95	275891773.7	275.89	22347.23
ANR without GAP	CA	479	1028205.833	1.03	83.28
	NPV	39488	84763657.44	84.76	6865.86
	Total	191444	410947468.5	410.95	33286.74

Final valuation Sheet

Ecosystem Service	Value in Million Rs
	Odisha
Water for agriculture	Data Unavailable
Timber Standing Stock	2251.07
Fuel, fodder and other NTFPs	941.05
Water Conservation	32055.18
Water Purification	Data Unavailable
Carbon Stock	39676.91
Soil Fertility	Data Unavailable
Air Pollution Control	647.30
Erosion Control	6133.88
Recreational Value of Tourism	460.16
Biological Control	21577.40
Gene-pool Protection	68495.65
Pollination	33286.74
Total	205525.34

Annexure B

1. Annual Plan of Operations for 2017-18

ABSTRACT OF PHYSICAL ACTIVITIES & FINANCIAL OUTLAY OF CAMPA APO- 2017-18

Sl.No	Component of physical activities	Financial outlay *(Rs. In Cr)*
	CA, Addl. CA PCA, SZ, 1.5 SZ etc 1st Year Block Plantation – 734.64 Ha ANR (gap) – 2050.96 Ha. Bamboo Plnt. – 115.00 Ha. Agave Plntn. – 85.00 ha. Vetiver grass – 75.00 ha. Sapling Planting – 15959 Nos. Avenue – 30.348 RKM Median Plnt. – 5.531 RKM 2nd Year Maintenance Block Plantation – 79.697 ha. Baldhill – 152.00 Ha. ANR - 4609.26 ha. Avenue – 44681 nos. sapling Tree planting – 100 nos. sapling 3rd Year Maintenance Block Plntn. – 537.61 Ha. ANR – 3432.10 ha. Bald Hill – 168.00 ha. Avenue – 27350 saplings 4th Year Maintenance Block Plntn – 630.58 Ha. ANR – 3631.27 Ha.	

	Avenue – 35300 nos. saplings& 30.44 RKM 5th Year Maintenance Block Plantn. – 418.48 ha. ANR – 4754.01 ha.	
1	Avenue – 750 nos. saplings	25.19
2	Integrated Wildlife Management Plan	
	(i) Regional Wildlife Management Plan	0.73
	(ii) Site Specific Wildlife Conservation Plan in 53 Sites (11 new Sites plus 42 running sites)	30.00
	Total CA,PCA,& IWMP	55.92

	NPV		
Sl no	*Activity*	*Physical Target*	*Financial Outlay (Rs. in crore)*
A.1			
1.1	Block Plantation (P.O + creation)		
1.2	ANR @200 Plants (P.O + creation)	100000 Ha.	153.90
1.3	Bald Hill Plantation (P.O + creation)	1000 Ha.	7.15
1.4	Bamboo 400 Plantation (P.O + creation)		
1.5	Plantation of Fruit, Fodder (P.O work)		
	Sub-total		161.05
2	Regeneration of Degraded Bamboo	150000 ha.	32.02
Total New Plantation/ Bamboo SSO -			
3	Maintenance of old plantations		
3.1	ANR 200 plants/ha (3rd yr maintenance)	91431 Ha.	21.74
3.2	Bald Hill Plantation (3rd year maintenance)	1000 ha.	1.61
3.3	Bamboo Plantation 400 Plants (3rdyr Maintenance)	10088 ha.	0.57
3.4	ANR 4th year maintenance	43640 ha.	2.79
3.5	Maintenance of 13th FC Plantation		1.99

3.6	Sacred Groove 791 nos.		0.87
	Total Maintenance :		29.57
4	Protection		
(I)	*Forest Protection*		
(i)	Forest Protection Squads at vulnerable sites of 24 divisions	32 Sites	4.44
(ii)	Supporting activity		
(iii)	a. Division control room –		1.73
(iv)	b. Circle level control room		0.37
(v)	c. Control room at Forest Hqrs.		0.10
(vi)	d. TT of seize produced and expense on arrested accused		0.09
(vii)	e. Legal Charges		0.11
(viii)	f. Engagement of 1950 local personnel for 195 protection unit		20.60
	Sub- Total Forest *Protection*:		10.47
(II)	*Fire Protection*		
(i)	Fire Protection Squad (Nos)	216	10.48
(ii)	Creation & Maintenance of fire-line (KM)	*18500*	3.70
(iii)	Training on Fire Control		0.05
(iv)	Procurement of blower equipment, etc.		4.34
(v)	Awareness and incentives		0.50
	Sub-total Fire Protection		19.07
	Total Protection-		48.07
5	Wild Life Management		
(i)	Protection Activities like anti-depredation, WL	LS	32.53

	Trekkers, Coordination cells, fencing etc.		
(ii)	Fire Protection Activities in WL Divisions and PA (Fireline& Fire Squad with vehicle)	LS	11.00
(iii)	Voluntary relocation of villagers from Protected Areas and Tiger Reserves	LS	10.00
(iv)	Habitat Improvement like water bodies creation, meadow development, salt licks, immunization, Black buck conservation, etc	LS	10.41
(v)	SMC Works in Wildlife habitats	LS	1.00
(vi)	Establishment, Operation of animal rescue center and veterinary treatment facilities for Wild animals	LS	8.40
(vii)	Management of biological diversity and biological resources	LS	0.35
(viii)	Implementation of Elephant/train collision mitigation plan		0.33
	Total Wildlife Management		74.02
6	AmaJangalaYojana		
6.1	Preparation of Micro-Plan , Capacity Building, Publication and communication 500 VSS in 23 divisions	500 VSS	67.91
6.2	ANR without gap(0th year)	25,000 ha	
6.3	ANR without gap (1st year)	25,000 ha	
6.4	ANR without gap (2nd year)	105283 ha	
6.5	Block plantation (2ndyear)	1010 Ha.	

	Total AmaJangalaYojana		67.91
Total	(A)		412.64
B. I	*Infrastructure for Forest*		
(i)	Maintenance of Mega Nursery/Permanent Nursery	39	1.94
(ii)			
(iii)	Range Officer's Residence	33	4.04
(iv)	Forester Quarters	115	10.83
(v)	Forest Guard Quarters	217	14.84
(vi)	Construction, Up-gradation and maintenance of Forest Road (RKM)	1500 RKM	7.51
(vii)	Culvert	200	3.06
(viii)	Cause Way	200	2.12
(ix)	Boundary Wall (Rmtr.)	5000	2.50
(x)	Tube well	100	0.90
(xi)	Construction of common toilet	94 nos	1.92
(xii)	Creation of water-body	56 nos.	1.68
(xiii)	Infrastructure for training school & colleges	4 nos.	2.00
(xiv)	Managerial & logistic arrangement in Ranges(without vehicle)	212 ranges	9.90
(xv)	Managerial & logistic arrangement in Ranges(with vehicle)	33 nos.	2.53
	Sub Total		65.80
B.(II)	*Infrastructure for Wildlife*		
(i)	Strengthening of Communication facilities for Protection of Wildlife	LS	10.34
(ii)	Infrastructure Development like barracks, floating jetty, road maintenance	LS	11.07

	Sub Total		21.41
	TOTAL INFRASTRUCTURE DEVELOPMENT (BI + BII)		87.1
C	Research &Capacity Building of frontline staff	LS	5.06
	Monitoring Evaluation , Forest IT &Geomatics		
	Upgradation of Forest IT, Digitization of forest boundaries etc.	LS	2.30
	GIS related activities of PCCF Odisha audits, and account (Double Entry System) Third Party Monitoring & Evaluation	LS	3.00
	TOTAL RESEARCH, MONITORING & EVALUATION, FIT&G (C)		10.36

TOTAL NPV (A+BI+BII+C)			510.21
	TOTAL (CAPCA + IWMP +NPV) APO 2017-18		566.13
	INTEREST		
Sl no	*Activity*	*Phy. Target*	*Unit Cost*
	Construction of State Capacity Building Centre	LS	15.00
	Expenses of State Authority	LS	0.25
	Total Interest :		15.25

2. Annual Plan of Operations for 2019-20

ABSTRACT OF PHYSICAL ACTIVITIES & FINANCIAL OUTLAY OF CAMPA APO- 2019-20

Sl.No	Component of Work	Financial outlay *(Rs. In Cr)*
	CA, Addl. CA PCA, SZ, 1.5 SZ etc 1st Year : Block Plantation – 547.43 Ha ANR (gap) – 4448.21 Ha.	

	Canal Bank Plnt. – 31.1 RKM 2nd Year Maintenance Block Plantation – 222.82 ha. Baldhill – 48.25 Ha. ANR - 1984.04 ha. Avenue – 7000 nos. sapling Tree planting – 2300 nos. sapling 3rd Year Maintenance : Block Plntn. – 79.70 Ha. ANR – 4609.27 ha. Bald Hill – 152.00 ha. Avenue – 44681 saplings Tree plantation – 100 nos of saplings 4TH Year Maintenance : Block Plntn – 452.83 Ha. ANR – 3331.68 Ha. Avenue – 27300 nos. saplings Baldhill – 168.00 Ha. 5TH Year Maintenance : Block Plantn. – 561.40 ha. ANR – 3595.59 ha. Avenue – 30.44 RKM or 35382 nos. Saplings 6th Year Maintenance ANR – 4754.01 ha.	
2	Integrated Wildlife Management Plan	
	(iii) Regional Wildlife Management Plan	0.73
	(iv) Site Specific Wildlife Conservation Plan in 81 Sites (21 new Sites plus 60 running sites)	35.72
	Total CA,PCA,& IWMP	85.29

	NPV 80%		
Sl no	*Activity*	*Physical Target*	*Financial Outlay (Rs. in crore)*
1			
1.1.	Block Plantation (P.O + creation)	2000 Ha.	9.92
1.2	ANR @200 Plants (P.O + creation)	20000 Ha.	41.36
1.3	ANR in Foni Affected Area of Puri WL division	400 Ha.	0.97
1.4	Bamboo 400 Plantation (P.O + creation)	2000 Ha.	6.70
1.5	Avenue Plantation in Cuttack Divn. (JalaSakti Mission.	76 RKM	0.94
	Sub-total		59.89
2	Regeneration of Degraded Bamboo	72580 ha.	16.26
Total	New Plantation/ Bamboo SSO/ SMC-		
3	Maintenance of old plantations		
3.1	ANR 200 Plants/ha (2nd year Maintenance)	84930 ha.	63.47
3.2	Bald Hill Plantation (2nd year maintenance)	1000 Ha.	4.04
3.3	ANR 4th year maintenance	93121 Ha.	8.21
3.4	Bald Hill Plantation (4th year maintenance)	1000 Ha.	1.99
3.5	Bamboo Plantation (4th year maintenance)	10088	0.76
3.6	Pre Planting operation for 2020-21	LS	20.00
	Total Maintenance :		98.47
4	Protection		
(I)	*Forest Protection*		
4.1	Forest Protection Squads at vulnerable sites of 24 divisions	32 nos. squad	5.74
4.2	Supporting activity		
4.3	g. Division control room –		3.01
4.4	h. Circle level control room		
4.5	i. Control room at Forest Hqrs.		

4.6	j. Engagement of 1950 local personnel for 195 protection unit		26.91
	Sub- Total Forest *Protection*:		35.66
(II)	*Fire Protection*		
4.7	Fire Protection Squad (Nos)	216	12.96
4.8	Creation & Maintenance of fire-line (KM)	8000 km.	2.24
4.9	Procurement of blower equipment, and logistics etc.	LS	1.84
	Sub-total Fire Protection		17.04
	Total Protection-		54.15
5.	Wild Life Management		
(A)	Protection Activities		
(i)	Wildlife protection Squads.	90Nos.	16.15
(ii)	Mobility for Boats for patrolling/anti-depredation/anti-smuggling activities.	LS	0.80
(iii)	Search Seizure & Post-mortem of dead wild animals	LS	0.40
(iv)	Management of Protection Coordination Cell	15Nos.	0.97
(v)	Strengthening of wildlife crime cell, Elephant cell etc. at WL HQ. and in Crime branch of the state	1	0.15
(vi)	Maintenance of Boundary of protected Areas	LS	0.8
	Total (A):-		19.26
(B)	Forest Fire Prevention and Control operations		
(i)	Fire-fighting Squads	41Nos.	2.42
(ii)	Fire-fighting equipmentsincluiding Blowers	152Nos.	0.93
(iii)	Training to fire-fighting squads	11Nos.	0.02
(iv)	Personel Logistics for the fire fighting squads	41Nos.	0.35
(v)	Fire line Creation & maintenance	7250KM	2.03

	Total (B):		5.74
(C)	Anti-depredation Activities		
(i)	Anti-depredation Squads	84Nos.	15.07
(ii)	Engagement of Tracker	90Nos.	2.50
(iii)	Anti-depredation equipments/Tracking devices	LS	1.00
(iv)	Compassionate Payment	LS	1.10
(v)	Fencing and Erection of barriers, Round Rubble Wall, Solar Fencing, trench etc. including maintenance.	LS	9.00
(vi)	Implementation of Elephant-Train collision mitigation plan	3LS	0.18
	Total (C):		28.85
(D)	Voluntary Relocation of Villages from Protected Areas and Tiger reserves	2Nos.	15.71
	Total (D):		15.71
(E)	Habitat Improvement		
(i)	Creation of water body (40m x 30m x 3m)	81Nos.	4.54
(ii)	Maintenance of Water Body created during previous years.	188Nos.	1.71
(iii)	Plantation of Fruit Bearing and Fodder species around water bodies and maintenance thereof.	11750Plant in Nos	0.56
(iv)	Second year maintenance of plantation of Fruit & Fodder species around water bodies	11650Plant in Nos	0.24

(v)	Third year maintenance of fruit & Fodder species around water bodies.	5250Plant in Nos	0.08
(vi)	Third year maintenance of Plantation of fruit bearing forestry species.	978Plant in Nos	0.01
(vii)	Fodder block plantation & its maintenance	50Ha	0.29
(viii)	Second year maintenance of fodder block plantation	17Ha	0.02
(ix)	Third year maintenance of Fodder& block plantation.	30Ha	0.03
(x)	Rejuvenation of Wildlife corridor	6Ha	0.03
(xi)	Third year maintenance of plantation taken up under rejuvenation of wildlife corridors	30Ha	0.03
(xii)	Creation and maintenance of salt licks.	50Nos.	0.25
(xiii)	Immunisation of cattle.	LS	0.30
(xiv)	Invasive weed eradication.	3731Ha	3.13
(xv)	Meadow development.	692Ha	3.39
(xvi)	Black Buck Conservation	4Nos.	0.70
(xvii)	Any Others	17	0.14
	Total (E):		15.48
(F)	SMC in Wildlife Habitat		
(i)	LBCD	2575Cum	1.64
(ii)	Staggard trench	1185Ha.	1.99
(iii)	Percolation Pit.	600Ha.	1.07
	Total (F):		4.70
(G)	Implementation of Action Plan for Soil Moisture Conservation Measures	10Nos.	1.00
	Total (G):		1.00

(H)	Establishment, operation and maintenance of animal rescue centre and veterinary treatment facilities for wild animals:		
(i)	Maintenance of Nandankanan WLS & Biological park & Other Rescue Centre.	8LS	3.20
(ii)	Maintence of Nandankanan Zoos hospital	1LS	0.15
(iii)	Establishment of Rescue Centre and Veterinary treatment facilities.	8LS	1.18
(iv)	Maintenance of Rescue Centre	5LS	0.18
	Total-(H):		4.71
(I)	Supply of wood-saving cooking appliances		
(i)	Distribution of fuel saving devices like Unnatchullas, Solar cookers/ lamps etc to the villagers around Protected Areas.	7094	1.42
	Total (I):		1.42
(J)	Management of biological diversity and biological resources.		
(i)	Biodiversity Assessment of the Protected Areas.	1LS	0.10
	Total (J):		0.10
	Total Wildlife Management (A to J)		96.98
7	AmaJangalaYojana		
7.1	Preparation of Micro-Plan , Capacity Building, Publication and communication 500 VSS in 23	540 VSS	

	divisions		
7.2	ANR without gap(0th year)	27,000 ha	81.57
7.3	ANR without gap (1st year)	25,000 ha	
7.4	ANR without gap (2nd year)	25,000 ha	
	ANR without gap (3rd year)	105283	
7.5	Block plantation (3rdyear)	1010 Ha.	
	Total Ama JangalaYojana		81.57
	Total NPV 80%		407.32
8.	NPV 20%		
(I)	*Infrastructure for Forest*		
(i)	Maintenance of Mega Nursery/Permanent Nursery	39	3.88
(ii)	Range Officer's Residence	30	3.67
(iii)	Forester Quarters	75	7.06
(iv)	Forest Guard Quarters	200	13.68
(v)	Construction, Up-gradation and maintenance of Forest Road (RKM)	1000 RKM	5.00
(vi)	Culvert	138	2.45
(vii)	Cause Way	234	2.48
(viii)	Managerial & logistic arrangement in Ranges(without vehicle)	212 ranges	7.63
(ix)	Managerial & logistic arrangement in Ranges(with vehicle)	70 nos.	2.32
	Research		2.85
	Sub Total		51.02
(II)	*Infrastructure for Wildlife*		
(i)	Strengthening of Communication facilities for Protection of Wildlife	LS	4.78

(ii)	Infrastructure Development like barracks, floating jetty, road maintenance	LS	10.00
(iii)	Forest Road Repair	753 RKM	5.20
(iv)	RCC Bridge at Patbil of STR & culvert in Debrigarh WLS	LS	1.00
(v)	Communication & IT	LS	0.15
	Sub Total		21.13
	TOTAL INFRASTRUCTURE DEVELOPMENT		72.15
10			
10.1	Capacity Building of frontline staff	LS	7.76
11	Monitoring Evaluation , Forest IT &Geomatics		
11.1	Upgradation of Forest IT, Digitization of forest	LS	15.00

	boundaries etc.		
	Monitoring & Evaluation	LS	5.00
	TOTAL MONITORING & EVALUATION, FIT&G		27.76
12	TOTAL NPV (20%)		99.91
TOTAL NPV (80% + 20%)			507.27
	INTEREST		
Sl no	*Activity*	*Phy. Target*	*Unit Cost (@ Rs.298/day)*
14	CAMPA Capacity Building Centre	LS	10.00
15	Expenses of State Authority	LS	4.00
	Accounting	LS	2.00
	Development of State Authority Office	LS	2.00
	Total Interest		18.00

Grand Total (NPV + Interest + CAPCA/IWMP) of APO 2019-20		610.56

3. Annual Plan of Operations for 2020-21

ABSTRACT OF PHYSICAL ACTIVITIES & FINANCIAL OUTLAY OF CAMPA APO 2020-21

Sl.No	Component of Work	Financial outlay (Rs. In Crore)
	CA, Addl. CA PCA, SZ, 1.5 SZ etc 1st Year : Block Plantation – 240.87 Ha ANR (gap) – 2681.077 Ha. ANR (without gap) – 458.68 ha. Bald Hill – 974.72 Ha. Sapling Planting – 5050 Nos. 2nd Year Maintenance Block Plantation – 268.56 ha. Baldhill – 383.25 Ha. ANR - 4585.88 ha. Canal Bank Plnt. – 31.1 RKM 3rd Year Maintenance Block Plntn. – 222.82 Ha. ANR – 1984.05 ha. Bald Hill – 48.25 ha. Avenue – 7000 saplings Tree Planting – 2300 nos. saplings 4th Year Maintenance Block Plntn – 76.46 Ha. ANR – 2930.78 Ha. Bald Hill – 152 Ha. Tree Planting – 100 nos. saplings Avenue – 44681 nos. saplings	

	5th Year Maintenance : Block Plantn. – 444.28 ha. ANR – 3284.59 ha. Baldhill – 168.6 Ha. Avenue – 27300 nos. saplings 6th Year Maintenance: Block Pltn. – 524.02 ha. ANR – 3516.65 Ha.	
1	Avenue – 30.44 RKM	75.01
2	Integrated Wildlife Management Plan	
	(i) Regional Wildlife Management Plan	5.00
	(ii) Site Specific Wildlife Conservation Plan in 83 Sites (9 new Sites plus 74 running sites)	31.42
	Total CA,PCA,	111.43

80% NPV

Sl no	*Activity*	*Physical Target*	*Unit Cost (@ Rs.298/day (Rs. in lakh)*	*Financial Outlay (Rs. In Cr)*
1				
1.1.	Block Plantation (P.O + creation)	1500 ha	0.86336	12.95
1.2	ANR @200 Plants (P.O + creation)	40000 ha	0.26962	107.85
1.3	Bald Hill Plantation (P.O + creation)	1000 ha	2.16340	21.63
1.4	Bamboo 400 Plantation (P.O + creation)	1000 ha	0.48857	4.89
1.5	Plantation of Fruit, Fodder (P.O work)	550 ha	0.34376	1.89
	Sub-total	44050 ha		149.21
2	Regeneration of Degraded Bamboo	75000 ha	0.02384	17.88
3	SMC works in 20 Divisions	6650 ha	0.31000	20.62

Total	New Plantation/ Bamboo SSO/ SMC-			187.71
4	Maintenance of old plantations			
4.1	Block Plantation (2nd year Maintenance)	2000 ha	0.28773	5.76
4.2	ANR 200 Plants/ha (2nd year Maintenance)	20100 ha	0.07871	15.82
4.3	Bamboo Plantation 400 Plants (2nd yr Maintenance)	1930 ha	0.20277	3.91
4.4	ANR 200 plants/ha (3rd yr maintenance)	85430 ha	0.03339	28.52
4.5	Bald Hill Plantation (3rd year maintenance)	1000 ha	0.23367	2.34
4.6	Avenue Plantation (2nd year maintenance) (RKM)	76 RKM	0.56494	0.43
4.7	18 month seedling (another 6months) Rs.13.10/seedling	44,12,000 Nos.	0.000131	5.78
	Total Maintenance :			62.56
5	Protection			
(I)	*Forest Protection*			
5.1	Forest Protection Squads	32		6.16
	Sub- Total Forest *Protection*:			6.16
(II)	*Fire Protection*			
5.5	Fire Protection Squad (Nos)	216	4.47	9.66
5.6	Transportation(Mobility) for Squad	216	2.10	4.53
5.7	Creation & Maintenance of fire-line (KM)	*19500*	*0.0298*	*5.81*
5.8	*Logistics & contingency for squads*	216	0.85	1.84
	Sub-total Fire Protection			21.84

	Total Protection-			28.00
6	Wild Life Management			
6.1	Protection Activities like anti-depredation, WL Trekkers, Coordination cells, fencing etc.	LS		49.32
6.2	Fire Protection Activities in WL Divisions	LS		6.47
6.3	Voluntary relocation of villagers from Protected Areas and Tiger Reserves	LS		10.00
6.4	Habitat Improvement like water bodies creation, meadow development, salt licks, immunization, Black buck conservation, etc	LS		18.61
6.5	SMC Works in Wildlife habitats	LS		6.42
6.6	Establishment, Operation of animal rescue center and veterinary treatment facilities for Wild animals	LS		9.50
6.7	Supply of wood-saving cooking appliances and other forest produce saving devices in forest fringe villages	LS		0.50
6.8	Management of biological diversity and biological resources	LS		0.25
	Total Wildlife Management			101.07
7	AmaJangalaYojana			
7.1	Preparation of Micro-Plan , Capacity Building, Publication and communication	580 VSS	L.S	3.49

7.2	ANR without gap(0th year)	65,500 ha	0.03032	19.86
7.3	ANR without gap (1st year)	27,000 ha	0.12518	33.80
7.4	ANR without gap (2nd year)	27,000 ha	0.03974	10.73
7.5	ANR without gap (3rd year)	27,700 ha	0.01292	03.58
7.6	Block plantation (4th year)	1010 ha	0.05364	0.54
	Total AmaJangalaYojana			72.00
8.1	SOWING OF BAMBOO SEEDS			0.25
8.2	MIYAWAKI PLANTATION			1.30
8.3	*Protection and Conservation of Pure Strand & RET Species*	85 ha. @ 200 plant/ Ha.	0.43594	2.38
	-DO -	799 ha. without plantation	0.25112	
8.4	PARA PROTECTION SQUAD (NOS.)	195	14.52	28.31
	Total 80% NPV			483.58
NPV 20%				
(I)	*Infrastructure for Forest*			
9.1	Maintenance of Mega Nursery/Permanent Nursery	39	3.98	1.55
9.2	Construction of Range Office	25	19.38	4.85
9.3	Range Officer's Residence	35	14.54	5.08
9.4	Forester Quarters	100	11.19	11.19
9.5	Forest Guard Quarters	200	8.12	16.24
9.6	Seizure Yard	2	12.00	0.24
9.7	Construction, Up-gradation and	1000	0.69	6.90

	maintenance of Forest Road (KM)			
9.8	Culvert	32	1.53	0.49
9.9	Cause Way	61	1.06	0.65
9.10	Boundary Wall (Rmtr.)	15000	0.05	7.50
9.11	Tube well	132	1.00	1.32
	Sub Total			56.01
(II)	*Infrastructure for Wildlife*			
9.12	Strengthening of Communication facilities for Protection of Wildlife	LS		5.25
9.13	Infrastructure Development like barracks, floating jetty, road maintenance	LS		10.93
	Sub Total			16.18
	TOTAL INFRASTRUCTURE DEVELOPMENT			72.19
10				
10.1	Capacity Building of frontline staff	LS		1.00
10.2	Awareness, capacity building in WL	LS		0.75

	Management			
	TOTAL CAPACITY BUILDING			1.75
11	Monitoring Evaluation , Forest IT &Geomatics			
11.1	Upgradation of Forest IT, Digitization of forest boundaries etc.	LS		20.00
11.2	e-Green Watch, CAMPA Trekker, monitoring, Data management and	LS		05.00

	analysis , third party monitoring, financial monitoring, etc			
11.3	Monitoring & Evaluation for WL Management	LS		0.50
TOTAL MONITORING & EVALUATION				5.50
12	RAISING OF PLANTING STOCK & ORCHIDARIUM			
12.1	ORCHIDARIUM	1 site		0.30
12.2	RAISING OF ROOT TRAINER SEEDLINGS (300 CC=75000 NOS., 500CC = 75000 NOS.	11 nos	20.00	2.20
12.3	RAISING OF 18 MONTHS OLD SEEDLINGS FOR 2021-22 PLANTATION(OUTLAY FOR 12 MONTHS UNDER APO 2020-21)	2Cr	0.0001832	36.64
12.4	RAISING OF 6 MONTHS OLD SEEDLINGS FOR DISTRIBUTION DURING 2020-21	1 Cr	0.000131	13.10
	Sub-total			52.24
	Total NPV 20%			151.68
TOTAL NPV (80% + 20%)				635.26
Activities under Interest				
Sl no	*Activity*	*Phy. Target*	*Unit Cost (@ Rs.298/day)*	*Financial Outlay (Rs. in Crore)*
INTEREST 60%				

13	Offsetting of the escalated expenditure due to wage rate enhancement	LS	LS	3.00
	Total Interest 60% -			3.00
	INTEREST 40%			
14	Construction of State Capacity Building Centre	LS	LS	15.00
15	Expenses of State Authority	LS	LS	5.00
	Research (Silvi BBSR)	L.S		1.20
16	Research (SilviRayagada)	L.S		1.00
17	Research In Wl Habitats & Biodiversity			01.50
	TOTAL RESEARCH			03.70
	Total Interest 40%			23.70
	Total Interest (60% + 40%)			26.70
TOTAL (NPV + Interest)				661.96
Grand Total (NPV + Interest + CAPCA/IWMP) of APO 2020-21				773.39

4. State level report of physical and financial achievements for 2017-18

FINAL VERIFICATION STATE CAMPA ANNUAL PLAN OF OPERATION 2017-18

Name of Division	WORKING PLAN PRESCRIPTION AND PLANTATION Rs. in lakhs													
	Regeneration of Degraded Bamboo Forests (as per site specific) /Ha		3rd Year Bamboo Plantation @ Rs.0.00682 lakhs/Ha in 50 plant / ha		ANR(creation) Over 1,00,000 ha RWC @ Rs.0.1638075 lakhs/ha in 200 plant		ANR (3rd year Maintenance) over 83121 ha @ Rs.0.02336 lakhs/ha		ANR (4th year Maintenance) over 43840 ha @ Rs.0.008405 lakhs/ha		Creation for Bald hill Plantation @ Rs.0.7148625 lakhs /ha		3rd year Maintenance of Bald hill Plantation @ Rs.0.160865 lakhs /ha	
	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Angul	2822	63.10	0	0.00	1500	229.80	2200	45.77	550	3.52	0	0.00	0	0.00
Athmallik	2000	13.05			500	76.95	300	9.95	500	1.05	0	0.00	0	0.00
Satkosia WL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Dhenkanal	500	1.25	1500	8.45	3000	477.94	3000	68.78	1100	7.78	0	0.00	0	0.00
Athagarh	1150	32.20	0	0.00	1925	312.27	3000	70.50	1400	8.94	0	0.00	0	0.00
Cuttack	0	0.00	0	0.00	1950	294.07	2300	56.61	1190	9.22	100	77.18	50	8.64
Mahanadi WL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	**6472**	**109.59**	**1500**	**8.454**	**8875**	**1391.03**	**10800**	**251.612**	**4740**	**30.52**	**100**	**77.18**	**50**	**8.64**
Khurda	0	0.00	300	1.66	1000	155.37	1000	23.18	800	4.26	50	35.93	50	7.64
Puri WL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Rajnagar WL	0	0.00	0	0.00	390	60.00	0	0.00	0	0.00	0	0.00	0	0.00
Nayagarh	0	0.00			4720	728.86	5000	101.62	2150	13.59	50	36.04	40	6.14
Chilika WL	0	0.00	0	0.00	200	30.78	0	0.00	0	0.00	0	0.00	0	
Chandaka WL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
City Forests	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Bhadrakh WL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	**0**	**0.00**	**300**	**1.663**	**6310**	**975.00**	**6000**	**124.81**	**2950**	**17.85**	**100**	**71.97**	**90**	**13.78**
Phulbani	4400	112.36	0	0.00	5000	769.71	5000	116.62	2150	13.76	0	0.00	0	0.00
Baliguda	6000	102.79	0	0.00	4000	659.32	3500	93.14	1150	8.91	0	0.00	0	0.00
Boudh	7500	78.75	0	0.00	1500	229.02	1500	34.37	1450	8.52	0	0.00	0	0.00
Gh.South	0	0.00	0	0.00	1430	218.55	4500	104.25	1500	9.61	0	0.00	30	4.43
Gh.North	2000	7.45	0	0.00	940	148.59	1900	46.06	750	5.74	0	0.00	0	0.00
Berhampur	0	0.00	0	0.00	1650	269.57	3000	78.18	600	4.63	75	57.31	100	19.76
Parlakhemundi	0	0.00	0	0.00	3000	482.16	1200	13.66	960	2.36	0	0.00	0	0.00
TOTAL	**19900**	**301.34**	**0**	**0**	**17520**	**2776.93**	**20600**	**486.287**	**8560**	**53.53**	**75**	**57.31**	**130**	**24.19**
Jharsuguda	290	3.05	0	0.00	1000	152.99	900	19.72	750	4.80	0	0.00	0	0.00
Sambalpur	4000	48.83	0	0.00	2500	377.16	1050	21.56	1000	8.44	0	0.00	0	0.00
Rairakhol	2800	38.49	0	0.00	1500	227.15	800	15.36	800	4.87	0	0.00	0	0.00
Bargarh	8000	26.22	0	0.00	2000	302.74	3500	79.93	1750	11.02				
Bamara WL	5500	55.13	0	0.00	1000	153.91	0	0.00	50	0.32	0	0.00	0	0.00
Hirakhud WL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	**20590**	**173.72**	**0**	**0.00**	**8000**	**1213.95**	**6250**	**136.57**	**4350**	**29.44**	**0**	**0.00**	**0**	**0.00**
Sundargarh	1509.4	25.14	3000	18.55	5000	809.92	5000	122.97	2150	11.60	75	53.56	50	7.98
Rourkela	0	0.00	0	0.00	2500	369.61	4000	86.12	1700	10.54	75	49.12	100	12.17
Bonai	1490.8	7.93	0	0.00	500	78.92	0	0.00	1200	8.06	0	0.00	0	0.00
Deogarh	0	0.00	580	3.26	600	92.34	1500	33.91	800	5.12	0	0.00	0	0.00
Keonjhar	0	0.00	0	0.00	700	103.34	1731	34.19	1310	8.37	0	0.00	20	3.25
TOTAL	**3000.2**	**33.07**	**3580**	**21.81**	**9300**	**1454.12**	**12231**	**277.182**	**7160**	**43.70**	**150**	**102.68**	**170**	**23.41**
Baripada	0	0.00	0	0.00	1000	153.91	2000	46.70	1500	9.61	0	0.00	50	6.43
Karanjia	0	0.00	0	0.00	500	76.95	1000	23.35	500	3.20	0	0.00	0	0.00
Rairangpur	0	0.00	0	0.00	500	66.31	1400	20.08	500	1.01	0	0.00	0	0.00
Balasore WL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Keonjhar WL	0	0.00	0	0.00	1500	230.86	3000	70.05	1400	8.97	0	0.00	40	6.43
STR	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	**0**	**0**	**0**	**0**	**3500**	**528.03**	**7400**	**160.179**	**3900**	**22.79**	**0**	**0.00**	**90**	**12.87**
Kalahandi(N)	14000	233.24	0	0.00	5000	776.81	5000	114.88	1650	10.57	75	53.39	50	7.98
Kalahandi (S)	1500	27.59	0	0.00	4000	654.57	4000	81.21	1700	12.59	50	36.97	50	8.26
Subarnapur	350	4.27	0	0.00	2000	307.82	2000	46.70	1700	10.89	75	53.62	50	8.04
Bolangir	4500	28.85	0	0.00	4000	615.63	6000	140.10	2100	13.45	75	53.62	50	8.35
Kharlar	3000	9.66	0	0.00	3000	490.01	3000	64.15	1400	9.15	75	54.90	50	8.10
Sunabeda WL	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	**23350**	**303.61**	**0**	**0**	**18000**	**2844.84**	**20000**	**447.04**	**8550**	**56.65**	**350**	**252.50**	**250**	**40.73**
Rayagada	0	0.00	0	0.00	5000	778.08	4600	100.85	650	4.15	50	28.76	60	9.62
Koraput	767.74	13.23	2900	16.31	2000	308.02	3600	84.02	500	3.36	100	71.27	100	15.69
Jeypore	2000	27.33	100	0.56	400	61.46	600	14.01	680	4.36	25	17.87	20	3.23
Nabarangpur	0	0.00	0	0.00	6000	916.98	0	0.00	500	3.70	0	0.00	0	0.00
Malkangiri	14000	219.52	0	0.00	500	76.95	1000	23.35	1100	7.05	0	0.00	0	0.00
TOTAL	**16768**	**260.08**	**3000**	**16.87**	**13900**	**2141.49**	**9800**	**222.227**	**3430**	**22.62**	**175**	**117.90**	**180**	**28.53**
Silva BBSR	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Silva Rayagada	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PCCF Odisha	0	0					0							0
P.D.OFSDP														
Dy Dir NKZP														
G.TOTAL	**90080**	**1181.42**	**8380**	**48.79**	**85405**	**13325.39**	**93081**	**2105.9**	**43640**	**277.1**	**950**	**679.53**	**960**	**152.142**

FINAL VERIFICATION STATE CAMPA ANNUAL PLAN OF OPERATION 2017-18

WORKING PLAN PRESCRIPTION AND PLANTATION Rs. In lakhs

	4th year Maintenance of Blook Plantation under Incide W.P. raised under 13 F.C. @ Rs.0.03843/ha		4th year Maintenance of Blook Plantation under outside W.P. raised under 13 F.C. @ Rs.0.03843/ha		2nd year & 3rd year maintenance of Sacred Groves.	Preliminery operation for Blook Plantation @ Rs.0.32488/Ha		Preliminery operation for ANR Plantation @ Rs.0.04788/Ha		Preliminery operation for Bamboo (400 Pl) @ Rs.0.13120/Ha		Total W.P.P. & Plantation
	Phy	Fina	Phy	Fina	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Finanolal
	16	17	18	19	20	21	22	23	24	25	26	27
An	0	0.00	0	0.00	1.33	0	0.00	500	23.84	70	9.18	376.54
Ath	0	0.00	0	0.00	0	0.00	0	50	1.42	0	0.00	102.41
Sa	0	0.00	0	0.00	0.00	0	0.00	0	0.00	0	0.00	0.00
Dh	150	[illegible]4.44	100	3.36	0.00	100	31.80	500	22.63	70	8.78	637.22110
Ath	50	[illegible]1.92	25	0.96	0.00	0	0.00	500	23.80	70	9.09	459.68859
Cu	0	0.00	0	0.00	0.00	70	22.74	500	23.94	0	0.00	492.39
Ma	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TO	**200**	**8.36**	**125**	**4.32**	**1.33**	**170**	**54.54**	**2050**	**95.63**	**210**	**27.05**	**2068.25**
Kh						100	31.20	500	23.22	0	0.00	282.46980
Pu	0	0.00	0	0.00	0	20	6.50	0	0	0	0	6.50
Ra	0	0.00	0	0.00	0.00	0	0.00	0	0.00	0	0.00	60.00
Na	0	0.00	200	7.45	0.00	90	29.23	500	23.86	70	9.00	955.78
Ch	0	0.00	0	0.00	0.00	0	0.00	200	9.58	0	0.00	40.36
Ch	0	0.00	0	0.00	0	0	0	0	0	0	0	0.00
Cl	0	0.00	0	0.00	0	0.00	0	50	1.26824	0.00	0	1.27
Bh	0	0.00	0	0.00	0	0	0	0	0	0	0	0.00
TO	**0**	**0.00**	**200**	**7.45**	**0.00**	**210**	**66.93**	**1250**	**57.93**	**70**	**9.00**	**1346.38**
Ph	50	[illegible]1.92	40	1.54	0.00	0	0.00	800.00	36.48	70	8.75	1061.13857
Bal	100	[illegible]3.55	40	1.82	0.00	20	6.50	800.00	38.30	70	9.18	924.51789
Bo	30	[illegible]1.35	165	6.47	0.08	100	32.49	500	23.94	70	9.18	424.17298
Gh	0	0.00	120	4.60	0.00	100	32.38	500	23.89	70	9.15	406.85486
Gh	0	[illegible]0.00	60	2.69	0.00	0	0.00	500	23.88	70	8.90	243.31909
Be	50	[illegible]2.23	50	2.27	0.00	30	9.75	500	23.94	60	7.87	475.51739
Pa	0	[illegible]0.00	0	0.00	0.00	0	0.00	600	27.19	0	0.00	525.37064
TO	**230**	**10.05**	**475**	**19.39**	**0.08**	**250**	**81.11**	**4200**	**197.63**	**410**	**53.04**	**4060.89**
Jha	0	[illegible]0.00	50	1.92	0.00	50.00	16.24	500	23.94	60.00	7.87	230.53659
Sa	0	[illegible]0.00	25	0.96	0.00	0.00	0.00	500	22.68	70.00	8.92	488.54
Ra	0	[illegible]0.00	40	1.20	0.06			500	23.87	70	8.83	319.83770
Ba	50	[illegible]1.92	325	12.33	3.53	55	17.87	200	9.58	60	7.87	475.00521
Ba	0	[illegible]0.00	0	0.00	0	0.00	0	400	19.15	70.00	8.9925	237.50
Hir	0	[illegible]0.00	0	0.00	0	0.00	0	0	0	0.00	0	0.00
TO	**50**	**1.92**	**440**	**16.41**	**3.59**	**105**	**34.11**	**2100**	**99.22**	**330**	**42.49**	**1751.42**
Su	0	[illegible]0.00	0	0.00	2.07	100	30.94	500	22.14	70	8.75	1113.61102
Ro	100	[illegible]3.77	200	7.65	0.00	30	8.71	500	23.59	0	0.00	571.29177
Bo	0	[illegible]0.00	0	0.00	0.08	40	12.99	500	23.86	70	9.18	141.02915
De	0	[illegible]0.00	50	1.92	1.07	100	30.53	500	23.94	70	9.06	201.15199
Ke	0	0.00	0	0.00	4.18	0	0.00	500	22.73	0	0.00	176.06383
TO	**100**	**3.77**	**250**	**9.58**	**7.40**	**270.00**	**83.17**	**2500**	**116.26**	**210**	**26.99**	**2203.15**
Ba	0	[illegible]0.00	100	3.84	4.69	50	16.24	500	23.94	0	0.00	265.35867
Ka	150	[illegible]5.76	0	0.00	15.04	100	32.49	500	23.94	0	0.00	180.726
Ra	0	[illegible]0.00	20	0.58	0.00	0	0.00	50	2.39	0	0.00	90.37
Ba	0	0.00	50	0.56	0	0.00	0	0.00	0	0.00	0	0.56
Ke	0	[illegible]0.00	0	0.00	2.56	0	0.00	500	23.94	0	0.00	342.81
ST	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TO	**150**	**5.76**	**170**	**4.97**	**22.29**	**150.00**	**48.73**	**1550**	**74.21**	**0**	**0.00**	**879.82**
Ka	30	1.14	50	1.90	0.00	45	13.92	800	36.48	70	8.75	1259.05
Ka	250	[illegible]9.04	50	1.92	2.93	100	30.94	800	35.41	70	8.74	911.17
Su	120	[illegible]4.61	30	1.15	0.00	100	32.49	500	23.94	70	9.18	502.71
Bo	500	19.22	125	4.80	1.72	100	32.49	500	23.94	70	9.18	951.34863
Kh	250	[illegible]9.44	100	3.31	1.52	100	30.94	800	35.62	70	8.75	725.54386
Su	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TO	**1150**	**44.45**	**355**	**13.07**	**6.17**	**445**	**140.78**	**3400**	**155.39**	**350**	**44.60**	**4349.82**
Ra	200	[illegible]7.38	0	0.00	0.00	0	0.00	500	29.62	70	8.72	967.17745
Ko	400	15.53	40	1.22	13.63	100	32.49	500	23.94	70	9.18	607.88884
Je	100	3.84	50	1.92	0.08	100	32.49	500	23.94	70	9.18	200.26865
Na	0	[illegible]0.00	150	5.59	1.26	100	23.14	500	30.86	0	0.00	981.52499
Ma	270	10.38	75	2.88	0.00	100	32.49	500	23.94	70	9.18	405.74
TO	**970**	**37.13**	**315**	**11.61**	**14.97**	**400**	**120.60**	**2500**	**132.30**	**280**	**36.28**	**3162.60**
SIN	0	0.00	0	0.00	0	0	0	0	0	0	0	0.00
SIN	0	0.00	0	0.00	0	0	0	0	0	0	0	0.00
TO	0	0	0	0	0	0	0	0	0	0	0	0
PC			0	0								0.00
P.C												0.00
Dy												0.00
G.T	2850	111.4471	2330	86.8029	55.81897	2000	629.969	19550	928.57	1860	239.441	19822.3403

FINAL VERIFICATION STATE CAMPA ANNUAL PLAN OF OPERATION 2017-18

F O R E S T P R O T E C T I O N

Continuation of Old Forest Protection Squads — Supporting Activities

	Continuation of protection squad @ Rs.13.25482 lakhs (APO 10-11)-08Nos with vhicle		Continuation of protection squad @ Rs.13.25482 lakh (APO11-12)-10Nos with vhicle		Continuation of protection squad @ Rs.14.5648 lakh (APO12-13)-14Nos with hiring vhicle		Maintananoe of Control room at Division offioe @Rs.4.88844 lakhs		Maintananoe of Control room at PCCF/RCCF offioe @ Rs.4.88844 akhs		Selzure of forest produoe, safeguard, feeding oharges of acused persons @ Rs.0.25 lakh		Legal oharges & oharges to Legal Consultant @ Rs.0.30 lakhs		Wage of Para Forest Staff @ Rs.1.06848 lakhs per person	
	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina
	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
An	0	0	0	0.00	0	0	1	4.23	1	4.02	1	0.25	1	0.19	30	27.94
Ath	0	0	0	0.00	1	11.831	1	4.20	0	0.00	1	0.25	1	0.30	30	27.88
Sa	0	0	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Dh	0	0	1	12.09	1	11.89	1	4.14	0	0.00	0	0.00	1	0.29	30	27.61
Ath	1	11.60	0	0.00	0	0	1	4.33	0	0.00	0	0.00	1	0.30	30	28.39
Cu			1	11.46	0	0	1	4.29	0	0.00	1	0.25	1	0.30	60	56.10
Ma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO	**1**	**11.60**	**2**	**23.56**	**2**	**23.72**	**5**	**21.19**	**1**	**4.02**	**3**	**0.75**	**5**	**1.37**	**180**	**167.93**
Kh	1	11.59	0	0.00	2	19.76	1	4.55	1	5.53	1	0.15	1	0.15	30	26.81
Pu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra	0	0.00	0	0.00		0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Na	1	11.63	1	11.56	0	0.00	1	4.15	0	0.00	0	0.00	1	0.30	60	54.57
Ch		0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Ch	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Cit	0	0.00	0	0.00	0	0.00	1	1.58	1	1.43	1	0.25	1	0.30	30	29.93
Bh	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TO	**2**	**23.22**	**1**	**11.56**	**2**	**19.76**	**3**	**10.28**	**2**	**6.96**	**2**	**0.40**	**3**	**0.75**	**120**	**111.30**
Ph	0	0	0	0.00	0	0.00	1	4.11	0	0.00	0	0.00	0	0.00	60	53.04
Bal	0	0	0	0.00	0	0.00	1	4.18	0	0.00	1	0.25	1	0.30	60	56.71
Bo	0	0	0	0.00	1	11.78	1	4.59	0	0.00	0	0.00	1	0.07	30	27.72
Gh	1	10.41	0	0.00	0	0.00	1	4.29	0	0.00	0	0.00	0	0.00	60	55.04
Gh	0	0	0	0.00	0	0.00	1	4.23	0	0.00	0	0.00	1	0.20	60	54.47
Be	0	0	0	0.00	1	11.59	1	4.03	1	4.03	1	0.25	0	0.00	60	52.84
Pa	0	0	1	12.65	0	0.00	1	4.05	0	0.00	0	0.00	0	0.00	60	58.25
TO	**1**	**10.41**	**1**	**12.65**	**2**	**23.37**	**7**	**29.49**	**1**	**4.03**	**2**	**0.50**	**3**	**0.57**	**390**	**358.07**
Jha	0	0	0	0.00	0	0.00	1	3.31	0	0.00	1	0.25	1	0.30	30	28.04
Sa	1	11.60	0	0.00	0	0.00	1	4.29	1	4.29	1	0.10	1	0.00	60	56.67
Ra	0	0.00	0	0.00	0	0.00	1	4.35	0	0.00	1	0.25	1	0.30	60	55.11
Ba	0	0.00	0	0.00	0	0.00	1	4.33	0	0.00	1	0.25	1	0.15	30	27.94
Ba	1	11.31	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Hir	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TO	**2**	**22.91**	**0**	**0**	**0**	**0**	**4**	**16.28**	**1**	**4.29**	**4**	**0.85**	**4**	**0.75**	**180**	**167.76**
Sur	0	0	0	0.00	1	11.24	1	4.15	0	0.00	0	0.00	0	0.00	60	56.14
Ro	0	0	0	0.00	1	13.27	1	4.67	1	4.67	1	0.25	1	0.30	60	50.15
Bo	0	0	1	11.92	1	12.03	1	4.26	0	0.00	1	0.15	1	0.28	60	55.85
De	0	0	1	11.37	0	0.00	1	3.37	0	0.00	1	0.20	0	0.00	60	56.17
Ke	0	0	1	11.66	1	12.44	1	4.26	0	0.00	0	0.00	1	0.03	60	55.46
TO	**0**	**0.00**	**3**	**34.95**	**4**	**48.98**	**5**	**20.71**	**1**	**4.67**	**3**	**0.60**	**3**	**0.61**	**300**	**273.77**
Ba	1	12.158	1	12.28	0	0.00	1	4.44	1	4.28	1	0.25	1	0.30	60	57.44
Ka	0	0	1	12.04	0	0.00	1	3.00	0	0.00	1	0.25	1	0.30	60	56.15
Ra	0	0	0	0.00	0	0.00	1	4.10	0	0.00	0	0.00	0	0.00	60	51.84
Ba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ke	1	11.882	0	0.00	1	12.51	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO	**2**	**24.04**	**2**	**24.31**	**1**	**12.51**	**3**	**11.54**	**1**	**4.28**	**2**	**0.50**	**2**	**0.60**	**180**	**165.42**
Ka	0	0	0	0.00	0	0.00	1	4.28	1	4.27	1	0.25	1	0.30	60	56.26
Ka	0	0	0	0.00	1	11.49	1	4.15	0	0.00	0	0.00	1	0.05	60	55.64
Su	0	0	0	0.00	0	0.00	1	4.24	0	0.00	0	0.00	1	0.30	60	56.36
Bo	0	0	0	0.00	1	14.55	1	4.67	0	0.00	1	0.25	1	0.30	60	63.39
Kh	0	0	0	0.00	1	12.29	1	4.26	0	0.00	1	0.25	1	0.30	60	55.03
Su	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO	**0**	**0**	**0**	**0**	**3**	**38.33**	**5**	**21.59**	**1**	**4.27**	**3**	**0.75**	**5**	**1.25**	**300**	**286.67**
Ra	0	0	0	0.00	0	0.00	1	4.15	0	0.00	1	0.20	0	0.00	60	56.69
Ko	0	0.00	0	0.00	0	0.00	1	4.40	1	4.24	0	0.00	1	0.29	60	57.41
Je	0	0	1	10.69	0	0.00	1	2.82	0	0.00	1	0.25	1	0.30	60	63.39
Na	0	0	0	0.00	0	0.00	1	4.25	0	0.00	0	0.00	0	0.00	60	57.10
Ma	0	0	0	0.00	0	0.00	1	4.19	0	0.00	1	0.25	0	0.00	60	55.66
TO	**0**	**0.00**	**1**	**10.69**	**0**	**0.00**	**5**	**19.81**	**1**	**4.24**	**3**	**0.70**	**2**	**0.59**	**300**	**290.26**
Sli	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sli	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PC																
P.C																
Dy																
G.T	**8**	**92.181**	**10**	**117.71**	**14**	**166.67**	**37**	**150.879**	**9**	**36.765**	**22**	**5.05**	**27**	**6.494**	**1950**	**1821.18**

FINAL VERIFICATION STATE CAMPA ANNUAL PL

FOREST PROTEC

	Reourring Expr Cheoking Station @ Rs.3.38944 lakhs		Hiring Vehicle Provided to 212 Ranges @ Rs.4.67482 lakhs/range		Vehicle Provided to 70 Ranges for Protection duty @ Rs.3.82984 lakhs/range		Subtotal Protection against loss of Forest Resource	Fire Fighting Squad						
								Fire fighting squads with vhehicle in each Forest Range @ Rs.4.86 lakhs/squad		Procurement of Fire blower @ Rs. 0.60 lakhs /each		Contigent expenditure for fuel etc. @ Rs.0.11/blower		fire line M @ Rs.0.0
	Phy	Fina	Phy	Fina	Phy	Fina	Finanolal	Phy	Fina	Phy	Fina	Phy	Fina	Phy
	44	45	46	47	48	49	50	51	52	53	54	55	56	57
An	1	2.79	5	10.34	1	1.87	51.63	6	24.17	10	5.00	6	1.06	500
Att	0	0.00	3	4.68	2	5.68	54.83	5	20.28	12	6.00	12	1.09	500
Sa	0	0.00	3	6.48	2	3.75	10.23	0	0.00	0	0.00	0	0.00	0
Dh	0	0.00	6	9.88	2	4.14	70.04395	8	35.33	10	4.95	0	0.00	308
Att	1	0.55	4	9.36	1	1.89	56.42971	5	19.82	5	5.00	5	0.88	500
Cu	2	5.61	5	11.70	1	1.85	91.56	3	13.10	10	5.00	10	0.88	200
Ma	3	3.37	2	4.24	2	6.24	13.85	0	0.00	0	0.00	0	0.00	0
TO	**7**	**12.33**	**28.00**	**56.68**	**11**	**25.43**	**348.58**	**27**	**112.6888**	**47**	**25.95**	**33**	**3.91**	**2007.5**
Kh	4	8.83	6	13.56	0	0.00	90.92065	6	16.21	5	2.43	6	0.10	91
Pu	0	0	5	11.70	0	0.00	11.70	0	0.00	0	0.00	0	0.00	0
Ra	0	0.00	4	8.32	1	1.35	9.67246	0	0.00	0	0.00	0	0.00	0
Na	1	2.79	6	14.04	1	1.75	100.79	7	27.00	10	5.00	10	0.88	485
Ch	0	0.00	4	8.74	1	1.88	10.62258	0	0	0	0	0	0	0
Ch	0	0.00	3	5.58	1	2.12	7.70	0	0.00	0	0.00	0	0.00	0
Cit	1	3.34	4	7.54	0	0.00	44.36	1	4.85	1	0.50	1	0.11	10
Bh	0	0.00	3	7.43	1	1.47	8.90547	0	0.00	0	0.00	0	0.00	0
TO	**6**	**14.96**	**35**	**76.92**	**5**	**8.57**	**284.68**	**14**	**48.07**	**16**	**7.93**	**17**	**1.09**	**586**
Ph	5	######	5	10.9600	2	3.1347	84.53894	7	23.88	10	4.87	10	1.10	700
Ba	0	0.00	5	11.70	2	3.78	76.92062	7	27.17	20	10.00	20	1.78	800
Bo	0	0.00	3	7.02	2	3.79	54.98331	5	19.48	10	5.00	10	0.80	500
Gh	3	2.50	3	5.62	1	0.51	78.37	5	21.22	8	4.88	8	0.04	500
Gh	6	5.59	3	7.02	2	3.73	75.24065	5	19.57	10	5.00	10	0.33	500
Be	0	0.00	3	7.02	1	1.75	81.51804	4	17.60	5	2.50	5	0.22	500
Pa	0	0.00	5	9.10	2	3.86	87.91053	7	27.17	15	7.50	15	1.32	800
TO	**14**	**21.37**	**27**	**58.46**	**12**	**20.55**	**539.48**	**40**	**156.09**	**78**	**39.75**	**78**	**5.58**	**4300**
Jha	0	0.00	4	9.24	1	1.57	42.70373	5	22.15	10	5.00	10	0.72	250
Sa	0	0.00	5	11.70	0	0.00	88.65536	5	22.52	12	6.00	12	0.82	450
Ra	0	0.00	5	12.35	1	1.77	74.13526	6	29.09	15	7.50	15	0.89	500
Ba	4	9.48	5	11.70	1	1.89	55.73591	6	29.05	15	7.50	15	1.43	500
Ba	0	0.00	4	9.36	1	1.89	22.55936	0	0.00	0	0.00	0	0.00	0
Hir	0	0.00	2	4.16	2	3.60	7.76	0	0.00	0	0.00	0	0.00	0
TO	**4**	**9.48**	**25**	**58.51**	**6**	**10.71**	**291.55**	**22**	**102.80**	**52**	**26.00**	**52**	**3.86**	**1700**
Su	3	8.52	5	11.35	1	1.89	93.28235	6	24.31	15	7.50	15	1.49	500
Ro	3	10.11	5	15.60	1	2.12	101.13639	6	29.10	15	7.50	15	1.65	500
Bo	0	0.00	6	13.92	1	1.88	100.28673	7	33.95	15	7.50	15	1.65	500
De	0	0.00	4	9.36	1	2.06	82.54	5	21.25	15	7.50	15	0.89	476
Ke	2	5.79	6	13.78	1	1.92	105.33238	7	25.27	20	10.00	20	0.83	554
TO	**8**	**24.41**	**26**	**64.01**	**5**	**9.87**	**482.58**	**31**	**133.8747**	**80**	**40.00**	**80**	**6.51**	**2530.3**
Ba	0	0.00	6	14.04	2	3.84	109.02219	8	38.80	10	5.00	10	1.10	500
Ka	0	0.00	4	9.37	2	3.39	84.49884	6	23.78	10	5.00	10	0.77	500
Ra	0	0.00	3	5.10	2	3.39	64.42300	5	0.54	10	5.00	0	0.00	0
Ba	0	0	4	10.84	1	2.06	12.89794	0	0.00	0	0.00	0	0.00	0
Ke	0	0.00	3	7.02	1	1.88	33.30	0	0.00	0	0.00	0	0.00	0
ST	0	0	5	15.60	2	4.24	19.84	0	0.00	0	0.00	0	0.00	0
TO	**0**	**0**	**25**	**61.9725**	**10**	**18.804**	**323.9804**	**19**	**63.118**	**30**	**15.00**	**20**	**1.87**	**1000**
Ka	1	3.03	4	9.36	1	1.89	79.63191	5	24.25	15	7.50	15	1.65	590
Ka	3	8.40	5	10.35	2	3.74	93.81426	7	30.00	15	7.20	15	1.16	600
Su	0	0.00	3	7.02	1	2.12	70.03740	4	14.37	5	2.50	5	0.55	500
Bo	1	3.37	8	24.96	3	6.36	117.85	11	53.35	5	2.50	5	0.55	500
Kh	3	6.45	4	10.00	1	2.00	90.58036	5	24.25	5	2.50	5	0.55	500
Su	0	0	3	7.02	0	0	7.02	0	0.00	0	0.00	0	0.00	0
TO	**8**	**21.25**	**27**	**68.71**	**8**	**16.11**	**458.93**	**32**	**146.21**	**45**	**22.20**	**45**	**4.46**	**2690**
Ra	0	0.00	4	9.36	3	5.50	75.90736	7	23.72	15	6.75	15	0.66	700
Ko	0	0.00	4	10.08	2	3.00	79.41770	6	29.11	10	5.00	10	1.10	600
Je	1	3.37	4	12.48	2	4.24	97.54212	6	29.07	5	2.38	5	0.42	500
Na	3	9.04	4	9.62	2	4.08	84.08496	6	22.02	5	2.50	0	0.00	500
Ma	1	2.82	3	7.02	3	5.60	75.54	6	29.10	15	6.75	15	1.65	600
TO	**5**	**15.22**	**19**	**48.56**	**12**	**22.42**	**412.49**	**31**	**133.02**	**50**	**23.38**	**45**	**3.82**	**2900**
SIN	0	0	0	0	0	0	0.00	0	0	0	0	0	0	0
SIN	0	0	0	0	0	0	0.00	0	0	0	0	0	0	0
TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PC							0.00						0.00	
P.C														
Dy														
G.T	52	119.03	212	493.828	69	132.47	3142.2641	216	895.8657	398	200.205	370	31.108	17714

AN OF OPERATION 2017-18

T I O N

	aintenance 2 lakhs/KM		Training @ Rs.0.15 lakhs In 37 Division		Fire Fighting Equipment @ Rs.0.86 lakhs/Sqd	Sub Total control of Forest Fire	Total Forest Protection
	Fina	Phy	Fina	Phy	Fina	Financial	Financial
	58	59	60	61	62	63	64
An	10.00	1	0.15	6	4.89	45.27	96.90
Ath	10.00	1	0.15	5	4.23	41.75	96.58
Sa	0.00	0	0.00	0	0.00	0.00	10.23
Dh	6.15	0	0.00	8	5.04	51.47076	121.51
Ath	10.00	1	0.15	5	3.75	39.59309	96.02
Cu	4.00	1	0.15	3	2.54	25.66	117.23
Ma	0.00	0	0.00	0	0.00	0.00	13.85
TO	40.15	4	0.60	27	20.45	203.75	552.32
Kh	1.86	0	0.00	6	4.05	24.65741	115.58
Pu	0.00	0	0.00	0	0.00	0.00	11.70
Ra	0.00	0	0.00	0	0.00	0.00	9.67
Na	9.70	0	0.00	7	4.98	47.56645	148.36
Ch	0	0	0	0	0	0.00	10.62
Ch	0.00	0	0.00	0	0.00	0.00	7.70
Cit	0.20	1	0.15	1	0.85	6.66	51.02
Bh	0.00	0	0.00	0	0.00	0.00	8.91
TO	11.76	1	0.15	14	9.89	78.88	363.56
Ph	14.00	1	0.15	7	5.95	49.94427	134.48
Ba	16.00	1	0.15	7	5.95	61.05	137.97
Bo	9.98	1	0.15	5	1.65	37.05698	92.04
Gh	10.71	1	0.15	5	4.18	41.18	119.55
Gh	9.00	1	0.15	5	4.25	38.29684	113.54
Be	10.00	1	0.15	4	2.96	33.42255	114.94
Pa	16.00	1	0.15	7	5.74	57.88821	145.80
TO	85.69	7	1.05	40	30.68	318.84	858.32
Jha	4.92	1	0.15	5	2.96	35.89390	78.60
Sa	9.00	1	0.15	5	3.71	42.19059	130.85
Ra	10.00	1	0.15	6	5.87	53.4999	127.64
Ba	10.00	1	0.15	6	5.10	53.23	108.96
Ba	0.00	0	0.00	0	0.00	0.00	22.56
Hir	0.00	0	0.00	0	0.00	0.00	7.76
TO	33.91	4	0.60	22	17.64	184.81	476.36
Su	10.00	1	0.15	6	4.57	48.00713	141.29
Ro	10.00	1	0.15	6	5.10	53.4990	154.64
Bo	10.00	1	0.15	7	5.95	59.20	159.49
De	9.53	1	0.15	5	3.80	43.11	125.65
Ke	11.07	1	0.15	7	3.11	50.42671	155.76
TO	50.59	5	0.75	31	22.52	254.2461	736.82282
Ba	10.00	1	0.15	8	6.80	61.85	170.87
Ka	10.00	1	0.15	6	5.10	44.79	129.29
Ra	0.00	0	0.00	0	0.00	5.54	69.96
Ba	0.00	0	0.00	0	0.00	0.00	12.90
Ke	0.00	0	0.00	0	0.00	0.00	33.30
ST	0.00	0	0.00	0	0.00	0.00	19.84
TO	20.00	2	0.30	14	11.90	112.18	436.1648
Ka	11.80	1	0.15	5	4.25	49.60	129.23
Ka	12.00	1	0.15	7	5.95	56.45668	150.27
Su	10.00	1	0.15	4	3.40	30.9667	101.00
Bo	10.00	1	0.15	11	9.35	75.90	193.75
Kh	10.00	1	0.15	5	4.25	41.70	132.28
Su	0.00	0	0.00	0	0.00	0.00	7.02
TO	53.80	5	0.75	32	27.20	254.62	713.55731
Ra	14.00	1	0.15	7	5.95	51.22738	127.13
Ko	12.00	1	0.15	6	5.10	52.45	131.87
Jey	10.00	0	0.00	5	5.02	46.90	144.44
Na	10.00	1	0.15	0	0.00	34.67	118.75
Ma	12.00	1	0.15	6	5.10	54.75	130.29
TO	58.00	4	0.60	24	21.17	239.99	652.48
SIN	0	0	0	0	0	0.00	0.00
SIN	0	0	0	0	0	0.00	0.00
TO	0	0	0	0	0	0	0
PC							0.00
P.D							0.00
Dy							0.00
G.T	353.9	32	4.8	204	161.4	1647.3264	4789.5905

	Range Officer Residence @ Rs.12.23lakhs/Range		Forester Qrs @ Rs.8.42 lakhs/each		Forest Guard Qrs @ Rs.8.84 lakhs/each		Forest Road @ Rs.0.50 lakhs/K.M.		Culvert @ Rs.1.53 lakhs/one		Cause way @ Rs.1.06 lakhs/one	
	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina
	65	66	67	68	69	70	71	72	73	74	75	76
An	1	12.23	2	18.84	7	47.88	17	10.75	2	3.06	4	4.24
Ath	0	0.00	1	9.42	1	6.84	50	25.00	4	6.12	5	5.30
Sat	0	0.00	1	9.42	2	13.68	0	0.00	5	7.65	5	5.30
Dhe	1	12.23	8	75.36	10	68.40	38	19.00	8	12.24	6	6.36
Ath	0	0.00	1	9.42	1	6.84	40	20.00	4	6.12	5	5.30
Cu	1	12.23	2	18.84	3	20.52	40	20.00	3	4.59	5	5.30
Ma	0	0.00	1	9.42	1	6.84	0	0.00	6	9.18	8	7.42
TO	**3**	**36.69**	**16**	**150.72**	**25**	**171.00**	**185**	**94.75**	**32**	**48.96**	**38**	**39.22**
Kh	0	0.00	3	28.26	4	27.36	45	22.50	0	0.00	5	5.30
Pu	1	12.23	1	9.42	1	6.84	0	0.00	0	0.00	1	1.06
Ra	0	0.00	1	9.42	1	6.84	0	0.00	0	0.00	0	0.00
Na	1	12.23	1	9.42	2	13.68	50	25.00	6	9.18	6	6.36
Ch	0	0.00	1	9.42	1	6.84	0	0.00	0	0.00	0	0.00
Ch	0	0.00	1	9.42	2	13.68		0.00	4	6.12	5	5.30
Cit	0	0.00	1	9.42	2	13.68	0	0.00	0	0.00	0	0.00
Bh	1	12.23	1	9.42	1	6.84	0	0.00	0	0.00	0	0.00
TO	**3**	**36.69**	**10**	**94.20**	**14**	**95.76**	**95**	**47.50**	**10**	**15.30**	**17**	**18.02**
Ph	1	12.23	3	28.26	5	34.20	20	14.74	0	0.00	0	0.00
Ba	1	12.23	5	47.10	6	41.04	40	20.00	4	6.12	6	6.36
Bo	0	0.00	4	37.68	7	47.88	40	20.00	8	12.24	5	5.30
Gh	0	0.00	1	9.42	2	13.68	40	20.00	8	12.24	5	5.30
Gh	1	12.23	2	18.84	5	34.20	40	20.00	1	1.53	6	6.36
Be	1	12.23	1	9.42	2	13.68	11	5.50	0	0.00	0	0.00
Pa	0	0.00	1	9.42	2	6.84	0	0.00	1	1.53	1	1.06
TO	**4**	**48.92**	**17**	**160.14**	**29**	**191.52**	**191**	**100.24**	**22**	**33.66**	**23**	**24.38**
Jha	0	0.00	1	9.42	4	27.36	3	2.50	2	3.06	1	1.06
Sa	1	12.23	3	28.26	7	47.88	40	20.00	5	7.65	6	6.36
Ra	0	0.00	2	18.84	8	54.72	40	20.00	6	9.18	6	6.36
Ba	1	12.23	1	9.42	4	27.36	40	20.00	8	12.24	6	6.36
Ba	0	0.00	0	0.00	2	13.68	0	0.00	0	0.00	0	0.00
Hir	1	12.23	1	9.42	3	20.52	0	0.00	5	7.65	6	6.36
TO	**3**	**36.69**	**8**	**75.36**	**28**	**191.52**	**123**	**62.50**	**26**	**39.78**	**25**	**26.50**
Su	1	12.23	2	18.84	7	47.88	40	20.00	8	12.24	5	5.30
Ro	1	12.23	3	27.44	10	68.35	40	20.00	7	10.71	6	6.36
Bo	1	12.23	4	37.68	10	68.40	40	20.00	0	0.00	6	6.36
De	1	12.23	1	9.42	2	13.68	27	13.50	0	0.00	0	0.00
Ke	0	0.00	4	37.68	10	68.40	40	20.00	8	12.24	5	5.30
TO	**4**	**48.92**	**14**	**131.06**	**39**	**266.71**	**187**	**93.50**	**23**	**35.19**	**22**	**23.32**
Ba	1	12.23	2	18.84	4	27.36	80	40.00	4	6.12	4	4.24
Ka	0	0.00	5	47.10	5	34.20	22	11.00	8	12.24	5	5.30
Ra	1	12.23	2	18.84	3	20.52	0	0.00	0	0.00	5	5.30
Ba	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Ke	1	12.23	2	18.84	3	20.52	0	0.00	12	18.36	7	7.42
ST	1	12.23	2	18.84	2	13.68	0	0.00	0	0.00	6	6.36
TO	**4**	**48.92**	**13**	**122.46**	**17**	**116.28**	**102**	**51.00**	**24**	**36.72**	**27**	**28.62**
Ka	1	12.23	2	18.84	2	13.68	40	20.00	8	12.24	4	4.24
Ka	1	12.23	1	9.42	1	6.84	40	20.00	0	0.00	0	0.00
Su	0	0.00	1	9.42	3	20.52	40	20.00	0	0.00	5	5.30
Bo	1	12.23	6	56.52	10	68.40	40	20.00	10	15.30	5	5.30
Kh	0	0.00	2	18.84	5	34.20	40	20.00	10	15.30	5	5.30
Su	1	12.23	1	9.42	1	6.84	0	0.00	4	6.12	4	4.24
TO	**4**	**48.92**	**13**	**122.46**	**22**	**150.48**	**200**	**100.00**	**32**	**48.96**	**23**	**24.38**
Ra	1	12.23	5	47.10	10	68.40	40	20.00	4	6.12	6	6.36
Ko	1	12.23	3	28.26	8	54.72	40	20.00	6	9.18	5	5.30
Je	0	0.00	3	28.26	6	41.04	40	20.00	0	0.00	5	5.30
Na	1	12.23	1	9.42	2	13.68	40	20.00	3	4.59	3	3.18
Ma	1	12.23	10	94.20	15	102.60	23	11.50	10	15.30	5	5.30
TO	**4**	**48.92**	**22**	**207.24**	**41**	**280.44**	**183**	**91.50**	**23**	**35.19**	**24**	**25.44**
SIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TO												
PC												
P.C												
Dy												
G.T	29	354.67	113	1063.64	215	1463.71	1265.7	640.99	192	293.76	199	209.877

NAL VERIFICATION STATE CAMPA ANNUAL PLAN OF OPERATION 2017-18

#REF!

	Boundary Wall 6000 RMT @Rs.0.06 lakh/RMT		Tube Wall @ Rs.0.90 lakhs/one		Common toilet @ Rs.2.04 lakh/one		Water body @ Rs.3.00 lakhs/one		Recidual & Maintenanoe og Permanent/ Mega Nursery@ Rs.11.00 lakhs/one		Total Infrastructure Developm ent Rs In lakhs
	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Financial
	77	78	79	80	81	82	83	84	86	87	89
An	50	2.50	2	1.80	2	4.07	2	6.00	1	7.28	118.65
Ath	150	7.50	2	1.80	2	4.08	2	6.00	1	11.50	83.56
Sa	100	5.00	2	1.80	2	4.08	0	0.00	0	0.00	46.93
Dh	150	7.50	2	1.80	3	6.12	2	6.00	1	11.46	226.47
Ath	100	5.00	2	1.80	2	4.08	1	3.00	1	11.41	72.97
Cu	100	5.00	2	1.80	3	6.12	0	0.00	0	0.00	94.40
Ma	50	2.50	2	1.80	1	2.04	0	0.00	0	0.00	39.20
TO	700	35.00	14	12.60	15	30.59	7	21.00	4	41.65	682.18
Kh	100	5.00	2	1.80	3	6.12	1	3.00	2	22.16	121.50
Pu	50	2.50	2	1.80	2	4.08	0	0.00	1	11.50	49.43
Ra	50	2.50	0	0.00	1	2.04	0	0.00	0	0.00	20.80
Na	100	4.98	2	1.80	3	6.12	1	3.00	1	10.01	101.77
Ch	50	2.50	2	1.80	2	4.08	0	0.00	0	0.00	24.64
Ch	52	2.50	2	1.80	2	2.04	0	0.00	0	0.00	40.86
Cit	100	5.00	2	1.80	1	2.04	0	0.00	0	0.00	31.94
Bh	60	3.00	2	1.80	0	0	0	0.00	0	0.00	33.29
TO	562	27.98	14	12.60	14	26.52	2	6.00	4	43.66	424.23
Ph	100	5.00	2	1.80	2	4.08	2	6.00	0	0.00	106.31
Ba	150	7.50	2	1.80	2	4.08	1	3.00	1	11.50	160.73
Bo	100	5.00	2	1.80	1	2.04	1	3.00	1	11.50	146.44
Gh	50	2.50	2	1.80	2	4.08	2	6.00	2	19.54	94.56
Gh	100	5.00	2	1.80	2	4.08	1	3.00	1	9.68	116.72
Be	100	5.00	2	1.80	2	4.08	2	6.00	1	11.50	69.21
Pa	100	5.00	2	1.80	2	4.08	0	0.00	1	6.81	36.54
TO	700	35.00	14	12.60	13	26.52	9	27.00	7	70.53	730.51
Jha	150	7.50	2	1.80	2	4.08	1	3.00	1	9.01	68.79
Sa	100	5.00	2	1.80	0	0	2	5.94	1	11.50	146.62
Ra	100	5.00	2	1.80	2	4.08	1	3.00	1	11.43	134.41
Ba	150	7.50	2	1.80	0	0	1	3.00	1	11.50	111.41
Ba	0	0.00	2	1.80	0	0	0	0.00	0	0.00	15.48
Hir	100	5.00	2	1.80	2	4.08	0	0.00	0	0.00	67.06
TO	600	30.00	12	10.80	6	12.24	5	14.94	4	43.43	543.76
Su	150	7.50	2	1.80	2	3.995	2	6.00	1	10.03	145.82
Ro	150	7.50	2	1.79	2	4.0562	2	6.00	1	11.50	175.94
Bo	150	7.50	2	1.80	1	2.04	2	6.00	1	11.50	173.51
De	150	7.50	2	1.80	2	4.08	2	6.00	1	11.50	79.71
Ke	100	5.00	2	1.80	3	6.1198	2	6.00	1	10.29	172.83
TO	700	35.00	10	8.99	10	20.29	10	30.00	5	54.82	747.81
Ba	100	5.00	2	1.80	2	4.08	2	6.00	1	11.50	137.17
Ka	150	7.50	2	1.80	2	4.08	2	6.00	1	10.00	139.22
Ra	150	7.50	2	1.80	2	4.08	2	6.00	1	9.56	85.83
Ba	0	0.00	1	1.80	0	0.00	0	0.00	0	0	1.80
Ke	150	7.50	2	1.80	2	4.08	0	0.00	0	0.00	90.75
ST	100	5.00	2	1.80	4	8.16	0	0.00	0	0.00	66.07
TO	650	32.50	11	10.80	12	24.48	6	18.00	3	31.06	520.84
Ka	90	4.50	2	1.80	2	4.08	2	6.00	1	10.48	108.09
Ka	100	5.00	2	1.80	2	4.08	1	3.00	1	11.50	73.87
Su	100	5.00	2	1.80	2	4.08	1	3.00	1	11.50	80.62
Bo	100	5.00	2	1.80	5	10.2	2	6.00	1	11.50	212.25
Kh	100	5.00	2	1.80	2	4.08	1	3.00	1	11.85	119.37
Su	50	2.50	2	1.80	1	2.04	0	0.00	0	0.00	45.19
TO	540	27.00	12	10.80	14	28.56	7	21.00	5	56.83	639.39
Ra	150	7.50	2	1.80	0	0	2	6.00	1	11.50	187.01
Ko	150	7.50	2	1.80	2	4.08	2	6.00	1	11.50	160.57
Je	100	5.00	2	1.80	2	4.08	1	3.00	1	11.50	119.98
Na	50	2.50	2	1.80	2	4.08	2	6.00	1	11.50	88.98
Ma	100	5.00	2	1.80	1	2.04	2	6.00	1	10.20	266.17
TO	550	27.50	10	9.00	7	14.28	9	27.00	5	56.20	822.71
SI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00
SI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00
TO					0	0	0	0.00	0	0.00	0.00
PC								0			0.00
P.C											0.00
Dy											0.00
G.T	5001.8	249.972	97	88.192	91	183.478	55	164.94	37	398.19	5111.419

FINAL VERIFICATION STATE CAMPA ANNUAL PLAN OF OPERATION 2017-18

	Theme based Training of Forest Staff						Other activity					Total Forest Wing Rs in lakhs	Wildlife Management Rs in lakhs	Ama Jangal Yojan under OFSDP	Grand Total APO 2017-18 (Rs. Lakhs)
	Division wise Arms @ Rs.1.30 lakhs+SMC @ Rs.1.02 lakhs/ divn Training		Range wise Legal @ Rs.0.29 lakhs+Law @ Rs.0.29 lakhs/ Range Training		Worl Forestry Day	Total Training	Research Activity	Monitorin and Evaluation	Strengthening of GIS Cell accountting	Creation , Maintenance & Fencing CA,PCA,CATP	P.O for 2016-17 Planting CA,PCA				
	Phy	Fina	Phy	Fina	Fina	Fina	Fina	Finan	Finan	Finanolal	Finan	Finan	Finan	Finanolal	Finan
	90	91	92	93	95	96	97	98	99	100	101	102	103	104	105
An	0	0.00	0	0.00	0.60	0.60	0	9.06		0.00	77.595	679.33840	326.71	225.99	1232.04702
Ath						0.00		7.1843		29.81	0	319.53918	131.24		450.78
Sa	0	0.00	0	0.00	0.00	0.00		6.8113				63.97529	529.34	31.24	624.56
Dh					0.20	0.20		12.127		92.29	61.366	1151.18672	360.77		1511.95
Ath						0.00		7.3999				636.08375	116.61		752.69
Cu					0.10	0.10		8.7638		15.72	68.706	797.31036	441.70		1239.01
Ma	0	0.00	0	0.00	0.00	0.00	0	6.40				59.45000	330.83		390.28
TO	0	0.00	0	0.00	0.90	0.90	0	58	0	138	208	3706.86370	2237.20	257.23	6201.32
Kh	0	0	0	0	0.20	0.20		8.7285		38.41		566.88495	54.37		621.25
Pu						0.00		7.5567		17.60		92.76386	112.66		205.45
Ra						0.00		7.0817		2.18		99.73411	91.83		191.56
Na						0.00		10.124		0.00	0	1216.03462	55.63		1271.67
Ch	0	0.00	0	0.00	0.00	0.00	0	7.3159				82.93848	175.06		257.99
Ch	0	0.00	0	0.00	0.00	0.00	0	7.6979		3.63		59.88772	394.80		454.69
Clt	2	2.01				2.01		2.8355	0	28.47		117.54767	30.52		148.07
Bh						0.00		5.6313				47.82679	291.31		339.14
TO	2	2.01	0	0.00	0.20	2.21	0.00	56.97	0.00	90.29	0.00	2283.64	1206.18	0.00	3489.81
Ph						0.00		9.489				1311.42074	87.78	453.29	1852.49
Ba						0.00		10.841				1234.05927	135.74	498.92	1868.72
Bo					0.10	0.10		6.9771				669.72830	52.42		722.15
Gh	0	0.00	0	0.00	0.00	0.00		6.9777		101.547		729.48688	60.04		789.53
Gh	0	0.00	0	0.00	0.00	0.00	0	7.434		0	0	481.01053	74.96		555.97
Be					0.30	0.30		5.4923		21.6539		687.11518	135.59		822.70
Pa			1	0.29	0.30	0.59	0	10.467				718.77085	110.11	442.57	1271.46
TO	0	0.00	1	0.29	0.70	0.99	0.00	57.68	0.00	123.20	0.00	5831.59	656.64	1394.79	7883.02
Jha	0	0.00	0	0.00	0.00	0.00	0	7.5853		77.72	7.85	471.07342	222.29		693.36
Sa	0	0.00	0	0.00	0.90	0.90	0	7.4006		2.39	0	776.7024	130.40		907.10
Ra	0	0.00	0	0.00	0.00	0.00		9.1815		2.41		593.4747	98.45	0.70	692.62
Ba						0.00		9.2767		71.61		776.2624	72.85	264.27	1113.39
Ba						0.00		7.2952		105.257	0	388.0914	523.43	224.57	1136.09
Hir						0.00		5.577				80.3931	233.77		314.16
TO	0	0.00	0	0.00	0.90	0.90	0.00	46.32	0.00	259.38	7.85	3086.00	1281.19	489.54	4856.73
Su	0	0.00	0	0.00	0.00	0.00	0	8.846		195.32	31.78	1636.6659	290.42		1927.09
Ro						0.00		9.60		6.86	3.9874	922.3182	283.56	318.03	1523.91
Bo	0	0.00	0	0.00	0.00	0.00		9.194		223.42	10.19	716.8260	530.18	298.47	1545.48
De						0.00		7.7437		12.79		427.04711	42.86	318.30	788.21
Ke					0.60	0.60		10.166	0	261.19	58.602	835.21305	426.29	357.85	1619.36
TO	0	0.00	0	0.00	0.60	0.60	0.00	45.55	0.00	699.58	104.56	4538.07	1573.32	1292.65	7404.03
Ba	0	0.00	0	0.00	1.20	1.20	0	12.471	0	0.26	0	587.33614	94.83		682.17
Ka						0.00		8.5514				457.79062	894.81		1352.60
Ra						0.00		6.7161				252.87926	51.89		304.77
Ba						0.00		5.9045				21.15931	250.73	114.73	386.62
Ke						0.00		6.1654		67.12	0	540.14178	433.53	254.25	1227.92
ST						0.00		6.3635				92.27348	451.86		544.13
TO	0	0.00	0	0.00	1.20	1.20	0.00	46.17	0.00	67.38	0.00	1951.58	2177.65	368.98	4498.21
Ka						0.00		7.7386				1504.11111	49.45	450.95	2004.51
Ka						0.00		10.172		84.91	0.31	1230.7000	75.00	444.17	1749.88
Su						0.00		6.40				690.73410	60.29		751.02
Bo						0.00		17.60				1374.94863	85.20	429.59	1889.74
Kh						0.00		6.3969		2.60		986.19	57.55	435.48	1479.22
Su						0.00		4.4505				56.66054	185.97		242.63
TO	0	0.00	0	0.00	0.00	0.00	0.00	52.76	0.00	87.51	0.31	5843.34	513.46	1760.19	8116.99
Ra	0	0.00	0	0.00	0.00	0.00		9.5428	0	0.22	202.56	1493.64516	85.66	572.32	2151.62
Ko						0.00		9.0184		33.65	246.61	1189.60610	46.77	424.20	1660.58
Je						0.00		9.2847	0	0.00	0	473.97388	75.39	298.74	848.11
Na						0.00		8.9818				1198.23734	262.47	329.51	1790.22
Ma	0	0.00	0	0.00	0.00	0.00		8.6386				810.83792	33.70	325.54	1170.08
TO	0	0.00	0	0.00	0.00	0.00	0.00	45.47	0.00	33.87	449.17	5166.30	503.995	1950.31	7620.61
SIN						0.00	201.41					201.41			201.41
SIN						0.00	40.00					40.00			40.00
TO						0.00	241.40	0.00		0.00	0.00	241.40	0.00	0.00	241.40
PC					0.00	0.00		18.41	338.51			356.92		0.00	356.92
P.C												0.00	0.00	9.19	9.19
Dy												0.00	504.60		504.60
G.T	2	2.01	1	0.29	4.514	6.814	241.40	427.07	338.509	1499.03	769.56	33005.7301	10654.24	7522.88	51182.84926

5. State level report of physical and financial achievements for 2019-20

FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Plantation & Maintenance													
	AR Plantation [1st Year]		Aided Natural Regeneration (Creation) 200 Plant		Bamboo Plantation [1st Year @400 plant]		Aided Natural Regeneration (2nd Year Maitenance) 200 Pl		Aided Natural Regeneration (4th Year Maitenance) 200 pl		Baldhill Plantation (2nd Year Maitenance)		Baldhill Plantation (4th Year Maitenance)	
	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan
Angul		0.00	500	95.92	70	22.286	1500	105.17	2200	18.46		0.00		0.00
Athmallik		0.00	50	10.11		0.000	500	35.35	300	2.40		0.00		0.00
Satkosia WL		0.00		0.00		0.000		0.00		0.00		0.00		0.00
Dhenkanal	100	49.61	500	103.40	70	23.450	3000	224.20	3000	25.74		0.00		0.00
Athagarh		0.00	500	95.17	70	20.909	1925	137.32	3000	24.82		0.00		0.00
Cuttack	70	33.07	500	98.48		0.000	1950	138.80	2300	18.81	100	38.43	50	9.49
Mahanadi WL		0.00		0.00		0.000		0.00		0.00		0.00		0.00
Khurda	100	39.19	500	95.98		0.000	1000	69.94	1000	8.38	50	19.07	50	9.14
Puri WL	20	9.45	125	21.86		0.000		0.00		0.00		0.00		0.00
Rajnagar WL		0.00		0.00		0.000	390	27.76		0.00		0.00		0.00
Nayagarh	90	42.79	500	91.71	70	22.441	4720	303.79	5000	37.10	50	19.56	40	7.22
Chilika WL	0	0.00	200	39.39		0.000	200	14.24		0.00		0.00		0.00
Chandaka WL		0.00		0.00		0.000		0.00		0.00		0.00		0.00
City Forests		0.00	0	0.00		0.000		0.00		0.00		0.00		0.00
Bhadrakh WL		0.00		0.00		0.000		0.00		0.00		0.00		0.00
Phulbani		0.00	800	151.89	70	21.405	5000	321.84	5000	41.99		0.00		0.00
Baliguda	20	9.45	800	157.57	70	22.330	4000	284.72	3500	29.40		0.00		0.00
Boudh	100	47.67	500	99.50	70	22.237	1500	106.25	1500	13.11		0.00		0.00
Gh.South	100	46.04	500	89.76	70	22.261	1430	85.67	4500	24.65		0.00	30	5.22
Gh.North		0.00	500	97.67	70	22.426	940	59.12	1900	14.67		0.00		0.00
Berhampur	30	13.78	500	95.82	60	16.968	1650	111.91	3000	26.32	75	28.61	100	19.41
Parlakhemundi		0.00	800	156.89	70	15.578	3000	209.47	1200	1.96	0	0.00	10	0.17
Jharsuguda	50	23.94	500	100.08	60	19.339	1000	70.52	900	8.07		0.00		0.00
Sambalpur		0.00	500	103.95	70	23.393	2500	181.13	1050	8.15		0.00		0.00
Rairakhol		0.00	500	98.48	70	22.332	1500	106.77	800	6.72		0.00		0.00
Bargarh	55	23.57	200	39.39	60	18.654	2000	142.19	3500	29.36		0.00		0.00
Bamara WL		0.00	400	78.45	70	22.331	1000	67.87		0.00		0.00		0.00
Hirakhud WL		0.00		0.00		0.000		0.00		0.00		0.00		0.00
Sundargarh	100	47.31	500	98.45	70	21.889	5000	354.45	5000	42.63	75	27.83	50	9.26
Rourkela	30	14.17	500	98.48		0.000	2500	176.95	4000	33.60	75	28.58	100	18.97
Bonai	40	17.36	500	94.30	70	11.963	500	35.48		0.00		0.00		0.00
Deogarh	100	48.74	500	103.40	70	22.160	600	44.84	1500	10.10		0.00		0.00
Keonjhar		0.00	500	98.04		0.000	700	48.50	1731	14.69		0.00	20	3.70
Baripada	50	23.62	500	98.17		0.000	1000	69.90	2000	16.80		0.00	50	7.59
Karanjia	100	47.25	500	98.48		0.000	500	35.59	1000	8.40		0.00		0.00
Rairangpur		0.00	50	7.75		0.000	500	33.94	1400	8.87		0.00		0.00
Balasore WL		0.00		0.00		0.000		0.00		0.00		0.00		0.00
STR South		0.00		0.00		0.000		0.00		0.00		0.00		0.00
STR North		0.00		0.00		0.000		0.00		0.00		0.00		0.00
Keonjhar WL		0.00	500	98.48		0.000	1500	106.06	3000	25.20	0	0.00	40	7.59
Kalahandi(N)	45	21.55	800	160.77	70	22.555	5000	350.17	5000	42.70	75	29.76	50	9.88
Kalahandi (S)	100	47.25	800	157.57	70	22.330	4000	278.55	4000	34.25	50	19.22	50	9.70
Subarnapur	100	46.88	500	95.85	70	15.046	2000	142.74	2000	1.79	75	28.47	50	0.42
Bolangir	100	47.25	500	98.48	70	22.330	4000	284.72	6000	50.40	75	28.82	50	9.49
Khariar	100	47.25	800	157.57	70	22.330	3000	213.54	3000	25.20	75	28.82	50	9.49
Sunabeda WL	0	16.02		0.00	0	1.201		0.00		0.00		0.00		0.00
Rayagada	0	0.00	500	89.89	70	22.568	5000	371.95	4600	38.66	50	19.50	60	11.99
Koraput	100	48.13	500	101.22	70	22.640	2000	145.81	3600	31.17	100	39.23	100	19.42
Jeypore	100	47.25	500	98.48	70	22.331	400	28.47	600	5.04	25	9.61	20	3.80
Nabarangpur	100	50.39	500	98.20		0.000	6000	424.08		0.00		0.00		0.00
Malkangiri	100	47.25	500	98.48	70	22.330	500	37.37	1000	8.40		0.00		0.00
Silva BBSR		0.00		0.00		0.000		0.00		0.00		0.00		0.00
Silva Rayagada		0.00		0.00		0.000		0.00		0.00		0.00		0.00
DFT Angul		0.00		0.00		0.000		0.00		0.00		0.00		0.00
TS Champua		0.00		0.00		0.000		0.00		0.00		0.00		0.00
G.Udayagiri		0.00		0.00		0.000		0.00		0.00		0.00		0.00
T.S.BBSR		0.00		0.00		0.000		0.00		0.00		0.00		0.00
DD, NZP		0.00		0.00		0.000		0.00		0.00		0.00		0.00
DCF, Hqrs.		0.00		0.00		0.000		0.00		0.00		0.00		0.00
FRS, Cuttack		0.00				0.000		0.00		0.00		0.00		0.00
OFSDP														
G.TOTAL	**2000**	**956.21**	**19825**	**3873.54**	**1930**	**590.01**	**85405**	**5987.14**	**93081**	**738.01**	**950**	**365.51**	**970**	**171.97**

FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Plantation & Maintenance											
	18 month seedling for 1st 12 months		Rraising 6 month old seedling for distribution		Bamboo Plantation [4th Year @50 plant]		AR Plantation [oth year] Plantation in 2020-21		Aided Natural Regeneration (PO Work)Plantation in 2020-21		Baldhill Plantation (PO Work)Plantation in 2020-21	
	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan
Angul	100000	13.76	200000	17.11		0.00		0.00	600	12.00		0.00
Athmallik	200000	23.23	200000	18.20		0.00		0.00	150	3.00		0.00
Satkosia WL		0.00		-		0.00		0.00		0.00		0.00
Dhenkanal		0.00	200000	18.20	1500	11.24	20	3.20	1000	20.02		0.00
Athagarh	200000	18.20	200000	18.20		0.00			1000	20.02	20	3.20
Cuttack	200000	46.45	200000	18.20		0.00		0.00	500	10.01		0.00
Mahanadi WL		0.00		-		0.00		0.00		0.00		0.00
Khurda		0.00	200000	18.20	0	0.00	100	16.02	300	6.01		0.00
Puri WL		0.00	200000	18.20		0.00	60	9.61	50	1.00		0.00
Rajnagar WL		0.00	200000	18.20		0.00		0.00	80	1.60		0.00
Nayagarh	100000	14.99	200000	13.82		0.00	20	2.59	1000	14.42	100	10.80
Chilika WL	50000	7.96	200000	18.20		0.00	10	1.60	135	2.70		0.00
Chandaka WL	100000	23.23	200000	18.20		0.00		0.00		0.00		0.00
City Forests		0.00	200000	18.20		0.00		0.00		0.00		0.00
Bhadrakh WL	150000	19.16	200000	18.20		0.00	27	4.32		0.00		0.00
Phulbani	100000	15.00	200000	18.20		0.00		0.00	2500	50.05	10	1.60
Baliguda		0.00	200000	18.20		0.00	50	8.01	1500	30.03		0.00
Boudh	100000	9.12	200000	18.20		0.00	23	3.68	1000	20.02		0.00
Gh.South	100000	17.42	300000	27.30	0	0.00	20	3.20	900	18.02		0.00
Gh.North	100000	14.30	300000	27.30		0.00		0.00	700	14.02		0.00
Berhampur	100000	18.50	200000	16.35		0.00	20	2.63	1000	17.84	20	3.14
Parlakhemundi	100000	23.23	200000	18.20		0.00		0.00	1200	24.02	95	15.22
Jharsuguda	300000	43.74	200000	18.19		0.00		0.00	250	4.97		0.00
Sambalpur		0.00	200000	12.00		0.00		0.00	250	11.24		0.00
Rairakhol	200000	18.20	100000	22.23		0.00		0.00	600	12.01		0.00
Bargarh	100000	23.23	100000	18.20		0.00		0.00	1000	20.02		0.00
Bamara WL		0.00	200000	18.20		0.00		0.00	300	6.01		0.00
Hirakhud WL		0.00	200000	18.20		0.00		0.00		0.00		0.00
Sundargarh	100000	23.23	200000	18.20	3000	20.63	20	3.20	100	20.02		0.00
Rourkela	100000	23.23	200000	18.20		0.00	30	6.41	500	20.02		0.00
Bonai	100000	9.45	100000	9.10		0.00		0.00	600	12.01		0.00
Deogarh	100000	12.07	400000	18.20	580	4.34		0.00		12.01		0.00
Keonjhar	100000	9.10		-		0.00		0.00	600	12.01	10	1.59
Baripada	100000	23.23	200000	18.20		0.00	40	6.41	100	2.00		0.00
Karanjia	100000	9.12	200000	18.20		0.00		0.00	500	15.02		0.00
Rairangpur		0.00	200000	18.20		0.00		0.00	50	1.00		0.00
Balasore WL	150000	15.84	200000	18.20	70	1.40	30	4.36		0.00	40	5.01
STR South		0.00		-		0.00		0.00		0.00		0.00
STR North		0.00	200000	18.20		0.00		0.00		0.00		0.00
Keonjhar WL		0.00		18.22		0.00		0.00	500	30.03		0.00
Kalahandi(N)	100000	23.23	200000	18.20		0.00	125	20.02	800	50.05	40	6.41
Kalahandi (S)	100000	18.54	200000	18.20	0	0.00	50	8.01	800	56.36	140	22.42
Subarnapur	100000	23.23	200000	18.20		0.00	75	12.02	500	20.02	140	22.42
Bolangir	100000	23.23	200000	18.20		0.00	80	12.81	500	40.04	110	17.62
Khariar	100000	23.23	200000	18.20			40	6.41	1400	28.03	35	5.61
Sunabeda WL		0.00	200000	18.20		0.00		0.00		0.00		0.00
Rayagada	100000	18.12	200000	18.20		0.00		0.00	500	60.06	100	16.02
Koraput	100000	23.23	200000	18.20	0	0.00	290	48.17	500	25.98	100	18.18
Jeypore	100000	23.23	200000	18.20	100	0.74	75	12.01	500	8.01	40	6.41
Nabarangpur	100000	23.23	200000	18.20		0.00	200	32.03	500	40.04	20	0.80
Malkangiri	100000	23.23	200000	18.20	0	0.00	85	13.61	500	16.02		0.00
Silva BBSR	100000	23.23		-		0.00		0.00		0.00		0.00
Silva Rayagada	100000	23.23		-		0.00		0.00		0.00		0.00
DFT Angul		0.00		-		0.00		0.00		0.00		0.00
TS Champua		0.00		-		0.00		0.00		0.00		0.00
G.Udayagiri		0.00		-		0.00		0.00		0.00		0.00
T.S.BBSR		0.00		-		0.00		0.00		0.00		0.00
DD, NZP		0.00		-		0.00		0.00		0.00		0.00
DCF, Hqrs.		0.00		-		0.00		0.00		0.00		0.00
FRS, Cuttack		0.00		-		0.00		0.00		0.00		0
DFSDP												
G.TOTAL	**4350000**	**743.86**	**9300000**	**855.02**	**5250**	**38.35**	**1490**	**240.33**	**25465**	**787.77**	**1020**	**156.44**

FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Plantation & Maintenance										
	Bamboo Plantation [P.O. @400 plant] Plantation in 2020-21		Fodder Plantation P.O. Plantation in 2020-21		Miyawaki Plantation, PO for 2020-21		SSO Bamboo Work		Avenue Plantation (Jal Shakti Abhiyan) 1st yr.		**Total Plantation**
	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Finan
Angul	30	1.2		0		0	2700	56.0514		0	**341.96**
Athmallik	30	1.2		0		0		0		0	**93.49**
Satkosia WL		0		0		0		0		0	**0.00**
Dhenkanal		0	10	1.6		0	1000	22.9		0	**503.56**
Athagarh	20	0.80		0		0	1150	26.3396		0	**364.97**
Cuttack		0	5	0.8		0		0	76	84.9525	**497.49**
Mahanadi WL		0		0		0		0		0	**0.00**
Khurda		0		0		0	2882.5	68.72		0	**350.64**
Puri WL		0		0		0		0		0	**60.12**
Rajnagar WL		0		0		0		0		0	**47.56**
Nayagarh	30	0.81089	16	1.70585		0	3000	53.0738		0	**636.84**
Chilika WL		0		0		0		0		0	**83.99**
Chandaka WL		0		0		0		0		0	**41.43**
City Forests		0		0		0		0		0	**18.20**
Bhadrakh WL		0		0		0		0		0	**41.68**
Phulbani	20	0.8	65	1.3		0	3000	68.7		0	**692.77**
Baliguda	30	1.2		0		0	3000	68.7		0	**629.61**
Boudh		0		0		0	3000	70.9584		0	**410.75**
Gh.South		0		0		0	3000	68.7		0	**408.25**
Gh.North	30	1.201		0		0	2000	45.8		0	**296.51**
Berhampur		0		0		0	1008	24.0307		0	**395.30**
Parlakhemundi	380	15.2108		0		0	2700	61.84		0	**541.78**
Jharsuguda		0		0		0	0	0		0	**288.86**
Sambalpur		0	1	0.36712		0	3000	68.7		0	**408.94**
Rairakhol		0		0		0	3000	68.7		0	**355.44**
Bargarh	50	2.002		0		0	1300	29.7752		0	**346.39**
Bamara WL		0		0		0	3000	68.72		0	**261.57**
Hirakhud WL		0		0		0		0		0	**18.20**
Sundargarh	40	1.6016	16	2.56256		0	2488	59.3192		0	**750.58**
Rourkela		0	138	22.1		0		0		0	**460.7100**
Bonai		0		0		0	3000	68.712		0	**258.38**
Deogarh		0		0		0	3000	68.72		0	**344.59**
Keonjhar		0		0		0		0		0	**187.64**
Baripada		0		0		0		0		0	**265.93**
Karanjia		0		0		0		0		0	**232.06**
Rairangpur		0		0		0		0		0	**69.76**
Balasore WL	20	0.8008		0		0		0		0	**45.61**
STR South		0		0		0		0		0	**0.00**
STR North		0		0		0		0		0	**18.20**
Keonjhar WL		0		0		0		0		0	**285.58**
Kalahandi(N)	100	4.004	30	4.8048	1	0.4004	2883	68.72		0	**833.21**
Kalahandi (S)		0	20	3.2		0	1000	23.84		0	**719.44**
Subarnapur		0	70	11.2112		0	700	16.04		0	**454.33**
Bolangir	30	1.2	4	0.64		0	3000	68.72		0	**723.95**
Khariar	40	1.6016	61	9.76976			2450	56.11			**653.15**
Sunabeda WL		0		0		0		0		0	**35.42**
Rayagada		0	5	0.8008	1	0.4004	3000	68.712		0	**736.88**
Koraput		0	1	0.2		0	3000	69.5056		0	**611.09**
Jeypore	50	2.002	10	1.6016		0	3000	68.72		0	**355.90**
Nabarangpur		0		0		0		0		0	**686.98**
Malkangiri	30	1.2	1	0.4		0	3000	68.712		0	**355.19**
Silva BBSR		0		0		0		0		0	**23.23**
Silva Rayagada		0		0		0		0		0	**23.23**
DFT Angul		0		0		0		0		0	**0.00**
TS Champua		0		0		0		0		0	**0.00**
G.Udayagiri		0		0		0		0		0	**0.00**
T.S.BBSR		0		0		0		0		0	**0.00**
DD, NZP		0		0		0		0		0	**0.00**
DCF, Hqrs.		0		0		0		0		0	**0.00**
FRS, Cuttack		0		0		0	0	0		0	**0.00**
OPSDP											
G.TOTAL	**930**	**36.84**	**453**	**63.06**	**2**	**0.80**	**69262**	**1577.54**	**76**	**84.95**	**17267.36**

Name of Division	FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs												
	Forest Protection												
	Continuation Forest Protection Squad with Vehicle		Continuation Forest Protection Squad with Hiring Vehicle		Co-ordination cell at Divn. Office		Co-ordination cell at Circle Office		Safeguarding of Seized Produce, Feeding expences of accused person		Para Protection squad		Total Protection
	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Finan
Angul		0.00		0	1	6.39	1	6.15		0.39	30	41.28	**54.21**
Athmallik		0.00	1	17.32	1	6.46		0.00		1.25	30	42.95	**67.97**
Satkosia WL		0.00		0.00	0	0.00		0.00		0.00		0.00	0.00
Dhenkanal	1	17.82	1	18.10	1	6.41		0.00		1.25	30	41.46	**85.04**
Athagarh	1	17.43		0.00	1	5.64		0.00		1.25	30	39.16	**63.48**
Cuttack	1	17.59		0.00	1	6.39		0.00		0.78	60	82.66	**107.42**
Mahanadi WL		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
Khurda	1	17.49	2	32.56	1	5.62	0	0.00		0.91	30	41.22	**97.80**
Puri WL		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
Rajnagar WL		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
Nayagarh	2	32.87		0.00	1	6.50		0.00		0.55	60	79.38	**119.30**
Chilika WL		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
Chandaka WL		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
City Forests		0.00	0	0.00	1	6.32	1	6.15		0.65	30	41.22	**54.34**
Bhadrakh WL		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
Phulbani		0.00		0.00	1	4.83		0.00		0.00	60	81.06	**85.89**
Baliguda		0.00		0.00	1	6.56		0.00		0.85	60	82.91	**90.32**
Boudh	0	0.00	1	17.85	1	6.41		0.00		1.25	30	41.54	**67.05**
Gh.South	1	17.05		0.00	1	6.48		0.00		0.00	60	81.16	**104.69**
Gh.North		0.00		0.00	1	6.45		0.00		0.14	60	82.41	**89.00**
Berhampur		0.00	1	18.32	1	6.39	1	6.26		0.25	60	85.78	**117.01**
Parlakhemundi	1	17.69	0	0.00	1	5.66		0.00		0.65	60	80.93	**104.93**
Jharsuguda	0	0.00		0.00	1	6.36		0.00	1	1.19	30	42.02	**49.57**
Sambalpur	1	17.13		0.00	1	6.37	1	6.41	1	0.49	60	82.45	**112.86**
Rairakhol		0.00		0.00	1	6.31		0.00	1	1.25	60	82.79	**90.34**
Bargarh		0.00		0.00	1	6.33		0.00		1.25	30	39.82	**47.41**
Bamara WL	1	17.53		0.00		0.00		0.00		0.00		0.00	**17.53**
Hirakhud WL						0.00		0.00		0.00		0.00	**0.00**
Sundargarh		0.00	1	15.39	1	6.41		0.00		0.25		83.48	**105.53**
Rourkela	0	0.00	1	18.10	1	6.41	1	6.41	1	1.25	60	82.91	**115.08**
Bonai	1	16.78	1	18.39	1	6.21		0.00		0.22	60	83.44	**125.04**
Deogarh	1	17.55		0.00	1	6.16		0.00	1	1.25	60	82.92	**107.88**
Keonjhar	1	17.82	1	18.10	1	6.41		0.00		0.28	60	83.31	**125.92**
Baripada	2	31.09		0.00	1	5.88	1	5.88	1	0.95	60	77.89	**121.69**
Karanjia	1	17.82		0.00	1	5.11		0.00		1.04	60	62.27	**86.24**
Rairangpur		2.20		1.66	1	6.24		0.00		0.00	60	76.16	**86.26**
Balasore WL						0.00		0.00		0.00		0.00	**0.00**
STR South		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
STR North		0.00		0.00		0.00		0.00		0.00	24	20.03	**20.03**
Keonjhar WL	1	16.99	1	17.18		0.00		0.00		0.00		0.00	**34.16**
Kalahandi(N)		0.00		0.00	1	6.41	1	6.41		0.60	60	83.57	**96.98**
Kalahandi (S)	0	0.00	1	17.46	1	6.38		0.00		0.30	60	84.42	**108.56**
Subarnapur		0.00		0.00	1	6.32		0.00		0.00	60	82.03	**88.35**
Bolangir		0.00	1	18.10	1	6.41		0.00	1	1.25	60	82.91	**108.67**
Khariar	1	18.10	0	0.00	1	6.41		0.00	1	1.25	6	82.91	**108.67**
Sunabeda WL		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
Rayagada		0.00		0.00	1	6.29		0.00	1	1.24	60	83.51	**91.05**
Koraput			0		1	6.39	1	6.41		0.00	60	85.08	**97.87**
Jeypore	1	17.82		0.00	1	6.35	1	1.25		0.00	60	82.92	**108.34**
Nabarangpur		0.00		0.00	1	6.41		0.00	1	0.66	60	82.91	**89.98**
Malkangiri		0.00		0.00	1	6.47		0.00		0.65	60	82.49	**89.61**
Silva BBSR		0.00		0.00		0.00		0.00		0.00		0.00	0.00
Silva Rayagada		0.00		0.00		0.00		0.00		0.00		0.00	0.00
DFT Angul		0.00		0.00		0.00		0.00		0.00		0.00	0.00
TS Champua		0.00		0.00		0.00		0.00		0.00		0.00	0.00
G.Udayagiri		0.00		0.00		0.00		0.00		0.00		0.00	0.00
T.S.BBSR		0.00		0.00		0.00		0.00		0.00		0.00	
DD, NZP		0.00		0.00		0.00		0.00		0.00		0.00	0.00
DCF, Hqrs.		0.00		0.00		0.00		0.00		0.00		0.00	0.00
FRS, Cuttack		0.00		0.00		0.00		0.00		0.00		0.00	0.00
OFSDP													
G.TOTAL	**19**	**328.77**	**13**	**228.52**	**37**	**230.56**	**9**	**51.33**	**10**	**25.54**	**1860**	**2677.34**	**3542.06**

FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Fire Protection							Infrastructure Development									
	Fire Fighting Squad (including Hiring of Vehicle)		Fireline Maintenance		Fire Fighting Equipment		Total Fire	Range Officer Residence		Forester Quarter		Forest Guard Quarter		Cause way		Culvert	
	Phy	Finan	Phy	Finan	Phy	Finan	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan
Angul	6	32.47	100	2.80	6	3.28	**38.55**	1	12.23	4	37.68	5	34.2	2	3.06	4	4.24
Athmallik	5	24.06	300	8.40	5	4.25	**36.71**		0	1	9.42	3	20.52	14	14.84	6	9.18
Satkosia WL		0.00		0.00		0.00	0.00		0	1	9.42	3	20.52	6	6.36	2	3.06
Dhenkanal	8	48.00	300	8.40	8	6.80	**63.20**	1	12.23	2	18.84	5	34.2	2	2.12	1	1.53
Athagarh	5	28.26	200	5.60	5	4.25	**38.11**	1	12.23	2	18.84	2	13.68	6	6.36		0
Cuttack	3	18.00	100	2.80	0	0.00	**20.80**	1	12.23	1	9.42	2	13.68	2	2.12	2	3.06
Mahanadi WL		0.00		0.00		0.00	**0.00**		0		0		0	1	1.06	2	3.06
Khurda	6	14.51	0	0.00	1	0.35	**14.86**	0	0	3	18.84	2	13.68	2	2.12	2	1.53
Puri WL		0.00		0.00		0.00	**0.00**	1	12.23		0		0	2	2.12	1	1.53
Rajnagar WL		0.00		0.00		0.00	**0.00**		0	1	9.42	2	13.68		0		0
Nayagarh	7	29.49	300	8.40	0	0.00	**37.89**	1	12.23	1	9.42	4	27.36	16	16.96	4	6.12
Chilika WL		0.00		0.00		0.00	**0.00**		0		0		0		0		0
Chandaka WL		0.00		0.00		0.00	**0.00**		0		0		0	4	4.24	1	35.00
City Forests	1	1.84		0.00		0.00	**1.84**		0	1	9.42	2	13.68		0		0
Bhadrakh WL		0.00		0.00		0.00	**0.00**		0		0		0		0		0
Phulbani	7	37.26	300	8.40	1	0.21	**45.87**		0	1	9.42	2	13.68		0		0
Baliguda	7	37.83	300	8.40	0	0.00	**46.23**	1	12.23	3	28.26	4	27.36	8	8.48		0
Boudh	5	27.18	200	5.60	0	0.00	**32.78**		0		0		0	8	8.48	6	9.18
Gh.South	5	14.54	300	8.40	5	2.16	**25.10**		0	1	9.42	2	13.68	8	8.48	5	7.65
Gh.North	5	26.44	200	5.60	5	4.25	**36.29**	1	12.23	1	9.42	2	13.68	4	4.24	1	1.53
Berhampur	4	10.52	150	4.20	4	2.96	**17.68**	1	12.23	1	9.42	3	20.52		0		0
Parlakhemundi	7	42.00	300	2.00		0.00	**44.00**	1	12.23	2	18.84	3	20.52	4	4.24	2	3.06
Jharsuguda	5	30.69	50	4.14		0.00	**34.83**		0		0	2	13.68		0		0
Sambalpur	5	25.98	200	5.60	5	3.22	**34.80**	1	12.23	2	18.84	2	13.68	2	2.12	2	3.06
Rairakhol	6	35.36	200	5.60	6	5.10	**46.06**		0	1	9.42		0	8	6.12	4	8.48
Bargarh	6	35.69	200	5.60	2	0.52	**41.81**	1	12.23	1	9.42	4	27.36	8	8.48	4	6.12
Bamara WL		0.00		0.00		0.00	**0.00**		0	1	9.42	2	13.68	4	4.24	2	3.06
Hirakhud WL		0.00		0.00		0.00	**0.00**	1	12.23		0		0		0		0
Sundargarh	6	30.82	200	5.60	6	5.98	**42.40**	1	12.23	1	9.42	3	20.52	1	1.06	2	3.06
Rourkela	6	35.44	200	5.60	1	0.21	**41.25**	1	12.23	2	18.84	8	54.72	6	6.36	6	9.18
Bonai	7	42.00	200	5.42	7	5.95	**53.37**		0	2	18.84	10	68.4	4	4.24	2	3.06
Deogarh	5	30.00	200	5.60	5	4.25	**39.85**	1	12.23	2	18.84	8	54.72	4	4.24	6	9.18
Keonjhar	7	37.03	290	8.12	2	0.39	**45.54**		0	1	9.42	8	54.72	6	6.36	5	7.65
Baripada	8	48.00	100	2.80	7	6.80	**57.60**	1	12.23	2	18.84	7	47.88	2	2.12	6	9.18
Karanjia	6	30.00	200	5.60	6	5.10	**40.70**		0	2	18.84	7	47.88	8	8.48	2	3.06
Rairangpur	5	18.16	100	2.80	5	4.00	**24.96**	1	12.23	2	18.84	3	20.52		0		0
Balasore WL		0.00		0.00		0.00	**0.00**		0	1	9.42	2	13.68	4	4.24		0
STR South		0.00		0.00		0.00	**0.00**	1	12.23	1	9.42	3	20.52	1	1.06		0
STR North		0.00		0.00		0.00			0		0		0		0		0
Keonjhar WL		0.00		0.00		0.00	0.00		0	1	9.42	1	6.84		0	2	3.06
Kalahandi(N)	5	30.00	300	8.40	5	4.25	**42.65**	1	12.23	3	28.26	15	102.6	8	8.48	2	3.06
Kalahandi (S)	7	34.18	300	8.40	7	5.82	**48.40**	1	12.23	3	28.26	2	13.68	6	6.36	2	3.06
Subarnapur	4	22.99	200	5.60		0.00	**28.59**		0		0		0		0		0
Bolangir	11	66.00	300	8.40	11	9.35	**83.75**		0	2	18.84	12	82.08	8	8.48	6	9.18
Khariar	5	30.00	300	8.40	5	4.25	**42.65**		0	2	18.84	9	61.56	2	2.12	2	3.06
Sunabeda WL		0.00		0.00		0.00	**0.00**	1	12.23	1	9.42	2	13.68	20	21.2	12	18.36
Rayagada	7	38.47	200	5.60	7	5.95	**50.02**	1	12.23	2	18.84	13	88.92	10	10.6	12	18.36
Koraput	6	35.65	300	8.40	6	5.14	**49.19**	1	12.23	2	18.84	4	27.36	4	4.24	4	6.12
Jeypore	6	36.00	250	7.00	5	5.10	**48.10**		0	2	18.84	3	20.52		0		0
Nabarangpur	6	35.92	300	8.40	6	5.10	**49.42**	1	12.23	2	18.84	9	61.56	8	8.48	4	6.12
Malkangiri	6	35.69	300	8.40	6	5.10	**49.19**	1	12.23	1	9.42		0	4	4.24	4	6.12
Silva BBSR		0.00		0.00		0.00	0.00		0	2	18.84	3	20.52		0		0
Silva Rayagada		0.00		0.00		0.00	0.00		0	2	18.84	3	20.52		0		0
DFT Angul		0.00		0.00		0.00	0.00		0	1	9.42	2	13.68		0		0
TS Champua		0.00		0.00		0.00	0.00	1	12.23		0		0		0		0
G.Udayagiri		0.00		0.00		0.00	0.00	1	12.23		0		0		0		0
T.S.BBSR		0.00		0.00		0.00			0		0		0		0		0
DD, NZP		0.00		0.00		0.00	0.00		0		0		0		0		0
DCF, Hqrs.		0.00		0.00		0.00	0.00		0		0		0		0		0
FRS, Cuttack		0.00		0.00		0.00	0.00		0		0		0		0		0
OFSDP																	
G.TOTAL	**216**	**1156.47**	**7940**	**218.48**	**150**	**120.09**	**1495.04**	**28**	**342.44**	**73**	**678.24**	**193**	**1320.12**	**217**	**228.60**	**130**	**231.32**

FINAL ACHIEVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Infrastructure Development											M &E
	Forest Road (Maintenance)		Maintenance Work of Permanent / Mega Nursery		Vehicle Provided to Ranges for Protection Duty		Hiring of Vehicle Provided to Ranges for Protection Duty		Other Infra		Total Infrastructure Development	Monitoring & Evaluation wages of DEO
	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Finan	Finan
Angul	16	9.99996	1	9.94	1	3.30568	5	18			132.66	20.83
Athmallik	40	20	1	6.665	3	7.36654	2	7.97058			95.96	13.40
Satkosia WL		0		0	2	2.4	3	10.8			52.56	14.71
Dhenkanal	50	25	1	9.94	2	6.64	6	21.6			132.10	22.40
Athagarh	50	25.00	1	9.94	1	13.29	4	2.7887			102.13	10.96
Cuttack	40	20		0	1	3.31575	5	17.99955	0	0	81.83	17.78
Mahanadi WL	20	5		0	2	5.4	2	4.98			19.50	9.08
Khurda	0	0	2	13.50761	0	0	6	20.1821			69.86	13.03
Puri WL		0	1	9.94	0	0	5	18			43.82	5.67
Rajnagar WL		0		0	1	3.32	4	14.4			40.82	11.33
Nayagarh	40	19.9442	1	9.94	1	2.5678	6	21.6			126.14	15.77
Chilika WL		0		0	1	3.31882	4	10.15483			13.47	10.96
Chandaka WL		0		0	1	3.32	3	9.3724			51.93	8.15
City Forests		0		0	0	0	4	12.92		0	36.02	8.57
Bhadrakh WL		0		0	1	3.32	3	10.6963		0	14.02	8.95
Phulbani	20	6		0	2	4.77656	5	14.8		0	48.68	16.61
Baliguda	50	25	1	22.99463	2	18	5	6.65216		0	148.98	15.72
Boudh	50	25	1	29.42696	2	6.16183	3	9.67		0	87.92	10.43
Gh.South	50	25	2	19.88	1	2.84848	4	10.55928		0	97.52	11.27
Gh.North		0	1	9.94	2	6.6438	3	9.13509	1	34.15	100.97	11.35
Berhampur		0	1	9.94	1	3.17211	3	10.8		0	66.08	8.34
Parlakhemundi		0	1	9.94	2	6.39191	5	18		0	93.22	15.84
Jharsuguda		0	1	5.98	1	3.03428	4	12.96		0	35.65	15.62
Sambalpur	40	20	1	9.94	0	14.47	5	0		0	94.34	15.48
Rairakhol	40	20	1	9.94	1	18.31912	5	3.37032		0	75.65	13.12
Bargarh	40	20	1	9.94	1	3.29009	5	17.4		0	114.24	13.48
Bamara WL		0		0	1	3.34022	4	14.28086		0	48.02	11.29
Hirakhud WL		0		0	2	6.24	2	6.20		0	24.67	8.89
Sundargarh		0	1	9.94	1	2.87485	5	16.88188		0	75.99	16.64
Rourkela	40	20	1	9.94	1	3.33	5	18.00		0	152.60	17.86
Bonai	20	10	1	9.94	1	3.31742	6	21.6		0	139.40	18.00
Deogarh	40	20	1	9.94	1	3.29808	4	14.4		0	146.85	11.14
Keonjhar	13	6.5	1	8.20576	1	3.33584	6	21.45		0	117.64	19.72
Baripada		0	1	9.94	2	5.53472	5	16.2		0	121.92	16.02
Karanjia		0	1	9.94	0	4.94393	4	10.8		0	103.94	11.24
Rairangpur		0	1	7.9628	2	5.0927204	3	4.811391		0	69.46	10.78
Balasore WL	30	15		0	1	2.37	5	14.72		0	59.43	11.35
STR South		0		0	2	17.64522	7	4.5276		0	65.40	15.83
STR North	40	20		0	2	6.00	5	1.66		0	27.66	2.28
Keonjhar WL	0	0		0	1	3.02868	3	9.9		0	32.24868	12.98
Kalahandi(N)	5	2.5	1	9.94	1	14.4	4	3.32		0	184.79	11.35
Kalahandi (S)	5	2.5	1	9.94	2	6.47567	5	16.52		0	99.03	15.74
Subarnapur	10	5	1	9.94	1	2.12392	3	9.36		0	26.42	8.50
Bolangir	40	20	1	9.94	3	9.96	8	28.8		0	187.28	24.97
Khariar	35	17.50	1	8.74	1	3.32	4	14.4		0	129.54	11.36
Sunabeda WL		0		0	0	0	3	10.8		0	85.69	6.79
Rayagada	40	20	1	9.94	3	9.89795	4	14.4		0	203.19	15.55
Koraput	40	20	1	9.94	2	6.70	4	14.40		0	119.83	13.79
Jeypore		0	1	9.94	2	6.64	4	14.4		0	70.34	13.62
Nabarangpur	15	7.5	1	9.94	2	6.64	4	14.4		0	145.71	13.62
Malkangiri		0	1	9.37799	3	9.96828	3	10.8		0	62.16	13.33
Silva BBSR		0		0		0		0		0	39.36	0.00
Silva Rayagada		0	1	9.94		0		0		0	49.30	0.00
DFT Angul		0		0		0		0	1	300.60	323.70	4.20
TS Champua		0		0		0		0		0.00	12.23	3.15
G.Udayagiri		0		0		0		0		0.00	12.23	1.95
T.S.BBSR		0		0		0		0		0	0.00	0.00
DD, NZP		0		0		0		0		0	0.00	0.00
DCF, Hqrs.		0		0		0		0		0	0.00	0.00
FRS, Cuttack		0		0		0		0		0	0.00	0.00
OFSDP												
G.TOTAL	**919**	**452.44**	**38**	**391.18**	**70**	**291.15**	**219**	**641.84**	**2**	**334.75**	**4912.09**	**680.77**

FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Compensatory Afforestation													
	PO for Block Plantation 2020-21		PO for ANR Plantation 2020-21		PO for Avenue Plantation		PO for Tall Tree Plantation		PO for Bald Hill & Others Plantation		1st Year Creation of Block Plantation		1st Year Creation of ANR Plantation	
	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan
Angul		0.12		0.00		0		0		0	1.23	0.35	935.9	171.28
Athmallik		0.00		0.00		0		0		0		0.00		0.00
Satkosia WL		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Dhenkanal	0.819	0.28	6.43	0.33		0.00		0.00		0.00		0.00	674.0	54.05
Athagarh		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Cuttack	13.944	4.81	5.49	0.63		0		0	111.39	119.75576	82	23.20		0.00
Mahanadi WL		0.00		0.00		0		0		0		0.00		0.00
Khurda		0.00	24.282	1.23		0		0		0		0.00		0.00
Puri WL		0.00	0	0.00		0		0		0		0.00		0.00
Rajnagar WL		0.00		0.00		0		0		0		0.00		0.00
Nayagarh	1.42	0.49	208.014	18.98		0		0		0		0.00		0.00
Chilika WL		0.00		0.00		0		0		0		0.00		0.00
Chandaka WL		0.00		0.00		0		0		0		0.00		0.00
City Forests		0.00		0.00	0	0		0		0		0.00		0.00
Bhadrakh WL		0.00		0.00		0		0		0		0.00		0.00
Phulbani		0.00		0.00		0		0		0		0.00		0.00
Baliguda		0.00		0.00		0		0		0		0.00		0.00
Boudh		0.00		0.00		0		0		0		0.00		0.00
Gh.South	0.265	0.09	2.003	0.10		0		0		0		0.00		0.00
Gh.North	0.051	0.04		0.00		0		0		0		0.00		0.00
Berhampur	3.792	0.63		0.00		0		0		0		0.00		0.00
Parlakhemundi		0.00		0.00		0		0		0		0.00		0.00
Jharsuguda		0.00	12.213	0.88		0		0		0	16.387	3.76	37.0	8.54
Sambalpur		0.00	316	19.12		0		0		0		0.00		0.00
Rairakhol		0.00		0.00		0		0		0		0.00		0.00
Bargarh		0.00	48.848	3.52		0		0		0		0.00		0.00
Bamara WL		0.00		0.00		0		0		0		0.00		0.00
Hirakhud WL		0.00		0.00		0		0		0		0.00		0.00
Sundargarh	1.593	0.55	20.068	1.01		0		0		0	11.786	5.10	413.2	109.69
Rourkela	333.651	27.93	63.628	45.26		0		0		0		0.00		0.00
Bonai	5.228	1.39	348.319	18.24	240	0.02528		0		0		0.00	217.8	43.22
Deogarh		0.00	1	8.89		0		0		0		0.00		0.00
Keonjhar	3.228	0.62	183.1986	9.77	1.94	0.21155		0.30		0		0.00	860.2	164.25
Baripada		0.00		0.00		0		0.00		0		0.00		0.00
Karanjia		0.00		0.00		0		0.00		0		0.00		0.00
Rairangpur		0.00		0.00		0		0.00		0		0.00		0.00
Balasore WL		0.00		0.00		0		0.00		0		0.00		0.00
STR South		0.00		0.00		0		0.00		0		0.00		0.00
STR North		0.00		0.00		0		0.00		0		0.00		0.00
Keonjhar WL		0.00	1.979	0.18		0		0.00		0		0.00		0.00
Kalahandi(N)		0.00	0	0.00		0		0.00		0		0.00	0.0	0.00
Kalahandi (S)	100	6.91	396.4605	401.76		0		0.00		0		0.00	4.5	1.12
Subarnapur		0.00	140	26.77		0		0.00	220	212.2472		0.00		0.00
Bolangir		0.00	887.54	63.74		0		0.00		0		0.00		0.00
Khariar	31.1	35.54		0.00		0		0.00		0		0.00		0.00
Sunabeda WL		0.00		0.00		0		0.00		0		0.00		0.00
Rayagada	19.668	6.76		0.00		0		0.00		0	50	37.32	258.6	326.25
Koraput		0.00		0.00		0	9	19.37		0	98.172	47.02	829.4	276.18
Jeypore		0.00		0.00		0		0		0		0.00		0.00
Nabarangpur		0.00		0.00		0		0		0		0.00		0.00
Malkangiri		0.00		0.00		0		0		0		0.00		0.00
Silva BBSR		0.00		0.00		0		0		0	*	0.00		0.00
Silva Rayagada		0.00		0.00		0		0		0		0.00		0.00
DFT Angul		0.00		0.00		0		0		0		0.00		0.00
TS Champua		0.00		0.00		0		0		0		0.00		0.00
G.Udayagiri		0.00		0.00		0		0		0		0.00		0.00
T.S.BBSR		0.00		0.00		0		0		0		0.00		0.00
DD, NZP		0.00		0.00		0		0		0		0.00		0.00
DCF, Hqrs.		0.00		0.00		0		0		0		0.00		0.00
FRS, Cuttack		0.00		0.00		0		0		0		0.00		0.00
OFSDP														
G.TOTAL	**515**	**86.16**	**2665**	**620.4**	**242**	**0.24**	**9**	**19.67**	**331**	**332.00**	**260**	**117**	**4230.57**	**1154.57**

FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Compensatory Afforestation									
	1st Year of Bald Hill & Others Plantation		1st Year Other Anciliary Activities		2nd Year Maintenance all Plantation		2nd Year Other Anciliary Activities		3rd Year Maintenance of all Plantation	
	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan
Angul		0.00		0.00	32.68	2.89		0.00	150.98	2.38
Athmallik		0.00		0.00		0.00		0.00		0.00
Satkosia WL		0.00		0.00		0.00		0.00		0.00
Dhenkanal		0.00	674.00	297.46	371.21	26.93		0.00	530.38	17.62
Athagarh		0.00		0.00		0.00		0.00		0.00
Cuttack	48.60	47.86		0.00	43.22	6.84		0.00	71.52	2.74
Mahanadi WL		0.00		0.00		0.00		0.00		0.00
Khurda		0.00		0.00	47.82	2.97		0.00		0.00
Puri WL		0.00		0.00		4.05		0.00		0.00
Rajnagar WL		0.00		0.00		0.00		0.00		0.00
Nayagarh		0.00		0.00		0.00		0.00		0.00
Chilika WL		0.00		0.00		0.00		0.00		0.00
Chandaka WL		0.00		0.00	1.87	1.18		0.00		0.00
City Forests		0.00		0.00	29.00	11.80		0.00		0.00
Bhadrakh WL		0.00		0.00		0.00		0.00		0.00
Phulbani		0.00		0.00		0.00		0.00		0.00
Baliguda		0.00		0.00		0.00		0.00		0.00
Boudh		0.00		0.00		0.00		0.00		0.00
Gh.South		0.00		0.00		0.00		0.00	1675.00	53.23
Gh.North		0.00		0.00		0.00		0.00		0.00
Berhampur		0.00		0.00	1660.00	0.11		0.00	65.00	3.45
Parlakhemundi		0.00		0.00		0.00		0.00		0.00
Jharsuguda		0.00		0.00		20.68		0.00		0.00
Sambalpur		0.00		0.00		0.00		0.00		0.00
Rairakhol		0.00		0.00		0.00		0.00	84.92	1.12
Bargarh		0.00		0.00		0.00		0.00	42640.00	65.27
Bamara WL		0.00		0.00	213.34	15.71		0.00		0.00
Hirakhud WL		0.00		0.00		0.00		0.00		0.00
Sundargarh		0.00	424.95	146.05	42.33	10.47		0.00	2186.37	71.60
Rourkela		0.00		0.00	9.65	46.57		0.00	65.46	7.55
Bonai		0.00	217.82	39.43	291.06	20.60		0.00	37.22	1.04
Deogarh		0.00		0.00	35.08	5.83		0.00		0.00
Keonjhar		0.00		58.66	814.99	59.90		0.00	65.33	1.89
Baripada		0.00		0.00		0.00		0.00	4.00	0.23
Karanjia		0.00		0.00		0.00		0.00		0.00
Rairangpur		0.00		0.00		0.00		0.00		0.00
Balasore WL		0.00		0.00		0.00		0.00		0.00
STR South		0.00		0.00		0.00		0.00		0.00
STR North		0.00		0.00		0.00		0.00		0.00
Keonjhar WL		0.00		0.00	8.09	1.32	72.80	5.36	91.00	5.15
Kalahandi(N)		0.00		0.00	0.00	0.00		0.00	0.00	0.00
Kalahandi (S)	46.39	40.20		0.00	48.25	19.03		0.00		0.00
Subarnapur		0.00		0.00		0.00		0.00		0.00
Bolangir		0.00		0.00		0.00		0.00		0.00
Khariar		0.00		0.00		0.00		0.00		0.00
Sunabeda WL		0.00		0.00		0.00		0.00		0.00
Rayagada	146.11	116.77		2.09		0.00		0.00		0.00
Koraput	142.15	118.52	1341.56	149.57		0.00		0.00		0.00
Jeypore		0.00		0.00		0.00		0.00		0.00
Nabarangpur		0.00		0.00		0.00		0.00		0.00
Malkangiri		0.00		0.00		0.00		0.00		0.00
Silva BBSR		0.00		0.00		0.00		0.00		0.00
Silva Rayagada		0.00		0.00		0.00		0.00		0.00
DFT Angul		0.00		0.00		0.00		0.00		0.00
TS Champua		0.00		0.00		0.00		0.00		0.00
G.Udayagiri		0.00		0.00		0.00		0.00		0.00
T.S.BBSR		0.00		0.00		0.00		0.00		0.00
DD, NZP		0.00		0.00		0.00		0.00		0.00
DCF, Hqrs.		0.00		0.00		0.00		0.00		0.00
FRS, Cuttack		0.00		0.00		0.00		0.00		0.00
OFSDP										
G.TOTAL	**383.25**	**323.35**	**2658.33**	**693.26**	**3648.58**	**256.86**	**72.80**	**5.36**	**47667.19**	**233.26**

FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Compensatory Afforestation								
	3rd Year Other Anciliary		4th Year Maintenance all Plantation		5th Year Maintenance all Plantation		6th Year Maintenanceall Plantation		Total CA,PCA etc.
	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Finan
Angul		0.00	72.07	0.75	629.84	5.36		0.00	**183.13**
Athmallik		0.00		9.40		10.11		0.00	**19.52**
Satkosia WL		0.00		0.00		0.00		0.00	**0.00**
Dhenkanal		0.00	32.00	0.30	174.97	2.01		0.00	**398.98**
Athagarh		0.00		0.00		0.00		0.00	**0.00**
Cuttack		0.00	42.50	2.31	4.84	0.26		0.00	**208.41**
Mahanadi WL		0.00		0.00		0.00		0.00	**0.00**
Khurda		0.00	19500.00	4.24		0.00		0.00	**8.44**
Puri WL		0.00		0.00		0.00		0.00	**4.05**
Rajnagar WL		0.00		0.00	25.00	1.30	2.00	0.27	**1.56**
Nayagarh		0.00		0.00		0.00		0.00	**19.47**
Chilika WL		0.00		0.00		0.00		0.00	**0.00**
Chandaka WL		0.00		0.00		0.00		0.00	**1.18**
City Forests		0.00		0.00		0.00		0.00	**11.80**
Bhadrakh WL		0.00		0.00		0.00		0.00	**0.00**
Phulbani		0.00		0.00		0.00		0.00	**0.00**
Baliguda		0.00		0.00		0.00		0.00	**0.00**
Boudh		0.00		0.00		0.00		0.00	**0.00**
Gh.South		0.00		0.00		0.00		0.00	**53.42**
Gh.North		0.00		0.00		0.00		0.00	**0.04**
Berhampur		0.00		0.00		0.00		0.00	**4.19**
Parlakhemundi		0.00		0.00		0.00		0.00	**0.00**
Jharsuguda		0.00		0.81		0.00		0.00	**34.68**
Sambalpur		0.00		0.00		0.00		0.00	**19.12**
Rairakhol		0.00		0.00		0.00		0.00	**1.12**
Bargarh		0.00	20.24	1.04		0.00		0.00	**69.83**
Bamara WL		0.00		0.00		0.00		0.00	**15.71**
Hirakhud WL		0.00		0.00		0.00		0.00	**0.00**
Sundargarh		0.00	406.73	4.76	61.60	0.53	61.55	3.17	**352.92**
Rourkela		0.00		0.00	35.63	1.93		0.00	**129.24**
Bonai		0.00	479.65	4.41	2801.43	26.56	3716.71	48.01	**202.91**
Deogarh		0.00		0.00	181.14	9.83		0.00	**24.55**
Keonjhar		1.60	572.21	6.06	10.00	2.23	1392.24	11.35	**316.84**
Baripada		0.00		0.00		0.00		0.00	**0.23**
Karanjia		0.00		0.00		0.00		0.00	**0.00**
Rairangpur		0.00		0.00		0.00		0.00	**0.00**
Balasore WL		0.00		0.00		0.00		0.00	**0.00**
STR South		0.00		0.00		0.00		0.00	**0.00**
STR North		0.00		0.00		0.00		0.00	**0.00**
Keonjhar WL		0.00	571.70	5.21	8.00	0.07		0.00	**17.30**
Kalahandi(N)		0.00		0.00		0.00		0.00	**0.00**
Kalahandi (S)		0.00	488.90	12.25		0.00		0.00	**481.27**
Subarnapur		0.00		0.00		0.00		0.00	**239.02**
Bolangir		0.00		0.00		0.00		0.00	**63.74**
Khariar		0.00		0.00		0.00		0.00	**35.54**
Sunabeda WL		0.00		0.00		0.00		0.00	**0.00**
Rayagada		0.00	2.34	0.13		0.00		0.00	**489.32**
Koraput		0.00	567.95	27.57		0.00		0.00	**638.22**
Jeypore		0.00		0.00		0.00		0.00	**0.00**
Nabarangpur		0.00		0.00		0.00		0.00	**0.00**
Malkangiri		0.00		0.00		0.00		0.00	**0.00**
Silva BBSR		0.00		0.00		0.00		0.00	**0.00**
Silva Rayagada		0.00		0.00		0.00		0.00	**0.00**
DFT Angul		0.00		0.00		0.00		0.00	**0.00**
TS Champua		0.00		0.00		0.00		0.00	**0.00**
G.Udayagiri		0.00		0.00		0.00		0.00	**0.00**
T.S.BBSR		0.00		0.00		0.00		0.00	**0.00**
DD, NZP		0.00		0.00		0.00		0.00	**0.00**
DCF, Hqrs.		0.00		0.00		0.00		0.00	**0.00**
FRS, Cuttack		0.00		0.00		0.00		0.00	**0.00**
OFSDP									
G.TOTAL	**0.00**	**1.60**	**22756.28**	**79.25**	**3932.46**	**60.19**	**5172.50**	**62.80**	**4045.75**

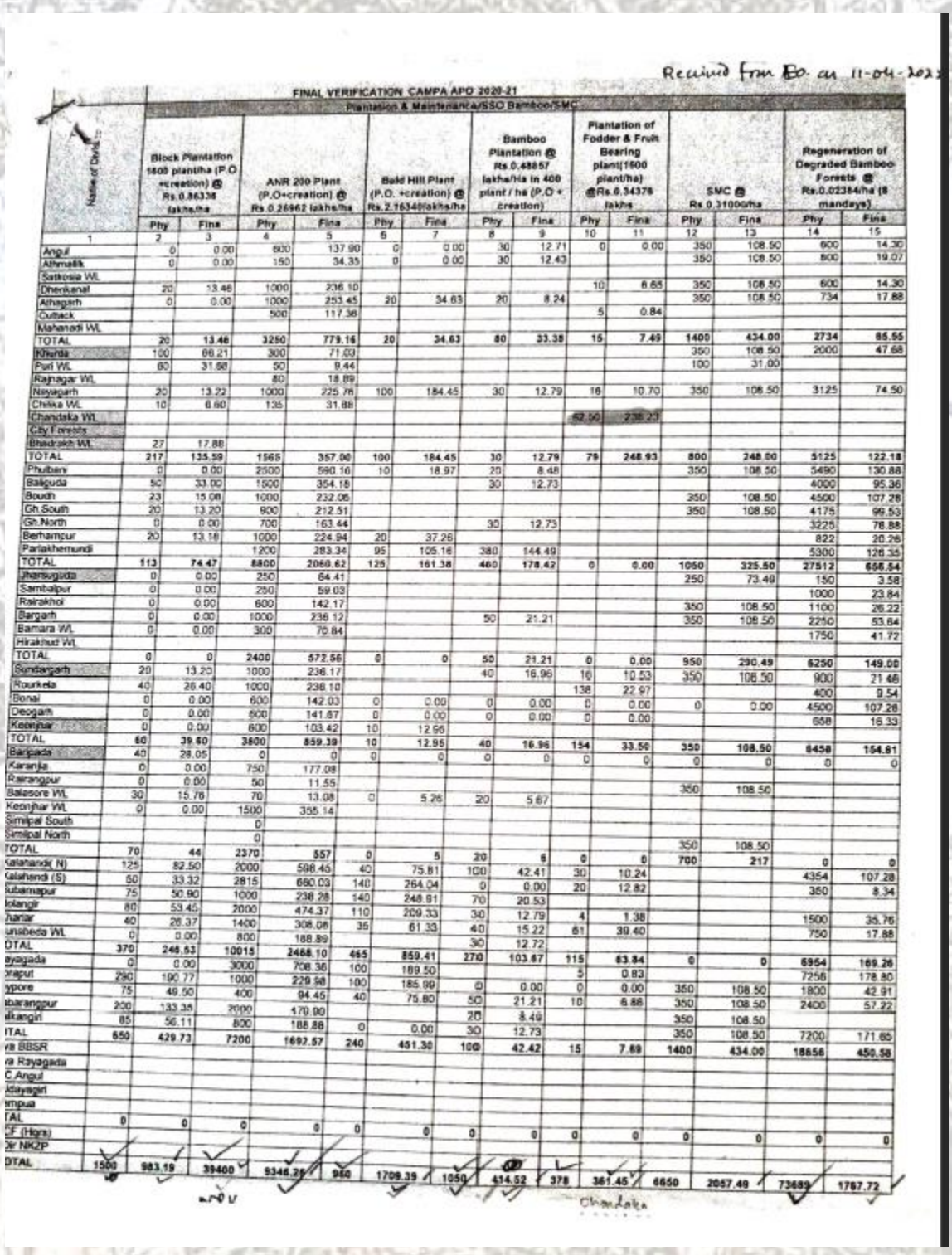
FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Ama Jangala Yojana												
	0th Year ANR Without Gap		1st Year ANR without gap :		2nd Year ANR without gap :		3rd Year ANR without gap :		3rd Year Block Plantation :		Others		Total AJY
	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Phy	Finan	Finan
Angul	916	23.072	913	114.452	937	41.958	2709	60.68		0	19	9.046	**249.21**
Athmallik		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
Satkosia WL		0.00		0.00		0.00		0.00		0.00		0.00	**27.31**
Dhenkanal		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
Athagarh		0.00		0.00		0.00		0.00		0.00		0.00	**0.00**
Cuttack		0		0		0		0		0		0	**0.00**
Mahanadi WL		0		0		0		0		0		0	**0.00**
Khurda		0		0		0		0		0		0	**0.00**
Puri WL		0		0		0		0		0		0	**0.00**
Rajnagar WL		0		0		0		0		0		0	**0.00**
Nayagarh		0		0		0		0		0		0	**0.00**
Chilika WL		0		0		0		0		0		0	**0.00**
Chandaka WL		0		0		0		0		0		0	**0.00**
City Forests		0		0		0		0		0		0	**0.00**
Bhadrakh WL		0		0		0		0		0		0	**0.00**
Phulbani	2000	71.142	1000	125.4	1000	41.2213	7000	108.70	10	1.748		0	**348.21**
Baliguda	275	17.799	495	62.7	469	22.4	2556	60.93		0		0	**163.83**
Boudh		0		0		0		0.00		0		0	**0.00**
Gh.South		0		0		0		0.00		0		0	**0.00**
Gh.North		0		0		0		0.00		0		0	**0.00**
Berhampur		0		0		0		0.00		0		0	**0.00**
Parlakhemundi		0		0		0		0.00		0		0	**170.31**
Jharsuguda		0		0		0		0.00		0		0	**0.00**
Sambalpur		0		0		0		0.00		0		0	**0.00**
Rairakhol		0		0		0		0.00		0		108.4895	**108.49**
Bargarh	86	0	821	0	470	0	1645	0.00	70	0		0	**148.51**
Bamara WL	1000	7.3975	1000	65.20512	1000	22.4	3546.21	59.41		0		10.4	**164.82**
Hirakhud WL		0		0		0		0.00		0		0	**0.00**
Sundargarh		0		0		0		0.00		0		0	**0.00**
Rourkela	1000	5.1251	1000	49.5425	1000	34.732	4600	51.41	50	8.099507		8.8	**157.71**
Bonai		0	700	1.67008	350	15.6798	3490.04	80.75		0		0	**98.10**
Deogarh	1000	25.2	100	123.8218	1000	44.8	5448.5	98.62	0	0		10.4	**302.84**
Keonjhar	1000	26.671	1000	131.3027	1000	47.2705	4700	68.93	40	3.5622	2080	10.3	**288.04**
Baripada		0		0		0		0.00		0		0	**0.00**
Karanjia		0		0		0		0.00		0		0	**0.00**
Rairangpur		0		0		0		0.00		0		0	**0.00**
Balasore WL	750	18.853		0	1098	42.895	1004	32.55		0		7.65069	**101.95**
STR South		0		0		0		0.00		0		0	**0.00**
STR North		0		0		0		0.00		0		0	
Keonjhar WL		0		0		0	5167.73	121.07	80	13.96287		0	**135.03**
Kalahandi(N)	1500	40.23	2000	265.9892	1000	47.2734	7880	131.98	70	11.24562	0	15.6	**512.31**
Kalahandi (S)	3250	105.33	3000	405.8751	1000	45.7388	6250	103.90		0		15.6	**676.44**
Subarnapur		0		0		0		0.00		0		0	**0.00**
Bolangir	2500	63	2000	254.3726	1000	44.8	7008	203.79	140	24.472	10000	26	**616.44**
Khariar	2000	74.73	2000	261.6584	1000	45.8386	7247.66	169.81	120	21.61478		0	**573.66**
Sunabeda WL		0		0		0		0.00		0		0	**0.00**
Rayagada	1000	37.22	950	121.0967	950	44.0177	6665.53	157.23	70	12.57716		0	**372.14**
Koraput	1000	25.193	1000	125.4	1000	41.2213	6250	98.25	140	24.472	1000	10	**324.53**
Jeypore	1000	25.192	1000	125.4	1000	44.8	4250	95.20	60	10.488	1020	10.4	**311.48**
Nabarangpur	0	0	2750	17.89375	5000	92.5		0.00		0	0	15.5	**125.89**
Malkangiri	2000	50.4	2000	250.8	1000	44.8	4329.04	96.96	160	27.968	0	20.8	**491.73**
Silva BBSR		0		0		0				0		0	**0.00**
Silva Rayagada		0		0		0				0		0	**0.00**
DFT Angul		0		0		0				0		0	**0.00**
TS Champua		0		0		0				0		0	**0.00**
G.Udayagiri		0		0		0				0		0	**0.00**
T.S.BBSR		0		0		0				0		0	
DD, NZP		0		0		0				0		0	**0.00**
DCF, Hqrs.		0		0		0				0		0	
FRS, Cuttack		0		0		0				0		0	**0.00**
OFSDP													**8.70**
G.TOTAL	**22277**	**616.55**	**23729**	**2502.58**	**21274**	**764.35**	**91747**	**1800.18**	**1010**	**160.21**	**14119**	**278.99**	**6477.68**

FINAL ACHIVEMENT UNDER CAMPA APO -2019-20 Rs in Lakhs

Name of Division	Research Activity/ Capacity Building	Utilization of Interest money	IT & GIS	Training Infra	Total Forest	Wild Life Management	Total Rs in lakhs
	Finan	Finan	Finan	Finan	Finan	Finan	Finan
Angul	0.00				1020.55	315.40919	1335.96
Athmallik	0.00				327.05	215.76490	542.82
Satkosia WL	0.00				94.58	656.52289	751.11
Dhenkanal	0.00				1205.28	606.18632	1811.47
Athagarh	0.00				579.65161	169.70433	749.36
Cuttack	0.00				933.73	721.44515	1655.17
Mahanadi WL	0.00				28.58	297.83400	326.41
Khurda	0.00				554.63	79.62639	634.25
Puri WL	0.00				113.66	136.44203	250.10
Rajnagar WL	0.00				101.27	355.17660	456.45
Nayagarh	0.00				955.41	79.85328	1035.27
Chilika WL	0.00				108.43	157.69122	266.12
Chandaka WL	0.00	267.44			370.13	446.78686	816.92
City Forests	6.09	11.95			148.80	38.18572	186.98
Bhadrakh WL	0.00				64.64	73.35379	138.00
Phulbani	0.00				1238.04	56.83782	1294.88
Baliguda	0.00				1094.68	166.75940	1261.44
Boudh	0.00				608.94	111.92951	720.87
Gh.South	0.00				700.24	75.12842	775.37
Gh.North	0.00				534.16	89.90752	624.06
Berhampur	0.00				608.60	155.34205	763.94
Parlakhemundi	0.00				970.09	151.09903	1121.19
Jharsuguda	0.00				459.21	145.10615	604.32
Sambalpur	0.00				685.53	335.00434	1020.53
Rairakhol	0.00				690.21	272.61600	962.83
Bargarh	0.00				781.67	99.32304	880.99
Bamara WL	0.00				518.94	793.79052	1312.73
Hirakhud WL	0.00				51.76	363.87717	415.64
Sundargarh	0.00				1344.06	224.82203	1568.88
Rourkela	0.00				1074.45	353.09000	1427.54
Bonai	0.00				895.20	355.76978	1250.97
Deogarh	0.00				977.70	338.03163	1315.73
Keonjhar	0.00				1101.35	502.04056	1603.39
Baripada	0.00				583.38	131.96364	715.35
Karanjia	0.00				474.18	158.58296	632.76
Rairangpur	0.00				261.21	113.17270	374.38
Balasore WL	0.00				218.33952	376.96346	595.30
STR South	0.00				81.23	523.73795	604.97
STR North	0.00				68.17	679.38000	747.55
Keonjhar WL	0.00				517.30	1374.70773	1892.01
Kalahandi(N)	0.00				1681.29	104.28501	1785.58
Kalahandi (S)	0.00				2148.88	194.84523	2343.72
Subarnapur	0.00				845.22	120.70304	965.93
Bolangir	0.00				1808.80	98.61000	1907.41
Khariar	0.00				1554.57	50.23000	1604.80
Sunabeda WL	0.00				127.90	278.61100	406.51
Rayagada	0.00				1958.15	165.92000	2124.07
Koraput	0.00				1854.54	41.62000	1896.16
Jeypore	0.00				907.78	140.01000	1047.79
Nabarangpur	0.00				1111.59	181.74487	1293.34
Malkangiri	0.00				1061.21	64.83604	1126.04
Silva BBSR	128.64				191.23	0.00000	191.23
Silva Rayagada	77.83				150.36	0.00000	150.36
DFT Angul	0.00				327.90	0.00000	327.90
TS Champua	0.00			40.00	55.38	0.00000	55.38
G.Udayagiri	0.00			40.00	54.18	0.00000	54.18
T.S.BBSR	0.00			220.00	220.00		220.00
DD, NZP	0.00			0.00	0.00	236.92861	236.93
DCF, Hqrs.	0.00	26.86	1367.72	1000.00	2394.59		2394.59
FRS, Cuttack	49.00				49.00		49.00
OFSDP							8.70
G.TOTAL	261.56	306.25	1367.72	1300.00	41647.58	13977.30988	55633.58662

6. State level report of physical and financial achievements for 2020-21



Received from DFO on 11-04-2021

FINAL VERIFICATION CAMPA APO 2020-21

Plantation & Maintenance/SSO Bamboo/SMC

Name of Divn.	Block Plantation 1600 plants/ha (P.O +creation) @ Rs.0.86336 lakhs/ha		AN/R 200 Plant (P.O+creation) @ Rs.0.26962 lakhs/ha		Bald Hill Plant (P.O. +creation) @ Rs.2.76340/lakhs/ha		Bamboo Plantation @ Rs.0.48857 lakhs/ha in 400 plant / ha (P.O + creation)		Plantation of Fodder & Fruit Bearing plant(1500 plant/ha) @Rs.0.34378 lakhs		SMC @ Rs.0.31000/ha		Regeneration of Degraded Bamboo Forests @ Rs.0.02384/ha (8 mandays)	
	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Angul	0	0.00	500	137.90	0	0.00	30	12.71	0	0.00	350	108.50	600	14.30
Athmallik	0	0.00	150	34.35	0	0.00	30	12.43			350	108.50	800	19.07
Satkosia WL														
Dhenkanal	20	13.46	1000	236.10					10	6.65	350	108.50	600	14.30
Athagarh	0	0.00	1000	253.45	20	34.63	20	8.24			350	108.50	734	17.88
Cuttack			500	117.36					5	0.84				
Mahanadi WL														
TOTAL	20	13.46	3250	779.16	20	34.63	80	33.38	15	7.49	1400	434.00	2734	65.55
Kilkida	100	66.21	300	71.03							350	108.50	2000	47.68
Puri WL	60	31.66	50	9.44							100	31.00		
Rajnagar WL			80	18.89										
Nayagarh	20	13.22	1000	225.76	100	184.45	30	12.79	16	10.70	350	108.50	3125	74.50
Chilka WL	10	6.60	135	31.88										
Chandaka WL									62.50	238.23				
City Forests														
Bhadrakh WL	27	17.88												
TOTAL	217	135.59	1565	357.06	100	184.45	30	12.79	79	248.93	800	248.50	5125	122.18
Phulbani	0	0.00	2500	590.16	10	18.97	20	8.48			350	108.50	5490	130.88
Baliguda	50	33.00	1500	354.18			30	12.73					4000	95.36
Boudh	23	15.08	1000	232.06							350	108.50	4500	107.28
Gh.South	20	13.20	900	212.51							350	108.50	4175	99.53
Gh.North	0	0.00	700	163.44			30	12.73					3225	76.88
Berhampur	20	13.18	1000	224.84	20	37.26							822	20.26
Parlakhemundi			1200	283.34	95	105.16	380	144.49					5300	126.35
TOTAL	113	74.47	8800	2060.62	125	161.38	460	178.42	0	0.00	1050	325.50	27512	656.54
Jharsuguda	0	0.00	250	64.41							250	73.49	150	3.58
Sambalpur	0	0.00	250	59.03									1000	23.84
Rairakhol	0	0.00	600	142.17							350	108.50	1100	26.22
Bargarh	0	0.00	1000	236.12			50	21.21			350	108.50	2250	53.64
Bamara WL	0	0.00	300	70.84									1750	41.72
Hirakhud WL														
TOTAL	0	0	2400	572.56	0	0	50	21.21	0	0.00	950	290.49	6250	149.00
Sundargarh	20	13.20	1000	236.17			40	16.96	10	10.53	350	108.50	900	21.46
Rourkela	40	26.40	1000	236.10					138	22.97			400	9.54
Bonai	0	0.00	600	142.03	0	0.00	0	0.00	0	0.00	0	0.00	4500	107.28
Deogarh	0	0.00	600	141.67	0	0.00	0	0.00	0	0.00			688	16.33
Keonjhar	0	0.00	600	103.42	10	12.96								
TOTAL	60	39.60	3800	859.39	10	12.95	40	16.96	154	33.50	350	108.50	6458	154.81
Baripada	40	26.05	0	0	0	0	0	0	0	0	0	0	0	0
Karanjia	0	0.00	750	177.08										
Rairangpur	0	0.00	50	11.55										
Balasore WL	30	15.76	70	13.08	0	5.26	20	5.67			350	108.50		
Keonjhar WL	0	0.00	1500	355.14										
Similpal South			0											
Similpal North			0											
TOTAL	70	44	2370	557	0	5	20	6	0	0	700	217	0	0
Kalahandi(N)	125	82.50	2000	598.45	40	75.81	100	42.41	30	10.24			4354	107.28
Kalahandi (S)	50	33.32	2815	680.03	140	264.04	0	0.00	20	12.82			350	8.34
Nuapada	75	50.90	1000	238.28	140	248.91	70	20.53						
Bolangir	80	53.45	2000	474.37	110	209.33	30	12.79	4	1.38			1500	35.76
Jharsuguda	40	26.37	1400	308.06	35	61.33	40	15.22	61	39.40			750	17.88
Sonepur WL	0	0.00	800	188.89			30	12.72						
TOTAL	370	246.53	10015	2488.10	465	859.41	270	103.67	115	63.84	0	0	6954	169.26
Rayagada	0	0.00	3000	708.36	100	169.50			5	0.83			7256	178.80
Koraput	290	190.77	1000	229.98	100	185.99	0	0.00	0	0.00	350	108.50	1800	42.91
Malkangiri	75	49.50	400	94.45	40	75.80	50	21.21	10	6.88	350	108.50	2400	57.22
Nabarangpur	200	133.36	2000	479.90			20	8.49			350	108.50		
Koraput	85	56.11	800	188.88	0	0.00	30	12.73			350	108.50	7200	171.85
TOTAL	650	429.73	7200	1692.57	240	451.30	100	42.42	15	7.69	1400	434.00	18656	450.58
Area BBSR														
Area Rayagada														
DFO Angul														
Udayagiri														
Rampua														
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CF (Hqrs)														
Dir NKZP														
TOTAL	1500	983.19	39400	9346.26	960	1709.39	1050	414.52	378	361.45	6650	2057.49	73689	1767.72

FINAL VERIFICATION CAMPA APO 2020-21

Name of Division	Plantation & Maintenance/SSO Bamboo/SMC												FINAL VERI Plantation &	
	A.R. Plantation 1600 plant/ha (2nd year) @ Rs.0.28773 lakhs/ha		ANR 200 Plant (2nd year) @ Rs.0.07871 lakhs/ha		Bamboo Plantation @ Rs.0.20277 lakhs/Ha in 400 plant / ha (2nd year)		ANR 200 Plant (3rd year) @ Rs.0.0.03339 lakhs/ha		Bald Hill Plant (3rd year) @ Rs.0.23367 lakhs/ha		Avenue plantation @ Rs.0.56494 RKM/250 pl. (2nd yeatry/ WL Habitat		18 months old seedling (another 6 months) @ Rs.13.10/ seedling)	
	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina
1	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Angul			500	36.23	70	13.00	1500	45.02	0	0.00	0.00	0.00	100000	12.45
Athmallik			50	3.62			500	15.85					100000	4.81
Satkusia WL														
Dhenkanal	100	27.33	500	37.36	70	13.48	3000	95.16					200000	47.81
Athagarh			500	31.34	70	11.48	1920	64.38					162000	21.22
Cuttack	70	19.05	500	36.89			1950	61.71	100	22.25	76	39.98		
Mahanadi WL													562000	86.28
TOTAL	170	46.38	2050	145.45	210	37.93	8875	272.10	100	22.25	76	40		
Khurda	100	18.51	500	37.56			1000	31.90	50	11.13				
Puri WL	20	4.37	125	16.42										
Rajnagar WL							390	12.37					100000	9.76
Nayagarh	90	22.66	500	33.84	70	12.57	4720	144.81	50	11.13			50000	6.22
Chilka WL			200	14.95			200	6.35					100000	12.45
Chandaka WL													0	0.00
City Forests													150000	19.85
Bhadrakh WL													400090	48.08
TOTAL	210	43.54	1325	102.76	70	12.57	6310	195.42	50	11	0	0	100000	12.45
Phulbani			800	59.87	70	13.48	5000	158.73					100000	12.45
Baliguda	20	5.48	800	59.82	70	13.48	4000	126.88					100000	7.76
Boudh	100	25.98	500	38.99	70	13.27	1450	45.99					100000	5.81
Gh South	100	27.33	500	37.39	70	13.48	1430	45.36					100000	12.45
Gh North			500	34.70	70	13.48	940	29.37					100000	3.50
Berhampur	30	8.10	500	34.03	60	11.44	1650	49.53	75	16.69			100000	12.45
Parlakhemundi			800	59.82	70	13.48	3000	95.16					700000	66.85
TOTAL	250	66.88	4400	322.63	480	92.12	17470	551.03	75	16.69	0	0	100000	3.73
Jharsuguda	50	14.39	500	39.36	60	12.19	1000	31.72					100000	13.10
Sambalpur			500	37.39	70	13.48	2500	78.65					100000	4.89
Rairakhol			500	37.39	70	13.48	1500	47.59					100000	12.45
Bargarh	55	15.04	200	14.96	60	11.56	2000	63.44					0	0.00
Bamara WL			400	29.91	70	13.48	1000	31.73						
Hirakhud WL													400090	34.16
TOTAL	105	29.43	2100	159.01	330	64.19	8000	253.12	0	0	0	0	0	0.00
Sundargarh	100	27.33	500	37.39	70	13.48	5000	158.60	75	16.65			100000	12.45
Rourkela	30	8.20	500	37.39			2500	79.31	75	16.65			100000	13.10
Bonai	40	10.96	500	37.48	70	13.52	500	15.90	0	0.00	0.00	0.00	100000	12.45
Deogarh	100	27.33	500	37.39	70	13.48	600	19.03	0	0.00	0.00	0.00	100000	4.00
Keonjhar			500	29.88			700	21.99					100000	41.99
TOTAL	270	73.82	2500	179.51	210	40.48	9300	294.82	150	33.30	0	0	400000	13.10
Baripada	50	14.39	500	39.36	0	0	1000	33.39	0	0	0	0	100000	12.45
Karanjia	100	25.74	500	36.37			500	15.86					100000	
Rairangpur			50	3.64			500	16.69					150000	22.45
Balasore WL													200000	25.84
Keonjhar WL			500	37.55			1500	46.47						
Similpal South														
Similpal North														
TOTAL	150	40	1550	117	0	0	3500	112.41	0	0	0	0	550000	74
Kalahandi(N)	45	12.30	800	59.82	70	13.48	5000	158.60	75	16.65	0.00	0.00	100000	4.25
Kalahandi (S)	100	27.32	800	58.31	70	13.43	4000	126.30	50	11.10			100000	12.45
Subarnapur	100	28.18	500	34.28	70	12.22	2000	39.23	75	12.72			100000	13.10
Bolangir	100	27.33	500	37.39	70	13.48	4000	126.88	75	16.65			100000	13.10
Kharliar	100	27.33	800	59.82	70	13.48	3000	95.16	75	16.68			100000	12.45
Sunabeda WL														
TOTAL	445	122.48	3400	249.62	350	66.10	18000	546.17	350	73.78	0	0	500000	55.35
Rayagada			500	37.39	70	13.48	5000	158.60	50	11.10			100000	12.45
Koraput	100	27.27	500	37.63	70	13.52	2000	64.09	100	22.33			100000	13.10
Jeypore	100	27.33	500	37.39	70	13.48	400	12.09	25	5.55			100000	12.45
Nabarangpur	100	27.77	500	37.39			6000	190.32					100000	12.44
Malkangiri	100	27.33	500	37.39	70	13.48	500	15.87					100000	12.45
TOTAL	400	109.71	2500	187.19	280	53.97	13900	441.57	175	38.97	0	0	500000	62.87
Silva BBSR													100000	9.00
Silva Rayagada													100000	12.45
FRC Angul														
G.Udayagiri														
Champua														
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	200000	21.45
Dy CF (Hqrs)														
Dy Dir NKZP														
G.TOTAL	2000	532.26	19825	1487.09	1930	367.36	85355	2868.66	900	196.12	76	39.98	4212000	490.86

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Name of Division	Maintenance/SSO Bamboo/SMC										Plantation & Maintenance/SSO Bamboo/SMC						
	RET Species 200 plant/Ha @ Rs.0.43594 lakhs		RET Species without gap plant/Ha @ Rs.0.25112 lakhs		Miyawaki Plantation (8000 plant/ha) @ Rs.37.16688		Sowing of Bamboo Seed @ Rs.0.02395 /ha		Root Trainer @ Rs.20.00 lakhs./1500 00 seedling		Raising of 18 months old seedling@ Rs.0.0001832 lakhs/seedling		Raising of 6 months old seedling@ Rs.0.0001310 lakhs/seedling		Orchid arium	Monitoring by data manager for pl.	Total plantation activity(creation & Maintenance)
	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Fina	Fina	Financial
1	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Angul											500000	91.50	200000	2.68		22.36	496.64
Athmallik											464000	70.66	100000	8.00		11.82	288.90
Satkosia WL											100000	17.40				10.42	27.82
Dhenkanal					1	37.17	300	7.19			500000	91.60	200000	8.00		47.10	743.41
Athagarh			100	25.21			100	2.40			500000	48.21	200000	19.34		11.55	674.38
Cuttack							400	9.59			500000	91.60	200000	8.00		18.10	446.58
Mahanadi WL											100000	18.32				9.32	27.64
TOTAL	0.00	0.00	100	25.21	1.00	37.17	800	19.18	0.00	0.00	2564000	429.29	900000	46.01	0.00	130.47	2705.38
Khurda											700000	117.81	200000	8.00		13.89	530.19
Puri WL											200000	13.79	200000	7.27		9.53	123.50
Rajnagar WL											200000	36.64	200000	8.00		11.68	87.58
Nayagarh											500000	91.60	200000	16.68		17.77	990.74
Chilika WL											150000	27.48	200000	8.00		11.14	112.62
Chandaka WL											200000	37.04	200000	7.60		9.23	304.55
City Forests											400000	73.28	200000	8.00		8.39	89.67
Bhadrakh WL											200000	35.19	200000	6.69		26.50	105.90
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2550000	432.83	1600000	70.24	0.00	108.12	2344.75
Phulbani	65	28.34	237	59.52							500000	89.82	200000	6.69		40.46	1326.35
Baliguda											500000	91.60	200000	8.00		47.65	860.61
Boudh											500000	91.60	200000	8.00		11.82	704.12
Gh.South			100	25.11							500000	91.10	300000	12.00		11.65	702.98
Gh.North											500000	91.60	300000	12.00		11.53	458.28
Berhampur											500000	91.60	200000	8.00		18.47	537.01
Parlakhemundi			48	12.06							500000	91.60	200000	8.00		16.31	968.22
TOTAL	65	28.34	385.00	96.69	0.00	0.00	0.00	0.00	0.00	0.00	3500000	638.92	1600000	62.69	0.00	157.80	5557.56
Jharsuguda											200000	7.96	300000	53.74		16.01	320.57
Sambalpur			50	11.28							500000	96.88	200000	6.29		16.01	355.95
Rairakhol											500000	91.60	200000	8.00		13.89	493.73
Bargarh											500000	91.60	200000	8.01		15.49	652.00
Bamara WL			11	2.76							200000	36.64	200000	8.00		25.11	260.18
Hirakhud WL											200000	36.64	200000	8.00		9.32	53.96
TOTAL	0.00	0.00	61	14.04	0.00	0.00	0.00	0.00	0.00	0.00	2100000	361.32	1300000	92.04	0.00	95.83	2136.39
Sundargarh											70000	15.30	200000	7.30		16.22	699.09
Rourkela											400000	78.61	200000	2.67		18.34	548.62
Bonai											400000	38.80	100000	4.00		20.67	403.74
Deogarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	400000	73.28	400000	8.00	0.00	11.65	360.61
Keonjhar											400000	35.77	0	0.00		19.83	227.83
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1670000	241.77	900000	21.97	0.00	86.71	2239.88
Baripada					0.00						0	0.00	200000	8.78		24.85	161.93
Karanja											0.00	0.00	200000	0.69		17.10	285.28
Rairangpur											400000	73.28	200000	8.00		12.45	234.11
Balasore WL											0.00	16.35	150000	12.22		11.59	102.40
Keonjhar WL											200000	12.11	200000	6.67		13.68	487.45
Similipal South															30.00	20.97	50.97
Similipal North											0.00	0.00	200000	6.00		18.64	133.14
TOTAL	0	0	0	0	0	0	0	0	0	0	600000	102	1150000	42	30	119	1465.28
Kalahandi(N)			25	6.28	1.00	35.90					500000	90.85	200000	8.00		11.78	1334.41
Kalahandi (S)			5	1.26							500000	91.60	200000	6.24		16.24	1342.80
Subarnapur			60	15.07							500000	95.12	200000	8.00		8.98	825.52
Bolangir			100	25.11							500000	91.60	200000	8.00		25.63	1172.26
Khariar											500000	91.60	200000	8.00		11.58	804.36
Sunabeda WL											200000	36.81	200000	7.83		6.54	252.79
TOTAL	0.00	0.00	190	47.72	1.00	35.90	0.00	0.00	0.00	0.00	2700000	497.38	1200000	48.07	0.00	80.75	5732.14
Rayagada	20	8.72	3	0.75							500000	91.41	200000	7.60		16.31	1435.30
Koraput			50	12.56	1	37.16					500000	91.60	200000	8.00		13.98	1099.39
Jeypore			10	2.51							500000	91.55	200000	8.00		13.98	638.47
Nabarangpur											500000	91.60	200000	8.00		13.17	1101.94
Malkangiri					1	36.77					500000	91.23	200000	7.60		16.65	796.63
TOTAL	20	8.72	63	15.82	2	73.93	0.00	0.00	0.00	0.00	2500000	457.40	1000000	39.20	0.00	74.09	5071.74
Silva BBSR									1.00	20.00							20.00
Silva Rayagada									1.00	20.00							32.45
FRC,Angul																4.16	4.16
G.Udayagiri																4.11	4.11
Champua																4.25	4.25
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	40.00	0.00	0.00	0.00	0.00	0.00	12.52	73.97
Dy CF (Hqrs)																	0.00
Dy Dir NKZP																	
G.TOTAL	85	37.06	798	199.47	4	147.00	800	19.18	2	40.00	18284000	3160.64	9650000	420.59	30	865.58	27327.11

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FOREST PROTECTION

Name of Division	Continuation of Old Forest Protection Squads															Fire Fighting Squad						Sub-Total control of Forest Fire
	Continuation of protection squad @ Rs.18.58 lakhs-18		Continuation of protection squad @ Rs.20.12 lakh - 14Nos with hiring vhicle		Coordination cell at Division office @Rs.6.639 87 lakhs		Coordination cell at PCCF/RC CF office @ Rs.6.6398		Wage of Para Forest Staff @ Rs.14.52 lakhs sqd.(10 person)		Patrolling for 219 Ranges (hiring Vehicle) @ Rs.4.92		Patrolling for 70 Ranges (with Vehicle) @ Rs.3.37 akhs/range		Subtotal Protection against loss of	Fire fighting squads with vhehicle in each Forest Range @ Rs.4.47		Fire line Maintenance @ Rs.0.0298 lakhs/KM		Logestic to the Fire Protection squad @ Rs.0.85 lakhs/Sqd		
	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Financia	Phy	Fina	Phy	Fina	Phy	Fina	Financial
1	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82
ngul	0	0	0	0	1	2.77	1	2.75	30	43.26	5	24.60	1	3.37	76.74	6	41.21	600	17.88	6	5.40	64.49
dhmalik			1	19.77	1	3.53			30	46.74	2	9.02	2	10.28	89.33	5	34.64	600	17.88	5	4.55	57.07
alkosia WL											3	10.60	2	6.43	17.03							0.00
henkanal	1	18.58	1	20.12	1	3.32			30	43.56	6	9.93	2	2.25	97.74	8	54.35	600	17.88	8	7.10	79.33
dhagarh	1	9.24	1	9.24	1	2.72			30	44.17	4	15.81	1	3.11	84.29	5	28.49	100	14.90	5	5.00	########
uttarsh	1	21.92			1	2.78			60	89.70	5	22.72			137.12	3	21.50	268	8.94	3	4.80	35.24
ahanadi WL											2	9.84	2	6.74	16.58	2	2.09					2.09
OTAL	3.00	49.74	###	49.13	###	15.12	##	2.75	180	267.4	27	102.51	10	32.17	518.83	29	182.28	2168	77.48	27	26.85	286.61
hurda	1	18.58	2	39.11	1	3.29	0	0.00	30	43.56	6	17.84			122.48	6	29.84	300	11.32	6	6.30	47.46
uri WL													5	18.20	18.20	2	2.09					2.09
ajnagar WL											4	13.97	1	2.86	16.83	2	2.09					2.09
yagarh	2	34.23			1	2.90			60	82.85	6	20.60			140.38	9	45.81	600	17.88	7	6.25	69.94
hilika WL											4	16.12	1	2.02	18.14	2	1.79			1	0.30	2.09
handaka WL											3	12.49	1	2.82	15.30	1	1.79			1	0.30	2.09
ity Forests					1	4.47	1	4.99	30.00	43.50	4	15.36			71.31	2	6.99	100	0.15	2	2.96	10.09
hadrakh WL															0.00	0	0.00	0	0.00	0	0.00	0.00
TOTAL	3.00	52.81	2	39.11	3	10.66	##	4.99	120	169.71	27	99.48	8	23.89	400.64	24	90.40	1000	29.35	17	18.11	135.86
hulbani					1	2.84			60	86.83					89.67	9	41.13	800	23.84	7	15.45	80.42
alliguda					1	2.74			60	87.12					89.86	9	48.08	800	23.84	7	5.95	77.87
ouch			1	19.40	1	2.70			30	43.11	3	11.07	2	5.85	82.13	5	26.78	500	14.90	5	4.55	46.21
Gh South	1	18.01			1	2.80			60	87.12	4	13.55	1	2.16	123.64	7	27.84	280	8.34	7	4.55	40.74
Gh North					1	2.78			60	87.05	3	9.70	2	4.22	102.75	5	34.64	600	17.88	5	4.55	57.07
erhampur			1	20.32	1	2.78	1	2.71	60	86.97	3	5.78	1	1.22	119.79	4	20.34	600	17.93	4	3.85	41.92
arlakhemundi					1	3.07			60	87.12	5	24.60	3	25.32	140.11	7	47.78	800	23.84	7	6.25	77.87
TOTAL	1	18.01	2	39.72	7	19.72	1	2.71	390	565.32	18	63.70	9	38.77	747.94	46	246.57	4380	130.57	42	44.95	422.10
harsuguda					1	3.32			30	43.54	4	19.68	1	3.37	69.91	7	34.64	282	8.39	5	4.55	47.58
ambalpur	1	18.57	*1	3.32	1	3.32			30	84.50	4	22.26			131.97	6	34.94	500	14.90	5	4.25	54.09
airakhol					1	3.24			60	86.65	5	24.60	1	3.37	117.87	6	41.51	600	17.88	6	5.10	64.49
argarh					1	2.82			30	37.72	5	24.60	1	1.20	66.34	8	41.21	500	14.90	8	5.40	61.51
amara WL	1	18.58									5	7.69			26.27	2	1.79				0.30	2.09
irakhud WL											2	9.80	2	6.74	15.54	2	1.79			2	0.30	2.09
TOTAL	2	37.15	1	3.32	4	12.71	0	0.00	150	252.41	25	107.63	5	14.68	427.90	31	155.88	1882	56.07	26	19.90	231.85
undargarh			1	17.08	1	2.29			60	81.15	5	14.60	1	2.06	117.19	6	43.04	500	14.90	5	3.57	61.51
ourkela			1	20.12	1	3.32	1	3.32	60	87.12	5	24.60	1	3.37	141.85	6	41.92	500	14.90	6	4.68	61.51
onai	1	18.18	1	21.12	1	2.71			60	88.40	6	29.52	1	3.02	162.94	7	47.78	500	14.90	7	8.80	71.48
eogarh	1	18.57	0	0.00	1	2.18	0	0.00	60	87.12	4	19.68	1	3.37	130.92	5	34.64	200	11.92	5	4.55	51.11
eonjhar	1	18.21	1	20.02	1	2.78			60	87.29	6	28.90	1	3.40	160.60	7	41.44	600	18.48	7	7.27	67.19
TOTAL	3	54.96	4	78.35	5	13.28	1	3.32	300	431.08	26	117.30	5	15.22	713.50	31	208.83	2300	75.10	30	28.87	312.80
anipada	0		2	38.82	1	3.86	1	3.86	60	92.83	5	24.60			163.98	7	47.78	500	14.90	7	6.25	68.93
aranjia	0	0.00	1	18.58	1	2.70			60	52.27					73.55	6	25.07	500	14.90	4	3.70	46.67
airangpur			1	3.82					60	84.18	4	12.30	1	2.03	102.33	5	34.64	300	8.94	5	4.55	48.13
alasore WL											4	9.41	1	1.34	10.75	1	1.79				0.30	2.09
eonjhar WL	1	19.96	1	18.75							1	3.39	3	14.78	56.86	1	1.79	0	0.00	1	0.30	2.09
imilpal South											7	33.78	2	7.41	41.18	1	1.79			1	0.30	2.09
imilpal North											8	29.52	2	6.74	36.26	2	1.79			2	0.30	2.09
TOTAL	1	20	5	80	2	7	1	4	180	229	27	113	9	32	484.92	23	118	1300	39	20	16	172
alahandi(N)					1	2.75	1	2.78	60	88.54	4	14.88	1	3.41	112.36	5	34.64	600	17.88	5	4.55	57.07
alahandi (S)			1	20.12	1	2.18			60	87.12	5	21.14	2	5.68	136.24	7	47.78	600	17.88	7	6.25	71.91
ubarnapur					1	2.70			60	84.87	3	9.87	1	1.44	98.89	4	17.99	500	15.40	4	13.28	46.6700
olangir			1	20.12	1	2.75			60	87.12	8	39.36	3	10.11	159.48	11	72.27	600	17.88	11	11.44	101.59
harlar			1	20.12	1	2.82			60	87.12	4	19.68	1	2.17	131.91	5	32.85	500	14.90	5	4.25	52.00
unabeda WL											3	8.86	1	5.90	14.76	2	1.79			2	0.30	2.09
TOTAL	0	0.00	3	60.36	5	13.21	1	2.78	300	434.77	27	113.79	9	28.70	653.62	34	207.32	2800	83.94	34	40.07	331.33
ayagada					1	3.32			60	87.12	4	19.68	3	10.11	120.23	7	47.78	600	17.88	7	6.25	71.91
oraput					1	2.82	1	2.41	60	87.12	4	19.68	2	5.95	117.79	6	41.21	600	14.90	6	5.40	61.51
eypore	1	18.57	0	0.00	1	3.32	0	0.00	60	87.12	4	12.74	2	6.74	128.49	8	41.21	500	14.90	6	5.40	61.51
abarangpur	1	18.58			1	2.60	0	0.00	60	88.39			2	6.80	116.37	6	41.25	500	14.90	6	5.10	61.25
alkangiri					1	2.37			60	87.09	3	14.40	3	6.33	110.20	8	34.23	500	14.90	8	5.40	54.53
TOTAL	2	37.15	0	0.00	5	14.24	1	2.41	300	436.84	15	66.50	12	35.94	593.08	33	205.87	2700	77.48	31	27.55	310.70
ilva BBSR				0.00											0.00				0.00			0.00
ilva Rayagada															0.00				0.00			0.00
RC,Angul															0.00				0.00			0.00
.Udayagiri															0.00				0.00			0.00
hampua															0.00				0.00			0.00
TOTAL	0.00	0.00	0	0.00	0.0	0.00	##	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
y CF (Hqrs)															0.00				0.00			0.00
y Dir NKZP																						
G.TOTAL	15	269.77	20	349.95	36	105.50	7	22.82	1920	2786.9	192	783.89	67.00	221.65	4540.43	251	1414.59	18530	568.73	227	220.01	2203.33

FINAL VERIFICATION CAMPA APO 2020-21

FINAL APO 2020-21

INFRA STRUCTURE DEVLOPMENT

INFRA STRUCTURE DEVLOPMENT

Name of Division	Range Officer Residence @ Rs.14.54 lakhs/Range		Range office @ Rs.19.38 lakhs/ office		Forester Qrs @ Rs.11.19 lakhs/each		Forest Guard Qrs @ Rs.8.12 lakhs/each		Forest Road @ Rs.0.69 lakhs/K.M.		Culvert @ Rs.1.53 lakhs/one		Cause way @ Rs.1.06 lakhs/one		Restoration & Maintenance of Permanent/ Mega Nursery@ Rs.3.98 lakhs/one		Seizure Yard @ Rs.12.00 lakh/one		Compound Wall @ Rs.0.05 lakh/RMT		Tube well @ Rs.1.00 lakh/one		TOTAL Infra.
	Phy	Fina	Phy	Fina			Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Phy	Fina	Fina
1	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
Angul	1	14.54	1	19.38	2	22.38	5	40.60	20	13.80					1	3.98			800	40.00	11	11.00	165.68
Athmallik					2	22.38	2	16.24	40	27.60	6	9.18	9	9.54	1	3.98			700	35.00	8	8.00	######
Satkosia WL			1	19.38	2	22.38	4	32.48															74.24
Dhenkanal	1	14.54	1	19.38	2	22.38	4	32.48	55	37.95	0	0.00	0	0.00	1	3.98	0	0.00	300	15.00	5	5.00	150.71
Athagarh					2	22.38	4	32.48	100	69.25					1	3.98							######
Cuttack	2	29.08	0	0.00	2	22.38	4	32.48															83.94
Mahanadi WL			1	19.38	2	22.38	1	8.12															49.88
TOTAL	4	58.16	##	77.52	###	156.66	24	194.88	215	148.60	6	9.18	9	9.54	4	15.92	0	0.00	1800	90.00	24	24.00	784.46
Khurda	2	38.76	1	14.54	4	44.76	5	40.60							2	7.96			508.2	25.00			171.62
Puri WL					2	22.38	2	16.24							1	3.63							42.25
Rajnagar WL	1	22.29	1	16.06	1	11.19	3	24.36															73.90
Nayagarh	1	14.54	0	0.00	2	22.38	2	16.24	8	5.52					1	3.98	1	12.00	800	40.00	15	15.00	129.66
Chilika WL					1	11.19	2	16.24															27.43
Chandaka WL					1	11.19	1	8.12	28	19.32													38.63
City Forests	1	14.54	1	19.38	1	11.19	2	16.24											500	25.00			86.35
Bhadrakh WL	1	14.54	1	19.38															100	5.00			38.92
TOTAL	6.00	104.67	##	69.36	###	134.28	17	138.04	36	24.84	0.00	0.00	0.00	0.00	4.00	15.57	##	12.00	1908	95.00	15	15.00	608.76
Phulbani	1	14.54	0	0.00	2	22.38	5	40.60	15	10.35									700	35.00	2	2.00	124.87
Baliguda	1	14.54	1	19.38	2	22.38	4	32.48	14	9.66					1	3.98			500	25.00			127.42
Boudh					1	11.19	4	32.48	26	17.94	8	12.24	8	8.48	1	3.81	1	12.00	500	25.00	4	4.00	127.144
Gh.South					2	22.38	4	32.48	51	35.19					2	7.96			700	35.00	3	3.00	136.01
Gh.North			1	19.38	3	33.57	5	40.60							1	3.98							97.53
Berhampur					3	33.57	2	16.24							1	3.98							53.79
Parlakhemundi	1	14.54	1	19.38	4	44.76	4	32.48							1	3.98							115.14
TOTAL	3	43.62	3	58.14	17	190.23	28	227.36	106	73.14	8	12.24	8	8.48	7	27.69	1	12.00	2400	120.00	9	9.00	781.90
Jharsuguda					2	22.38	3	24.36							1	3.98							50.72
Sambalpur			1	19.38	2	22.38	4	32.48	40	27.60					1	3.98							105.82
Rairakhol			1	19.38	3	33.57	4	32.48	58	40.02					1	3.98							129.43
Bargarh					1	11.19	3	24.36	30	20.70	1	1.53	5	5.30	1	3.98			500	25.00	10	10.00	102.06
Bamara WL	1	14.54	0	0.00	3	33.57	3	24.36											500	25.00	12	12.00	109.47
Hirakhod WL					2	22.38	3	24.36			5	7.66							250	12.50			66.90
TOTAL	1	14.54	2	38.76	13	145.47	20	162.40	128	88.32	6	9.19	5	5.30	4	15.92	0	0	1250	62.50	22	22.00	564.40
Sundargarh	1	14.54	0	0.00	3	33.57	4	32.48							1	3.98			400	20.00	2	2.00	106.57
Rourkela	1	14.54	1	19.38	2	22.38	4	32.48	40	27.60					1	3.98			200	10.00	2	2.00	132.36
Bonai	1	14.54	0	0.00	2	22.38	4	32.48	20	13.80					1	3.98			500	25.00	1	1.00	113.18
Deogarh	0	0.00	1	19.38	3	33.57	5	40.60	40	27.60	0	0.00	0	0.00	1	3.98							125.13
Keonjhar					1	11.19	4	32.48	0.22	11.04	1	1.53	5	5.30	1	3.98			550	27.50	8	9.00	102.02
TOTAL	3	43.62	2	38.76	11	123.09	21	170.52	100	80.04	1	1.53	5	5.30	5	19.90	0	0	1650	82.50	13	14.00	579.26
Baripada	1	14.54	0	0.00	1	11.19	5	40.60							1	3.98							70.31
Karanjia	1	14.54	0	0.00	1	11.19	5	40.60							1	3.98			500	25.00	2	2.00	97.31
Rairangpur					1	11.19	4	32.48	3	2.07					1	3.98			500	25.00	3	3.00	79.72
Balasore WL					1	11.19	1	8.12					5	5.30					300	15.00			39.51
Keonjhar WL	1	14.54	1	19.38	1	11.19	4	32.48															77.59
Similipal South	1	14.54	1	19.38	2	22.38	8	64.96					4	4.24							4	4.00	129.50
Similipal North	2	29.08	2	38.76	3	33.57	12	97.44	57	46.23			8	8.48					700	35.00	8	8.00	296.56
TOTAL	6	87	4	78	10	112	39	317	70	48	0	0	17	18	3	12	0	0	2000	100	19	19	791
Kalahandi(N)	1	14.54	0	0.00	2	22.38	5	40.60	20	13.80			5	5.30	1	4.07			500	25.00	12	12.00	137.64
Kalahandi (S)	1	14.54	1	19.38	2	22.38	5	40.60	12	8.28					1	3.98			500	25.00	1	1.00	135.16
Subarnapur									0	0.00	10	15.30			1	3.98							19.28
Bolangir	1	14.54	1	19.38	1	11.19	5	40.60	52	35.88	0	0.00	5	5.30	1	3.98	0	0.00	500	25.00	6	6.00	181.87
Khariar					1	11.19	4	32.48	35	24.15					1	3.98							71.80
Sunabeda WL					2	22.38	3	24.36															46.74
TOTAL	3	43.62	2	38.76	8	89.52	22	178.64	119	82.11	10	15.30	10	10.60	5	19.94	0	0.00	1500	75.00	19	19.00	572.49
Rayegada	1	14.54	1	19.38	2	22.38	4	32.48	40	27.60	0	0.00	0	0.00	1	3.98	0	0.00	500	25.00	1	1.00	146.36
Koraput	1	14.54	1	19.38	3	33.57	6	48.72	40	27.60					1	3.98			500	25.00	5	5.00	177.79
Jeypore	1	14.54	1	19.38	2	22.38	4	32.48	10	6.90	0	0.00	2	2.12	1	3.98	0	0.00	500	25.00			126.78
Nabarangpur					2	22.38	4	32.48	25	17.25	1	1.53	5	5.30	1	3.98			500	25.00	3	3.00	110.92
Malkangiri	1	14.54	0	0.00	2	22.38	4	32.48							1	3.98			500	25.00	1	1.00	99.38
TOTAL	4	58.16	3	58.14	11	123.09	22	178.64	115	79.35	1	1.53	7	7.42	5	19.90	0	0.00	2500	125.00	10	10.00	661.23
Silva BBSR															1	3.98							3.98
Silva Rayegada	2	29.08			2	22.38	3	24.36							1	3.98							79.80
TRC Angul							1	8.12															8.12
G.Udayagiri	1	14.54				11.19																	25.73
Champua	1	14.54																					14.54
TOTAL	4	58.16	0	0.00	2	33.57	4	32.48	0.00	0.00	0.00	0.00	0.00	0.00	2	7.96	0	0.00	0.00	0.00	0	0.00	132.17
Dy.CF (Hqrs)																							0.00
Dy.Dir NKZP																							
G.TOTAL	34	511.79	24	456.96	98	1107.81	197	1699.64	889	624.70	32	48.97	61	64.66	39	154.74	2	24.00	15008	750.00	131	132.00	5475.27

FINAL VERIFICATION CAMPA APO 2020-21

Name of Division	Research and development	Expenditure of State Authority	GIS	M & E	Training	CA,PCA Etc.	Total Forest	Total WL	Grand Total APO 2020-21 (Rs. Lakhs)
	Fina	Fina	Fina	Fina	Fina	Fina	Fina	Fina	Fina
1	106	107	108	109	110	111	112	113	114
Angul	0.00		3.95	0.00	2.55	97.64	1091.35699	440.44	1531.799
Athmallik			6.34		2.55	16.30	592.41832	411.70	1004.12
Satkosia WL						0.00	119.08600	1553.86	1672.95
Dhenkanal					2.55	120.24	1193.98000	707.05	1901.03
Athagarh			0.00		0.60	0.00	935.74069	352.42	1288.16
Cuttack						121.07	823.95219	600.10	1424.06
Mahanadi WL						0.00	96.19000	282.68	378.87
TOTAL	0.00	0.00	10.29	0.00	8.25	355.26	4852.72419	4348.25	9200.97
Khurda			14.02		1.95	6.92	894.64452	189.71	1084.36
Puri WL						2.38	186.42561	162.24	348.66
Rajnagar WL						0.00	180.40260	501.24	681.65
Nayagarh					2.55	93.69	1426.96728	65.24	1492.21
Chilika WL						0.00	160.27831	132.93	293.21
Chandaka WL		106.75				3.88	471.19833	625.97	1097.17
City Forests		26.76			1.95	10.38	296.51740	50.18	346.70
Bhadrakh WL							144.82289	70.79	215.61
TOTAL	0.00	133.51	14.02	0.00	6.45	117.25	3761.26	1798.32	5559.57
Phulbani			6.54			0.00	2049.49009	46.82	2096.31
Baliguda					2.55	0.00	1425.97926	165.28	1591.27
Boudh					2.55	0.00	962.16113	114.46	1076.63
Gh.South					2.55	0.52	1006.42782	104.44	1110.87
Gh.North					2.55	0.07	718.24551	119.72	837.97
Berhampur					2.55	14.45	769.50697	148.21	917.72
Parlakhemundi					2.55	0.00	1551.61720	202.24	1753.85
TOTAL	0	0	7	0	15.30	15.04	8483.43	901.19	9384.62
Jharsuguda			3.01		1.95	32.09	525.82991	140.53	666.36
Sambalpur			4.52		2.55	269.85	924.75573	477.35	1402.11
Rairakhol					1.20	15.04	1191.29084	331.16	1522.46
Bargarh					2.55	89.26	1195.90220	90.14	1286.04
Bamara WL						8.96	659.44150	466.44	1125.88
Hirakhud WL							138.49000	384.36	522.85
TOTAL	0	0	8	0	8	415.20	4635.71	1889.98	6525.69
Sundargarh			10.48		2.55	117.64	1115.02040	200.44	1315.46
Rourkela			6.17		2.55	243.20	1321.52392	301.05	1622.58
Bonai						327.09	1098.71393	392.88	1491.59
Deogarh					2.55	143.65	1028.37795	331.63	1360.01
Keonjhar					1.20	170.37	858.67849	308.09	1166.77
TOTAL	0	0	17	0	9	1001.95	5422	1534.10	6956.42
Baripada					2.55	0.00	467.69982	229.58	697.28
Karanjia			14.01		2.55	0.00	519.37403	136.26	655.63
Rairangpur					2.55	7.09	473.93251	59.99	533.92
Balasore WL						0.00	250.38194	311.97	562.36
Keonjhar WL						55.30	752.19000	471.69	1223.88
Similpal South						0.00	223.74200	605.08	828.82
Similpal North						0.00	468.05400	467.30	935.36
TOTAL	0	0	14	0	8	62	3155.37430	2281.87	5437.244
Kalahandi(N)			30.66		2.55	27.97	2130.57950	107.67	2238.25
Kalahandi (S)					2.55	1138.91	3535.81000	116.50	3652.31
Subarnapur					1.95	388.82	1381.12658	81.33	1462.46
Bolangir					2.55	309.71	2387.06000	105.37	2492.43
Khariar					2.55	14.46	1452.31256	46.24	1498.56
Sunabeda WL							316.38497	226.14	542.52
TOTAL	0.00	0.00	30.86	0.00	12.15	1879.87	11203.27	683.25	11886.52
Rayagada					2.55	332.61	2467.05000	268.24	2735.29
Koraput			14.05		2.55	708.49	2529.81527	56.03	2585.85
Jeypore			5.67		2.55	0.00	1272.40150	115.74	1388.14
Nabarangpur					2.55	-0.00	1849.99000	163.33	2013.32
Malkangiri					2.55	0.00	1461.46748	94.54	1556.00
TOTAL	0.00	0.00	19.92	0.00	12.75	1041.10	9580.72	697.88	10278.61
Silva BBSR	123.11						156.08923		156.09
Silva Rayagada	96.00						208.25000		208.25
FRC,Angul							12.28493		12.28
G.Udayagiri							29.84264		29.84
Champua							18.78575		18.79
TOTAL	219.11	0.00	0.00	0.00	0.00	0.00	425.25	0.00	425.25
Dy CF (Hqrs)		1055.00	374.14				1429.14444		1429.14
Dy Dir NKZP								414.94	414.94
G.TOTAL	219.11	1188.51	493.96	0.00	79.65	4888.06	52949.20	14134.84	67498.981

7. State level report on achievements for wildlife conservation for 2017-18

Item-wise Physical & Financial Achievement under CAMPA APO: 2017-18 (during: 2018-19) (Wildlife Management)			
Sl. No.	**Item of Work**	**Physical Achievement**	**Financial Achievement (Rs. In lakh)**
(1)	(2)	(3)	(4)
A	**Regional Wildlife Management Plan**		
1	**Protection Activities**		
1(i)	Wildlife Protection Squads including anti-smuggling operations at specified location including river squads and Sea patrolling to prevent fishing and trawler movement for protection of sea turtles for twelve months (10 persons/squad)	Engaged 90 Nos. of Squad	**1041.56398**
1(ii)	Search, Seizure & Wild animal Rescue Operation & Postmortem of dead wild animals.	Search, Seizure & Wild animal Rescue Operation & Postmortem of dead wild animals.	**28.83822**
1(iii)	Deployment of Fire Fighting Squads (10 persons/squads).	Engaged 41 Nos. Of Fire Fighting Squad	**237.96518**
1(iv)	Fire line creation & Maintenance.	Fire line Creation- 11250 Km.	**225.02955**
1(v)	Fire fighting equipments including blowers, its POL and maintenance.	161 Nos. of Fire equipments	**98.52400**
1(vi)	Provision for POL & maintenance of Blowers (Old).	POL & Maintenance of 82 Nos. of Old blowers	**9.18601**
1(vii)	Training to the personel of fire fighting squads at Division level.	15 Nos. of training	**1.65000**
1(viii)	Personal Logistic.	38 Nos. of personal Logistics.	**33.33972**
Total			**1676.09666**
2	**Anti-depredation Activities**	-	
2(i)	Anti-depredation squads for identified belts for twelve months (10 persons/squad)	Engaged 85 Nos. of Squad	**933.68296**

2(ii)	Tracker Engagement for twelve months (2 persons/squad)	Engaged 90 Nos. of epephant Tracker	**159.55252**
2(iii)	Anti-depredation equipments/Tracking device installation & maintenance	Anti-depredation equipments/Tracking devices	**137.28745**
2iv)	Compassionate Payment.	Payment to the Victimes.	**180.59005**
2 (v)	Fencing and Erection of barriers, Round Rubble Wall, Solar Fencing, trench etc. including maintenance.	Solar fencing over-78.38 Kmt., trench fening over-75.76 Kmt., Oper wall, Open wall and Stone over-4809 Nos., Construction of RCC Pillar over-5466 Nos., Compound wall 100 mtr., Construction of Latenite lining -686 Mtr., Stone wall guard-1077 Mtr., water passage, Renovation of elephant proof trench over-470 Mtr., Newly digging elephant proof trench over -511 Rmt and Erection of barriers and Round Rubble wall etc.	**666.82638**
Total			**2077.93936**
3	**Communication**	-	-
3(i)	Instalation of VHF base station, Mobile phones, and maintenance thereof including satellite tracking of patrolling/ squad vehicle	Instalation of VHF, Mobile Phones etc.	**516.96269**
3(ii)	Maintenance of control room at Division Head Quarters including engagement of DEOs	15 Nos. of Cotrol Room	**51.40827**
3(iii)	Mobility, POL etc. for Boats & Vehicle.	Mobility & POL for boats and Vehicle	**47.36780**
3(iv)	Forest Road repairs.	Repari of Forest Road-530 Kms.	**291.50000**
Total			**907.23876**
4	**Infrastructure development**	-	-
4 (i)	Anti-poaching Barrack.	Construction of 13 Nos. of Barrack	**260.00000**
4(ii)	Anti-poaching check gates.	Construction of 5 Nos. of Check gate	**35.00000**

4(iii)	Seizure Yard.	1 No. Seizure Yard	**7.00000**
4(iv)	Wildlife Crime Control & Coordination Center at Circle Head Quarters.	Wildlife Crime Control & Co-ordination Centre	**58.08898**
4(v)	Computer, Internet connection, invertors and other equipments and maintenance thereof. For different offices and Camps.	Purchase of Computer, Internet connection, invertor equipments etc.	**100.54478**
4(vi)	Equipments for monitoring of wild animals and the protection activities.	Purchase of Monitoring equipmenrts	**137.75961**
4(vii)	Floating Jetty	6 Nos. of Floating Jetty	**82.25000**
4(viii)	Purchase of speed boats for patrolling/Promotion of Eco-tourism.	Purchase of speed boats -17 Nos.	**241.50000**
4(ix)	Watch Tower	Construction of 7 Nos. of Watch Tower	**140.00000**
4(x)	Strengthening of wildlife crime cell, Elephant cell etc. at WL HQ. and in Crime branch of the state	Strengthening of wildlife crime cell, Elephant cell etc.	**6.64200**
4(xi)	Communication and information Technology.	Purchase of Computer, Printer etc.	**19.93900**
4(xii)	Maintenance of Boundary of Protected Areas.	Maintenance of boundary wall	**68.50000**
Total			**1157.22437**
5	**Habitat Improvement**	-	-
5(i)	Creation of water body (40m x 30m x 3m)	Created 50 Nos. of Water Body	**199.96000**
5(ii)	Maintenance of Water Body created during previous years.	Maintenance 98 Nos. of Water body	**49.00000**
5(iii)	Plantation of Fruit Bearing and Fodder species around water bodies and maintenance thereof (@ rs.409/- per plant)	Plantation of fruit bearing and fodder species -13415 Nos. around water bodies.	**56.49018**
5(iv)	Second year maintenance of Plantation of Fruit & Fodder species around water bodies.	10485 Nos. of trees aroud water bodies.	**17.20023**
5(v)	Second year maintenance of Plantation of Fruit bearing forestry species (@ Rs.154/-per plant)	4884 Nos. of trees	**8.01600**
5(vi)	Fodder block plantion & its maintenance	18 Ha. Of Fodder plantation	**8.96788**
5(vii)	Second year maintenance of fodder block plantation.	54 Ha. Maintenance of fodder block plantation	**7.11939**

5(viii)	Soil and moisture conservation measures(like LBCD, Check dams contour trenches contour bund etc drainage line treatment, renovation and treatment of creeks etc.	SMC work , LBCD, Check dams, Contour trenche, bunds etc.	**90.00000**
5(ix)	Rejuvenation of Wildlife Corridors	48 Ha. Rejuvenation Of Wildlife Corridors	**22.89540**
5(x)	Second year maintenance of plantation taken up under rejuvenation of Wildlife Corridors.	Maintenance 72 Ha.	**9.42804**
5(xi)	Creation and maintenance of salt licks.	Creation & Maintenance of salt lick	**22.50000**
5(xii)	Immunisation of cattle.	Cattle immunisation	**28.80000**
5(xiii)	Invasive weed eradication.	2806 Ha. Of Invasive Weed eradication	**168.41728**
5(xiv)	Meadow development.	567 Ha. Of Meadow development	**198.34982**
5(xv)	Black Buck Conservation	Black Buck Conservation	**24.95500**
Total			**912.09922**
6	**Management of Zoos & Protected Areas**	-	-
6(i)	Strengthening & Management of Zoos.	Construction and Management of Zoos	**734.87004**
6(ii)	Up-gradation of Nandankanan Zoo hospital with advanced Post-Mortem and Forensic Capability, Vetenary doctor/dignosis etc.	Up-gradation of Zoos, hospital, Post-mortem, dignosis etc.	**9.99903**
6(iii)	Distribution of fuel saving devices like Unnat chullas, Solar cookers/ lamps etc to the villagers around Protected Areas.	Fuel saving devices/Unnat Chullas, Solar Cooker/Lamp etc.	**16.00000**
6(iv)	Interpretation Centre along with display units, multimedia and their mordenisation and maintenance/Development of Orchidarium at Gudgudia.	4 Nos. of Interpretation Centre and development of Orchidarium	**74.65000**
6(v)	Rescue Centre	2 Nos. Establishment of Rescue Centre	**17.00000**
Total			**852.51907**
7	**Research Activities.**		

7(i)	Biodiversity assessment of the Protected Areas.	5 Nos. of Biodivercity	**15.00000**
7(ii)	Other Research proposals	Research proposals	**13.30529**
Total			**28.30529**
8	**Others**	-	-
8(i)	Training & Capacity Building	Training & Capacity Building	**24.05000**
8(ii)	Observation of Important days	Observation of Important days	**13.76500**
8(iii)	IEC Materials	IEC Materials	**9.11099**
Total			**46.92599**
B	**Implementation of Site specific Wildlife Conservation Plan**	Implemented of 64 Nos. Project in 22 nos. of Division.	**2126.89424**
C	**Preparation of Comprehensive Wildlife Management Plan for the State**	**-**	**0.00000**
D	**Relocation of families from Protected Areas/ Tiger Reserves**	Relocated 75 Nos.of families	**750.00000**
E	**Implimentation of Action Plan for Soil Moisture Consrvation Measures**	Implemented 10 Nos. of action plan	**100.00000**
F	**Implementation of Elephant-Train collision mitigation plan**	Implementation of Elephant-Train collision mitigation plan	**19.00000**
	Grand Total:-		**10654.24296**

8. State level report on achievements for wildlife conservation for 2019-20

Item-wise Financial Achievement of funds under CAMPA APO: 2019-20 (Wildlife Management)								
Sl. No.	**Item of Work**	**Unit**	**Unit cost (Rs. in lakh)**	**Quantity/Unit (in No.)**	**Approved Outlay (Rs. In Lakh)**	**Funds released by CEO, State CAMPA Authority (Rs. in lakh)**	**Funds utilised against release (Rs. in lakh)**	**Physical Achievement**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	
A.	**Wildlife Management (NPV)**							
Activities for Wildlife Management under CAMPA APO: 2019-20 (80% of NPV)							**Components**	
1	**Protection Activities**	-	-					
(i)	Wildlife protection Squads.	Nos.	17.94	90	1614.60000		1561.15973	Wages of 90 nos of Squads
(ii)	Mobility for Boats for patrolling/anti-depredation/anti-smuggling activities.	LS			80.00000		58.43132	Mobility for boats for patrolling
(iii)	Search Seizure & Post-mortem of dead wild animals	LS			40.00000		29.09917	Searh Seizure and Post-mortem
(iv)	Maintenance of control room	Nos.	6.45	15	96.75000		93.84749	Maintenance of 15 nos. of control room
(v)	Strengthening of wildlife crime cell, Elephant cell etc. at WL HQ. and in Crime branch of the state			1	14.76000		2.42260	Crime cell and Elephant cell
(vi)	Maintenance of Boundary of protected Areas	LS			80.00000		70.37033	Maintenance of boundary

	Total (1):-				**1926.11000**		**1815.33064**	
2	**Forest Fire Prevention and Control operations**	-	-					
(i)	Fire-fighting Squads	Nos.	5.9	41	241.90		231.07393	Wages of 41 nos of fire Squads
(ii)	Fire-fighting equipments incluiding Blowers	Nos.	0.61	152	92.72		82.89571	Fire fighting equipments including blower-152 Nos.
(iii)	Training to fire-fighting squads	Nos.	0.15	11	1.65		1.65000	11 nos of training
(iv)	Personel Logistics for the fire fighting squads	Nos.	0.85	41	34.85		31.45000	Logistics- 41 nos.
(v)	Fire line Creation & maintenance	KM	0.028	7250	203.00		199.50118	Fire line-7125 Kms
	Total (2):				**574.120**		**546.57082**	
3	**Anti-depredation Activities**	-	-					
(i)	Anti-depredation Squads	Nos.	17.94	84	1506.96000		1461.09049	Wages of 84 nos. of squad
(ii)	Engagement of Tracker	Nos.	2.78	90	250.20000		247.76472	Wages of 90 nos. of squad
(iii)	Anti-depredation equipments/Tracking devices	LS			100.00000		80.11501	Anti-depredation equipments
(iv)	Compassionate Payment	LS			110.00000		97.05863	Payment to victim
(v)	Fencing and Erection of barriers, Round Rubble Wall, Solar Fencing, trench etc. including maintenance.	LS			900.00000		879.71795	
(vi)	Implementation of Elephant-Train collision mitigation plan	LS		3	18.00000		7.93748	Elephant-Train collision mitigation plan
	Total (3):				**2885.16000**		**2773.68428**	

4	**Voluntary Relocation of Villages from Protected Areas and Tiger reserves**	**Nos.**		2	1571.00		1371.00	Relocation of villages
	Total (4):				**1571.00**		**1371.00**	
5	**Habitat Improvement**	-	-					
(i)	Creation of water body (40m x 30m x 3m)	Nos.	5.60	81	453.60000		452.69092	Water bodies- 81 Nos.
(ii)	Maintenance of Water Body created during previous years.	Nos.	0.91	188	171.08000		166.39099	Maintenance of water bodies-182 Nos.
(iii)	Plantation of Fruit Bearing and Fodder species around water bodies and maintenance thereof.	Plant in Nos	0.00474	11750	55.69500		45.41029	Fruit bearing and fodder species plantation-9580 nos.
(iv)	Second year maintenance of plantation of Fruit & Fodder species around water bodies	Plant in Nos	0.00204	11650	23.76600		22.06780	Second year maint of fruit and fodder species-10815 Nos.
(v)	Third year maintenance of fruit & Fodder species around water bodies.	Plant in Nos	0.00161	5250	8.45250		8.69500	Third year mainteance of fruit and fodder species-5250 Nos.
(vi)	Third year maintenance of Plantation of fruit bearing forestry species.	Plant in Nos	0.00161	978	1.57458		1.57458	Third year maintenance of plantation of fruit bearing forestry species-978 Nos.
(vii)	Fodder block plantation & its maintenance	Ha	0.57864	50	28.93200		12.24040	Fodder block plantation-20 ha.
(viii)	Second year maintenance of fodder block plantation	Ha	0.15184	17	2.58128		2.58128	Second year maint of fodder block plantation-17 ha.

(ix)	Third year maintenance of Fodder& block plantation.	Ha	0.1088	30	3.26400		3.26400	Third year Maint -30 ha.
(x)	Rejuvenation of Wildlife corridor	Ha	0.57864	6	3.47184		3.39420	Wildlife Corridor-6 ha.
(xi)	Third year maintenance of plantation taken up under rejuvenation of wildlife corridors	Ha	0.1088	30	3.26400		2.17600	Third year maint- 30 ha.
(xii)	Creation and maintenance of salt licks.	Nos.	0.50	50	25.00000		25.15000	Salt licks-50 nos.
(xiii)	Immunisation of cattle.	LS			30.00000		23.41500	Immunization of cattle
(xiv)	Invasive weed eradication.	Ha	0.084	3731	313.40000		295.30990	Invassiv weed eradication-3516 ha.
(xv)	Meadow development.	Ha	0.49	692	339.08000		294.74000	Meadow Development- 602 ha.
(xvi)	Black Buck Conservation	Nos.	LS	4	70.35000		11.72000	Black bluck conservation
(xvii)	Any Others		LS	17	14.22000		14.22360	Construction of artificial cave for bear hide and out
	Total (5):				**1547.7312**		**1385.043396**	
6	**SMC in Wildlife Habitat**	-	-					
(i)	LBCD	Cum	0.0638	2575	164.285		164.28500	LBCD- 2575 cum
(ii)	Staggard trench	Ha.	0.168	1185	199.08		199.08000	Staggard Trench-1185 Ha.
(iii)	Percolation Pit.	Ha.	0.17920	600	107.52		102.16070	Percolation Pit- 570 Ha.
	Total (6):				**470.885**		**465.5257**	

7	**Implementation of Action Plan for Soil Moisture Consrvation Measures**	Nos.	10.00	10	100.00		100.00	Soil & Moisture conservation work- 10 nos
	Total (7):				**100.00**		**100.00**	
8	**Establishment, operation and maintenance of animal rescue centre and veterinary treatment facilities for wild animals:**							
(i)	Maintenance of Nandankanan WLS & Biological park & Other Rescue Centre.	LS		8	320.00		275.5484	Maintenance of WLS & Rescue Centre- 8 Nos
(ii)	Maintence of Nandankanan Zoos hospital	LS		1	15.00		13.304	Maintenance of Zoos-1 Nos.
(iii)	Establishment of Rescue Centre and Veterinary treatment facilities.	LS		8	118.00		101.175	Establishment of Rescue Centre-8 Nos.
(iv)	Maintenance of Rescue Centre	LS		5	18.50		18.500	Maintenance of Rescue Centre- 5 Nos.
	Total-(8):				**471.50**		**408.52740**	
9	**Supply of wood-saving cooking appliances and other forest produce saving devices in forest fringe villages as specified by the National Authority from time to time;**							
(i)	Distribution of fuel saving devices like Unnat chullas, Solar cookers/		0.02	7094	141.88		138.162	

	lamps etc to the villagers around Protected Areas.							
	Total (9):				**141.88**		**138.162**	
10	**<u>Management of biological diversity and biological resources.</u>**							
(i)	Biodiversity Assessment of the Protected Areas.	LS		1	10.00		5.30680	
	Total (10):				**10.00**		**5.30680**	
	Grand Total (80% NPV)				**9698.39**		**9009.15160**	
Activities for Wildlife Management under CAMPA APO: 2019-20 (20% Components of NPV)								
11	**Strengthening of Communication facilities.**							
(i)	Instalation of VHF base station, Mobile phones, and maintenance thereof including satellite tracking of patrolling/ squad vehicle.			LS	478.00		405.02510	
(ii)	Forest Road repairs.	KM	0.69	753	519.57		513.64000	
(iii)	Construction of RCC bridge at Patbil of Similipal Tiger Reserve & 9 box cell culverts in Debrigarh WLS.	LS			100.00		100.00000	
(iv)	Communication and information Technology.	LS			15.00		15.00000	
Total (11):-					**1112.57**		**1033.66510**	
12	**Infrastructure Development**							
(i)	Anti-poaching Barrack.		20.00	18	360.00		319.00000	
(ii)	Anti-poaching check gates.		7.00	15	105.00		98.00000	

(iii)	Seizure Yard.		7.00	10	70.00		42.00000	
(iv)	Floating Jetty.		15.00	9	135.00		55.64717	
(v)	Construction of Watch Tower		20.00	9	180.00		127.60235	
(vi)	Equipments for monitoring of wild animals and the protection activities.	LS			150.00		127.54075	
(vii)	Computer, Internet connection, invertors and other equipments and maintenance thereof.	LS			90.00		68.85683	
	Total- (12):				**1090.00**		**838.64710**	
13	**Research Activities:**							
(i)	Research Proposals	LS			35.00		31.19792	
	Total-(13):				**35.00**		**31.19792**	
14	**Publicity & Awarness Programmes:**	-	-	-	-	-		
(i)	Training & Capacity building	LS			30.00		21.2500	
(ii)	Observation of Important days	LS			15.00		12.6000	
(iii)	IEC Materials	LS			30.00		30.0000	
	Total- (14):				**75.00**		**63.85000**	
	Grand Total (20% NPV)				**2312.57**		**1967.36012**	
	Total NPV (80%+20%)				**12010.96**	**12010.68**	**10976.51172**	
B	**Preparation of Comprehensive Regional Wildlife Management Plan for the State**	LS			**73.00**	**3400.00**	**0.00**	
C	**Implementation of Site specific**	LS			**3571.72**		**3000.79816**	

	Wildlife Conservation Plan							
Total { A+(B+C)}:-					**3644.72**	**3400.00**	**3000.79816**	
Grand Total:-					**15655.68**	**15410.68**	**13977.30988**	

Total Unspent Balance	**1433.37012**
Funds has already been refunded	**464.53983**
Funds has already been refunded by IOs directly to A/c of PCCF (O)	**16.49496**
Funds refunded by IOs through Treasury Challan	**843.62231**
Balance funds to be refunded	**108.71302**

9. State level report on achievements for wildlife conservation for 2020-21

Item-wise allotment/release and expenditure of funds against the approved outlay under CAMPA APO: 2020-21 (Wildlife Management)					
Sl. No.	**Item of Work**	**Total approved outlay (Rs. in lakh)**	**Total funds released against the approved outlay by CEO, State CAMPA**	**Total funds utilised against the released**	**Physical achievement**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
A.	**Wildlife Management (NPV)**				
Activities for Wildlife Management under CAMPA APO: 2020-21 (80% Components of NPV)					
1	**Protection and Anti-Depredation Activities**				
(i)	Wildlife Protection cum Anti-depredation Squads.	3233.44	3233.44	3140.70835	Wages of 174 Nos of Squad
(ii)	Engagement of Wildlife Tracker.	262.80	262.80	255.35333	Wages of 90 Nos. of Elephant Squad
(iii)	Anti-depredation equipments/Tracking devices.	100.00	100.00	100.00	Purchase Equipments and Tracking devices-cage, mega phone, torch, net, kit, siren, canon gun, snake catcher, rope, search light, chain, folding

					ladder, LED search light etc.
(iv)	Compassionate Payment as per management plan provision to protect wild animals.	110.00	110.00	102.4208	Payment to Victive
(v)	Fencing and Erection of barriers, Round Rubble Wall, Solar Fencing, trench fencing etc. including maintenance.	700.00	700.00	673.265	Trench fencing-73.483 Km. and Barbed wire Fencing-4 Km.
(vi)	Implementation of Elephant-Train collision mitigation plan.	20.00	20.00	8.73844	Elephant-Train collision plan
(vii)	Mobility for Boats for patrolling/anti-depredation/anti-smuggling activities.	100.00	100.00	85.22977	Mobility for boats for patroling
(viii)	Rescue & release operation of wild animals.	40.00	40.00	23.99	Rescue and release operation
(ix)	Maintenance of control room to co-ordinate anti-poaching activities.	100.65	100.65	93.60516	Maintenance 15 Nos of controll room
(x)	Strengthening of wildlife crime cell, Elephant cell etc. at WL HQ. and in Crime branch of the state along with Data Management.	65.00	65.00	56.24752	Wildlife crime cell, Elephant cell etc.
(xi)	Maintenance of Boundary of protected Areas.	100.00	100.00	100.00	Maintenance of boundary- 430 Kms, 886 Mtrs and boundary line pillar
(xii)	Development and upscaling of Intelligence Network for Protection of Wildlife.	100.00	100.00	94.6171	Development and upscalling Intelligence Network
	Total (1):-	**4931.89**	**4931.892**	**4734.17547**	
2	**Forest Fire Prevention and Control operations**				
(i)	Fire-fighting Squads	315.360	315.36	293.977	Wage of 48 Nos. Fire Squad
(ii)	Fire-fighting equipments including Blowers	58.560	58.56	58.57	Equipment & Blowers- 96 nos.
(iii)	Training to fire-fighting squads	1.800	1.80	1.80	Trainging to 12 nos. of Fire Squad
(iv)	Logistics support for the fire fighting squads	40.800	40.80	40.74	Logistics for fire fighting squad-48 Nos.
(v)	Fire line Creation & maintenance	205.233	205.233	203.7346	Fire line-6840 kms
(vi)	Data Management and analysis	25.000	25.00	23.66984	Date management & Wages of personnel

	Total (2):	**646.753**	**646.7526**	**622.49144**	
3	**Voluntary Relocation of Villages from Protected Areas and Tiger reserves**				
(i)	Voluntary Relocation of Villages from Protected Areas and Tiger reserves	1000.00	1000.00	1000.00	Relocation of Villages
	Total (3):	**1000.00**	**1000.00**	**1000.00**	
4	**Improvement of Wildlife Habitat**				
(i)	Creation of water body (40m x 30m x 3m)	1072.80	1072.80	1054.57	Created 177 Nos of Water bodies
(ii)	Maintenance of Water Body created during previous years.	145.28	145.28	142.3685	Maintenance 149 Nos. of water bodies
(iii)	Plantation of Fruit Bearing and Fodder species around water bodies and maintenance thereof.	20.29	20.29	19.5135	Plantaiton around water bodies- 3895 Nos. Plants
(iv)	Second year maintenance of plantation of Fruit & Fodder species around water bodies	21.86	21.86	19.578	Second year maintenance- 10250 Nos. of Plants
(v)	Third year maintenance of fruit & Fodder species around water bodies.	13.16	13.16	12.767	Third year maintenance- 11125 Nos. of plants
(vi)	Creation of Fodder block plantation (0'th year)	0.00	0.00	0.00	-
(vii)	Second year maintenance of fodder block plantation	17.26	17.26	9.98551	Second year maintenance of fodder block plantation- 30 Ha.
(viii)	Third year maintenance of Fodder block plantation.	3.29	3.29	2.86887	Third year maintenance-17 Ha.
(ix)	Creation and maintenance of salt licks.	25.00	25.00	25.00	Salt licks-50 Nos.
(x)	Immunisation of cattle.	95.90	95.90	95.315	Immunisation of cattle
(xi)	Invasive weed eradication.	100.00	100.00	99.994	Invasive weed eradication-806 ha.
(xii)	Meadow development and maintenance	300.00	300.00	300.00	Meadow Development-342.50 ha
(xiii)	Black Buck Conservation	25.00	20.00	20.00	Black Buck conservation- 2 Nos.

(xiv)	Rejuvenation of Wildlife corridor (0th year)	6.88	6.88	0.00	-
(xv)	Second year maintenance of plantation taken up under rejuvenation of wildlife corridors	1.73	1.73	0.38	Second year maintenance rejuvenation of wildlife corridors-6 ha.
(xvi)	Construction of treatment shed and creation of artificial cave for wild sloth bear.	13.00	13.00	13.00	Construction treatment shed and artificial cave for wild sloth bear
	Total (4):	**1861.44**	**1856.43767**	**1815.34038**	
5	**SMC in Wildlife Habitat**				
(i)	LBCD	50.93	50.93	50.922	750 Nos. of LBCD
(ii)	Staggard trench	91.40	91.40	91.404	450 Nos.
(iii)	Graded bund and diaphragam wall	100.00	100.00	100.00	10 Nos.
(iv)	Water Harvesting structure	400.00	390.00	390.00	39 Nos.
	Total (5):	**642.33**	**632.325**	**632.326**	
6	**Establishment, operation and maintenance of animal rescue centre and veterinary treatment facilities for wild animals:**				
(i)	Maintenance of Nandankanan & Other Rescue Centre.	300.00	300.00	300.00	Maintenance Rescue Centre-8 Nos.
(ii)	Maintence of Nandankanan Zoos hospital	50.00	50.00	50.00	Maintenance of Zoos hospital
(iii)	Establishment of Rescue Centre and Veterinary treatment facilities.	200.00	200.00	199.998	Establishement of Rescue centre and veterinary facilities-2 nos.
(iv)	Logistics for Rescue Centre	400.00	400.00	400.00	Rescue centre 16 nos with logistics, equipments and training
	Total-(6):	**950.00**	**950.00**	**949.998**	

7	**Supply of wood-saving cooking appliances and other forest produce saving devices in forest fringe villages as specified by the National Authority from time to time;**				
(i)	Distribution of fuel saving devices like Unnat chullas/LPG, Solar cookers/ lamps etc to the villagers around Protected Areas.	50.00	50.00	50.00	Purchase of unnat chullas/LPG, Solar Cooker/lamp etc.
	Total (7):	**50.00**	**50.000**	**50.00**	
8	**Management of biological diversity and biological resources.**				
(i)	Biodiversity Assessment of the Protected Areas.	25.00	0.00	0.00	-
	Total (8):	**25.00**	**0.00**	**0.00**	
	Grand Total (80% NPV)	**10107.41**	**10067.41**	**9804.33129**	
Activities for Wildlife Management under CAMPA APO: 2020-21 (20% Components of NPV)					
9	**Strengthening of Communication facilities for Protection of Wildlife**				
(i)	Instalation of VHF base station, and maintenance thereof including satellite tracking.	175.09	175.09	161.0897	Installation of VHF base station-58 nos, purchase of walky Takies and mobile phone
(ii)	Equipments for monitoring of wild animals and the protection activities.	200.00	200.00	200.00	Monitoring equipment- Tracp camera, night vision binocular, etc.
(iii)	Communication and information Technology, data analysis and data managing etc.	150.00	150.00	144.9975	Development of GIS web portal, payment to ORSAC for Web app develop etc.
Total (9):-		**525.09**	**525.09**	**506.0872**	
10	**Construction & Maintenance of Infrastructure for Protection of Wildlife.**				
(i)	Maintenance of Forest Road/Inspection path.	517.50	517.50	517.49	Maint. 750 Kms of Forest road/ Inspection path
(ii)	Anti-poaching Barrack.	300.00	300.00	300.00	Construction of Anti-poaching Barrack-15 Nos.

(iii)	Anti-poaching check gates.	35.00	35.00	35.00	Check gate-5 Nos.
(iv)	Seizure Yard.	35.00	35.00	35.00	Seizure Yard-5 Nos.
(v)	Floating Jetty.	45.00	45.00	44.66325	Floating Jetty-3 Nos.
(vi)	Construction of Watch Tower	160.00	160.00	160.00	Watch Tower-8 Nos.
	Total- (10):	**1092.50**	**1092.50**	**1092.15325**	
11	**Research Activities:**				
(i)	Promoting conservation, sustainable use and documentation of biological diversity including preservation of habitats etc.	150.00	140.00	131.183	Research Work
	Total-(11):	**150.00**	**140.00**	**131.183**	
12	**Publicity & Awarness Programmes:**				
(i)	Publicity,Awareness,Training & Capacity building etc.	75.00	75.00	74.9963	Tin sheet-10000 Nos and Road side signboard-171 Nos.
	Total- (12):	**75.00**	**75.00**	**74.9963**	
13	**Monitoring and Evaluation:**				
(i)	Monitoring & Evaluation of management effectiveness of protected areas	50.00	0.00	0.00	-
	Total (13):	**50.00**	**0.00**	**0.00**	
	Grand Total (20% NPV)	**1892.59**	**1832.59**	**1804.42**	
	Total NPV (80%+20%)	**12000.00**	**11900.00**	**11608.751**	
B.	**Implementation of Regional Wildlife Management Plan for the State**	**500.00**	**500.00**	**152.57**	**Implementation of RWLMP-** Elephant over pass over the right main canal and left main canal of Janjore irrigation project.
C.	**Implementation of Site Specific Wildlife Conservation Plan**	**3142.50**	**3142.45**	**2788.45679**	**Implementation of SSWLCP-** 83 nos. of project in 20 nos of Divisions

	Total (B+C):	**3642.50**	**3642.45**	**2941.02679**	
	Grand Total {A (80% + 20%) + (B+C)}:	**15642.50**	**15542.45**	**14549.77783**	

10. Ama Jangala Yojana

AMA JANGALA YOJANA

(Forest, Environment & Climate Change Department)
Government of Odisha

Letter No: 939 / AJY Cell- 151/2018 Date: 22-11-2021

To

Mr. Bajinath Kr. Paswan,
Senior Consultant-GRID-Sustainability and Climate Change
M/s. Pricewaterhouse Coopers Pvt. Ltd.,
Plot No.56&57, Block DN, Sector V, Salt Lake, Kolkata-700091

Sub: Information on CAMPA evaluation for 2017-18, 2019-20 and 2020-21 pertaining to Ama Jangala Yojana.

Ref: 1. Your E-mail dated 16.11.2021.

2. Memo No.17891 dated 25.10.2021 of O/o the PCCF, Jt. CEO, State Authority, CAMPA.

Sir,

I am directed to furnish herewith the information on CAMPA evaluation for 2017-18, 2019-20 and 2020-21 of Ama Jnagala Yojana. The physical and financial progress of the three APOs is enclosed herewith.

Yours sincerely,

22/11/2021

Dy. Project Director (A&F)

Encl: As above

Memo No. 940 /AJY Cell- 151/2018 Date. 22-11-2021

Copy with enclosure forwarded to the Jt. Chief Executive Officer, State Authority, CAMPA of O/o the PCCF & HoFF, Bhubaneswar, Odisha for kind information.

22/11/2021

Dy. Project Director (A&F)

SFTRI Campus, At/P.O: Ghatikia, Bhubaneswar – 751029, Phone: (0674) 2386016,
Visit us at: http://www.ofsdp.org, Email:ajy@ofsdp.org

Physical Progress of Ama Jangala Yojana under CAMPA APO 2020-21

Sl No.	Name of Division	Survey Demarcation & Pillar Posting		ANR with GAP (0th yr)		ANR without GAP (0th yr)		Micro Plan Preparation		ANR without GAP (1st yr)		ANR without GAP (2nd yr)		Block Plantation (4th Year)		Pending work of APO 2019-20	
		Target (in Ha.)	Achievement (in Ha.)	Target (in Ha.)	Achievement (in Ha.)	Target (in Ha.)	Achievement (in Ha.)	Target (No of VSS)	Achievement (No of VSS)	Target (in Ha.)	Achievement (in Ha.)	Target (in Ha.)	Achievement (in Ha.)	Target (in Ha.)	Achievement (in Ha.)	Target (in Ha.)	Achievement (in Ha.)
1	Angul	375	425	-	-	375	375	8	9	1,000	1,000	913	913	-		87	87
2	Balasore(wl)	50	50	-	-	50	50	2	2	750	750	-		-			
3	Baliguda	2,000	2,000	1,000	1,000	1,000	1,000	40	40	1,000	1,000	495	495	-		505	505
4	Bamra (WL)	1,295	1,295	600	600	695	695	27	27	1,000	1,000	500	500	-		500	500
5	Bargarh	400	400	-	-	400	400	11	11	1,000	1,000	515	515	70	70	485	485
6	Bolangir	2,000	2,000	1,000	1,000	1,000	1,000	40	40	2,500	2,500	2,000	2,000	140	140		
7	Bonai	682	682	-	-	682	682	20	20	-	-	-	-	-	-		
8	Deogarh	1,100	1,100	550	550	550	550	23	23	1,000	1,000	1,000	1,000	-			
9	Jeypore	3,500	3,500	1,750	1,750	1,750	1,750	70	70	1,000	1,000	1,000	1,000	60	60		
10	Kalahandi (N)	4,200	4,200	2,000	2,000	2,200	2,200	84	84	1,500	1,500	2,000	2,000	70	70		
11	Kalahandi (S)	4,200	4,200	2,000	2,000	2,200	2,200	84	84	3,250	3,250	3,000	3,000	-			
12	Keonjhar	1,250	1,250	600	600	650	650	25	25	1,000	1,000	1,000	1,000	40	40		
13	Keonjhar (WL)	1,500	1,500	700	700	800	800	30	30	-		-		80	80		
14	Khariar	1,270	1,270	600	600	670	670	25	25	2,000	2,000	2,000	2,000	120	120		
15	Koraput	4,500	4,500	2,100	2,100	2,400	2,400	90	90	1,000	1,000	1,000	1,000	140	140		
16	Malkangiri	1,500	1,500	750	750	750	750	30	30	2,000	2,000	2,000	2,000	160	160		
17	Nabarangpur	1,700	1,700	850	850	850	850	34	34	1,000	1,000	-	-	-	-	2,000	2,000
18	Paralakhemundi	1,000	1,000	500	500	500	500	20	20	1,000	1,000	497	497	-	-	503	503
19	Phulbani	3,160	3,160	1,600	1,600	1,560	1,560	82	82	2,000	2,000	1,000	1,000	10	10		
20	Rairakhol	1,000	1,000	500	500	500	500	20	20	1,000	1,000	-		-		2,000	2,000
21	Rayagada	4,745	4,745	2,200	2,200	2,545	2,545	90	90	1,000	1,000	950	950	70	70		
22	Rourkela	1,460	1,460	700	700	760	760	30	30	1,000	1,000	1000 (No allotment)		45	45		
	Total	**42,887**	**42,937**	**20,000**	**20,000**	**22,887**	**22,887**	**885**	**886**	**27,000**	**27,000**	**20,870**	**19,870**	**1,005**	**1,005**	**6,080**	**6,080**

SMS(IME)

(Accounts Manager)

Chinmay
DEO-Accounts

Divisionwise Expenditure of Ama Jangals Yojana under CAMPA APO 2020-21

Sl No.	Name of Division	Total Target (in Rs.)	Total Released (in Rs.)	Expenditure									Total Expenditure (in Rs.)	Balance Surrendered (in Rs.)
				JFM Site Selection	Micro Plan Preparation	Support to capacity Building	ANR Without GAP (19-20)	ANR Without GAP (18-19)	ANR Without GAP (17-18)	ANR Without GAP (16-17)	Total ANR Without GAP	Block Plantation (Maintenance)		
1	Angul	1,92,28,300	1,83,66,000	3,64,550	90,000	1,17,372	-	5,58,750	1,36,07,066	36,28,262	1,77,94,078	-	1,83,66,000	-
2	Balasore (wl)	96,70,000	95,54,000	42,000	20,000	29,000	-	74,500	93,88,500	-	94,63,000	-	95,54,000	-
3	Baliguda	3,10,80,000	2,67,67,000	16,92,000	4,00,000	5,90,280	17,68,118	14,89,882	1,88,39,590	19,67,130	2,40,84,720	-	2,67,67,000	-
4	Bamra (WL)	2,74,42,000	2,52,48,000	10,95,000	2,70,000	3,10,380	20,68,924	13,49,009	1,81,67,705	19,86,982	2,35,72,620	-	2,52,48,000	-
5	Bargarh	2,31,40,000	2,22,18,000	3,38,400	1,10,000	1,62,280	-	5,96,000	1,85,89,230	20,46,610	2,12,31,840	3,75,480	2,22,18,000	-
6	Bolangir	5,03,67,000	4,79,62,000	16,92,000	4,00,000	5,91,200	37,94,840	14,90,000	3,12,95,000	79,48,000	4,45,27,840	7,50,960	4,79,62,000	-
7	Bonai	30,61,000	20,28,000	5,76,972	2,00,000	2,34,848	-	10,16,180	-	-	10,16,180	-	20,28,000	-
8	Deogarh	2,21,67,000	2,14,41,000	9,30,000	2,30,000	3,22,000	13,02,950	-	1,45,52,050	41,04,000	1,99,59,000	-	2,14,41,000	-
9	Jeypore	3,47,93,000	3,08,73,000	29,61,000	7,00,000	10,34,600	-	92,48,750	1,25,78,000	40,23,260	2,58,50,010	3,27,390	3,08,73,000	-
10	Kalahandi (N)	4,86,74,000	4,27,72,000	36,37,200	8,40,000	12,41,010	78,18,000	33,88,000	1,84,39,650	70,62,400	3,67,08,050	3,45,740	4,27,72,000	-
11	Kalahandi (S)	7,41,80,000	7,08,24,000	35,98,560	8,40,000	12,41,440	78,18,000	33,88,000	4,20,16,000	1,19,22,000	6,51,44,000	-	7,08,24,000	-
12	Keonjhar	2,31,28,000	2,16,29,000	10,57,500	2,50,000	3,00,000	5,46,454	6,86,072	74,31,461	24,56,312	1,11,20,299	2,18,501	1,29,46,300	86,82,700
13	Keonjhar (WL)	81,34,000	62,90,000	12,69,000	3,00,000	4,43,400	26,16,480	12,32,000	-	-	38,48,480	4,29,120	62,90,000	-
14	Kharsar	4,01,42,000	3,75,24,000	10,74,420	2,50,000	3,69,500	22,77,000	9,98,300	2,39,63,100	79,48,000	3,51,86,400	6,43,680	3,75,24,000	-
15	Koraput	4,03,58,000	3,48,25,000	38,07,000	9,00,000	13,29,540	79,69,500	35,76,000	1,25,18,000	39,74,000	2,80,37,500	7,50,960	3,48,25,000	-
16	Malkangiri	4,15,47,000	3,98,18,000	12,69,000	3,00,000	4,43,400	28,46,250	11,17,500	2,50,35,610	79,48,000	3,69,47,360	8,58,240	3,98,18,000	-
17	Parlakhemundi	2,59,27,000	2,47,73,000	8,46,000	2,00,000	2,94,868	18,97,500	7,45,000	1,81,99,987	25,89,645	2,34,32,132	-	2,47,73,000	-
18	Phulbani	4,57,61,000	4,21,64,000	26,73,360	8,20,000	12,11,960	60,71,040	23,24,400	2,50,36,000	39,74,000	3,74,05,440	53,240	4,21,64,000	-
19	Rayagada	4,11,19,000	3,58,09,000	40,60,905	9,00,000	13,30,059	85,94,800	39,19,300	1,27,28,000	38,93,105	2,91,35,205	3,82,830	3,58,09,000	-
20	Rourkela	2,42,80,000	1,85,26,000	12,35,160	3,00,000	4,43,400	26,56,500	11,32,400	1,25,17,160	-	1,63,06,060	2,41,380	1,85,26,000	-
21	Nabarangpur	4,62,87,000	4,56,96,000	14,38,200	3,40,000	5,02,520	46,32,876	-	3,87,82,404	-	4,34,15,280	-	4,56,96,000	-
22	Rairakhol	3,85,15,000	3,73,62,000	8,46,000	2,00,000	2,95,600	20,70,790	3,97,587	3,31,43,416	-	3,56,11,793	-	3,69,53,393	4,08,607
23	PMU	5,00,000												
	Total	**72,00,00,300**	**66,24,69,000**	**3,65,04,228**	**88,60,000**	**1,28,38,657**	**6,67,70,022**	**3,87,27,630**	**40,68,27,929**	**7,74,71,706**	**58,97,97,287**	**53,77,521**	**65,33,77,693**	90,91,307

(SMS/ME)

(Accounts Manager)

Chinmay
(DEO-Accounts)

Physical Progress of Ama Jangala Yojana under State CAMPA APO 2019-20

Sl No	Name of DMU	No of VSS	Survey Demarcation & Boundary Clearance (Treatment Area)		Micro Plan Preparation		ANR Without Gap Plantation (0th year)		ANR Without Gap Plantation (1st Year)		ANR Without Gap Plantation (2nd Year)		ANR Without Gap Plantation (3rd Year)		Block Plantation (3rd Year)	
			Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
1	Angul	20	1000	950	20	19	1000	916	1000	913	1000	937	2819	2710	N.A	N.A
2	Balasore(WL)	15	750	750	15	15	750	750	N.A	N.A	1000	1000	1006	1004	N.A	N.A
3	Baliguda	20	1000	1000	20	20	1000	275	1000	495	1000	469	5440	2556	N.A	N.A
4	Bamra (WL)	20	1000	1000	20	20	1000	300	1000	500	1000	500	3546	1774	N.A	N.A
5	Bargarh	20	1000	1000	20	20	1000	86	1000	515	1000	470	4000	1878	70	70
6	Bolangir	50	2500	2500	50	50	2500	2500	2000	2000	1000	1000	7008	7008	140	140
7	Bonai	0	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	700	350	4592	3719	N.A	N.A
8	Deogarh	20	1000	1000	20	20	1000	1000	1000	1000	1000	1000	5448	5449	N.A	N.A
9	Jeypore	20	1000	1000	20	20	1000	1000	1000	1000	1000	1000	4250	4250	60	60
10	Kalahandi (N)	30	1500	1500	30	30	1500	1500	2000	2000	1000	1000	8000	7880	70	70
11	Kalahandi (S)	65	3250	3250	65	65	3250	3250	3000	3000	1000	1000	6295	6295	N.A	N.A
12	Keonjhar	20	1000	1000	20	20	1000	1000	1000	1000	1000	1000	4750	4700	40	40
13	Keonjhar (WL)	0	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	5237	5168	80	80
14	Khariar	40	2000	2000	40	40	2000	2000	2000	2000	1000	1000	7248	7248	120	120
15	Koraput	20	1000	1000	20	20	1000	1000	1000	1000	1000	1000	6250	6250	140	140
16	Malkangiri	40	2000	2000	40	40	2000	2000	2000	2000	1000	1000	4329	4329	160	160
17	Paralakhemundi	20	1000	1000	20	20	1000	276	1000	497	1000	493	6019	2927	N.A	N.A
18	Phulbani	40	2000	2000	40	40	2000	2000	1000	1000	1000	1000	7000	6915	10	10
19	Rayagada	20	1000	1000	20	20	1000	1000	1000	950	1000	1000	6880	6666	70	70
20	Rourkela	20	1000	1000	20	20	1000	191	1000	0	1000	1000	4504	4216	50	45
21	Satkosia(WL)	0	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	1411	1394	N.A	N.A
22	Nabarangpur	20	1000	1000	20	20	1000		2000		5000	2300	N.A	N.A	N.A	N.A
23	Rairakhol	20 (20 VSS- 19-20 & 40 VSS- 18-19)	3000 Ha. (1000 Ha. in 19-20 & 2000Ha. in 18-19	3000 Ha. (1000 Ha. in 19-20 & 2000Ha. in 18-19	140 (20 VSS- 19-20 & 80 VSS- 18-19 & 80 VSS- 17-18)	140 (20 VSS- 19-20 & 40 VSS- 18-19 & 80 VSS- 17-18)	1000	1000	2000	2000 Ha. (only fire line work)	4000Ha. (only fire line, SMC)	4000Ha. (only fire line, SMC)	N.A	N.A	N.A	N.A
	Total	**540**	**29000**	**28950**	**660**	**659**	**27000**	**22043**	**27000**	**19870**	**27700**	**22520**	**106031**	**94334**	**1010**	**1005**

(SMS/ME)

Ch. Reddy
Accounts Manager

Chinmay
DEO-Accounts

Divisionwise Expenditure under State CAMPA APO 2019-20

Sl No.	Name of Division	Total Target (in Rs.)	Total Released (in Rs.)	Expenditure						Total Expenditure (In Rs.)	Balance Surredered (in Rs.)
				Survey Demarcation, Pillar posting	Micro Plan Preparation	Support to capacity Building	Publication & Communication	Total ANR Without GAP	Block Plantation (Maintenance)		
1	Angul	2,68,94,179	2,68,94,000	5,37,600	1,60,000	2,07,000	-	2,40,16,648	-	2,49,21,248	19,72,752
2	Balasore (wl)	94,04,112	94,04,000	4,20,000	1,50,000	1,80,000	-	80,91,601	-	88,41,601	5,62,399
3	Baliguda	3,27,65,219	1,63,82,500	5,60,000	2,00,000	2,80,000	-	1,53,42,500	-	1,63,82,500	-
4	Bamra (WL)	2,85,23,510	1,42,61,500	5,60,000	2,00,000	2,80,000	-	1,32,21,500	-	1,42,61,500	-
5	Bargarh	3,07,63,600	1,53,81,500	5,60,000	4,00,000	60,000	-	1,31,71,549	6,59,271	1,48,50,820	5,30,680
6	Bolangir	5,66,05,120	5,66,04,500	14,56,000	5,20,000	7,24,000	-	5,14,57,300	24,47,200	5,66,04,500	-
7	Bonai	1,34,21,050	67,10,500	-	-	-	-	67,10,498	-	67,10,498	2
8	Deogarh	3,27,84,573	3,27,84,000	5,60,000	2,00,000	2,80,000	-	2,92,43,923	-	3,02,83,923	25,00,077
9	Jeypore	3,11,48,800	3,11,48,000	5,60,000	2,00,000	2,80,000	-	2,90,40,300	10,67,700	3,11,48,000	-
10	Kalahandi (N)	5,40,43,600	5,40,42,500	8,40,000	3,00,000	4,20,000	-	4,85,46,815	11,24,562	5,12,31,377	28,11,123
11	Kalahandi (S)	6,77,70,800	6,77,70,000	18,20,000	6,50,000	9,10,000	-	6,42,64,245	-	6,76,44,245	1,25,755
12	Keonjhar	3,19,19,200	3,19,18,500	5,60,000	2,00,000	2,70,000	-	2,74,17,821	3,56,220	2,88,04,041	31,14,459
13	Keonjhar (WL)	1,31,28,653	1,31,28,000	-	-	-	-	86,54,937	13,96,287	1,00,51,224	30,76,776
14	Khariar	5,50,12,358	5,50,12,000	11,20,000	4,00,000	5,60,000	-	4,78,95,505	19,55,342	5,19,30,847	30,81,153
15	Koraput	3,70,27,200	3,70,26,500	5,60,000	2,00,000	2,40,000	-	2,90,06,217	24,47,201	3,24,53,418	45,73,083
16	Malkangiri	4,91,73,850	4,91,72,500	11,20,000	4,00,000	5,60,000	-	4,42,95,700	27,96,800	4,91,72,500	-
17	Parlakhemundi	3,40,62,560	1,70,31,000	5,60,000	2,00,000	2,80,000	-	1,59,91,000	-	1,70,31,000	-
18	Phulbani	3,99,94,800	3,99,94,000	11,20,000	4,00,000	5,55,000	-	3,25,71,480	1,74,800	3,48,21,280	51,72,720
19	Rayagada	3,72,14,643	3,72,14,000	5,60,000	2,00,000	2,80,000	-	3,49,16,284	12,57,716	3,72,14,000	-
20	Rourkela	3,15,42,624	1,57,71,000	5,60,000	2,00,000	1,20,000	-	1,40,81,049	8,09,951	1,57,71,000	-
21	Satkosia (WL)	31,60,349	31,60,000	-	-	-	-	27,30,800	-	27,30,800	4,29,200
22	Nabarangpur	5,10,40,000	5,10,40,000	5,60,000	2,00,000	2,80,000	-	92,50,000	-	1,02,90,000	4,07,50,000
23	Rairakhol	4,65,60,000	4,65,60,000	16,80,000	12,00,200	2,40,000	-	75,60,000	-	1,06,80,200	3,58,79,800
24	PMU	17,39,200	8,69,500	-	-	1,12,350	7,57,150	-	-	8,69,500	-
	Division Total	**81,57,00,000**	**72,92,80,000**	**1,62,73,600**	**65,80,200**	**71,18,350**	**7,57,150**	**57,74,77,672**	**1,64,93,049**	**62,47,00,022**	**10,45,79,979**

(AMS/ME) Accounts Manager (DEO-Accounts)

Physical Progress of Ama Jangala Yojana under CAMPA APO 2017-18

Sl No	Name of DMU	No of VSS	Survey Demarcation & Boundary Clearance		Micro Plan Preparation		ANR Without Gap Plantation (1st Year)		ANR Without Gap Plantation (2nd Year)		Block Plantation (2nd Year)	
			Area (in Ha.)	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
1	Angul	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	2819 Ha.	2819 Ha.	N.A	N.A
2	Balasore(WL)	0	0 Ha.	0 Ha.	0	0	1000 Ha.	1000 Ha.	1006 Ha.	1006 Ha.	N.A	N.A
3	Baliguda	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	5440 Ha.	5440 Ha.	N.A	N.A
4	Banara (WL)	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	3546 Ha.	3546 Ha.	N.A	N.A
5	Bargarh	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	4000 Ha.	4000 Ha.	70 Ha.	70 Ha.
6	Bolangir	40	2000 Ha.	2000 Ha.	40	40	1000 Ha.	1000 Ha.	7008 Ha.	7008 Ha.	140 Ha.	140 Ha.
7	Bonai	0	0 Ha.	0 Ha.	0	0	700 Ha.	700 Ha.	4592 Ha.	4592 Ha.	N.A	N.A
8	Deogarh	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	5449 Ha.	5449 Ha.	N.A	N.A
9	Jeypore	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	4250 Ha.	4250 Ha.	60 Ha.	60 Ha.
10	Kalahandi (N)	40	2000 Ha.	2000 Ha.	40	40	1000 Ha.	1000 Ha.	8000 Ha.	8000 Ha.	70 Ha.	70 Ha.
11	Kalahandi (S)	60	3000 Ha.	3000 Ha.	60	60	1000 Ha.	1000 Ha.	6295 Ha.	6295 Ha.	N.A	N.A
12	Keonjhar	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	4750 Ha.	4750 Ha.	40 Ha.	40 Ha.
13	Keonjhar (WL)	0	N.A	N.A	0	0	N.A	N.A	5237 Ha.	5237 Ha.	80 Ha.	80 Ha.
14	Khariar	40	2000 Ha.	2000 Ha.	40	40	1000 Ha.	1000 Ha.	7248 Ha.	7248 Ha.	120 Ha.	120 Ha.
15	Koraput	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	6250 Ha.	6250 Ha.	140 Ha.	140 Ha.
16	Malkangiri	40	2000 Ha.	2000 Ha.	40	40	1000 Ha.	1000 Ha.	4329 Ha.	4329 Ha.	160 Ha.	160 Ha.
17	Paralakhemundi	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	6019 Ha.	6019 Ha.	N.A	N.A
18	Phulbani	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	7000 Ha.	7000 Ha.	10 Ha.	10 Ha.
19	Rayagada	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	6880 Ha.	6880 Ha.	70 Ha.	70 Ha.
20	Rourkela	20	1000 Ha.	1000 Ha.	20	20	1000 Ha.	1000 Ha.	4504 Ha.	4504 Ha.	50 Ha.	50 Ha.
21	Satkosia(WL)	0	N.A	N.A	0	0	N.A	N.A	1411 Ha.	1411 Ha.	N.A	N.A
22	Nabarangpur	40	2000 Ha.	2000 Ha.	40	40	5000 Ha.	5000 Ha.	N.A	N.A	N.A	N.A
23	Rairakhol	40	0 Ha.	2000 Ha.	40	0	4000 Ha.	4000 Ha.	N.A	N.A	N.A	N.A
	Grand Total	**540**	**25000 Ha.**	**27000 Ha.**	**540**	**500**	**31700 Ha.**	**31700 Ha.**	**1,06,032**	**1,06,032**	**1010**	**1010**

SM& IME)

Ch. Prabhu
Accounts Manager

Chinmay
(DEO - Account)

Divisionwise Expenditure under State CAMPA APO 2017-18

Sl No.	Name of Division	Total Released (incl. Opening Balance) (in Rs.)	Expenditure									Total Expenditure (in Rs.)	Fund Surrendered (in Rs.)
			JFM Site Selection	Micro Plan Preparation	Support to capacity Building	Publication & Communication	Forest Restoration under JFM-SMC	ANR Without GAP (16-17) 1st Year	ANR Without GAP (17-18) 2nd Year	Total ANR Without GAP	Block Plantation (Maintenance)		
1	Angul	2,65,13,854	5,93,475	3,60,000	3,67,000	10,000	1,76,434	70,22,224	1,76,66,354	2,46,87,678		2,61,04,587	3,19,267
2	Balasore (wl)	1,29,15,814	-	88,909	1,04,000		8,72,781	11,43,475	1,06,20,156	1,17,63,631		1,28,25,321	89,493
3	Baliguda	5,43,37,016	5,86,863	2,00,000	1,42,000	10,000	9,60,000	83,42,471	4,38,15,883	5,21,58,353		5,38,27,216	5,09,800
4	Banua (WL)	2,51,84,110	5,35,000	2,00,000	2,80,000	10,000		68,34,012	1,67,68,345	2,36,02,357		2,46,77,357	5,06,753
5	Bargarh	3,10,99,580	5,35,000	2,00,000	2,80,000			1,16,45,321	1,79,11,372	2,95,56,693	6,03,960	3,07,95,653	3,03,927
6	Bolangir	4,79,98,056	10,54,500	3,80,000	5,35,000			84,40,000	3,82,27,624	4,66,67,624	13,59,930	4,79,98,054	2
7	Bonai	3,31,93,603	-	-	97,000			85,39,670	3,43,78,605	4,29,18,475		3,29,75,475	2,18,128
8	Deogarh	3,68,04,411	5,35,000	2,00,000	2,67,200	10,000		96,34,096	2,36,89,753	3,33,24,749		3,43,56,949	24,47,463
9	Jeypore	3,34,18,660	4,86,000	2,00,000	1,96,000	10,000		98,14,384	2,20,66,047	3,18,80,431	6,83,152	3,31,64,583	2,54,077
10	Kalahandi (N)	5,08,89,577	11,10,000	4,00,000	5,89,000			69,33,500	4,11,59,209	4,80,92,709	5,45,154	5,07,37,063	1,52,514
11	Kalahandi (S)	5,12,91,133	16,86,000	6,00,000	8,69,000			1,99,73,149	3,30,23,687	4,79,96,836		5,11,30,836	1,80,297
12	Keonjhar	4,06,66,406	5,89,720	2,30,000	2,75,000	6,006		1,21,11,834	2,63,25,641	3,84,37,175	4,97,761	4,00,05,664	6,60,742
13	Keonjhar (WL)	2,90,84,826	-	-	29,000			-	2,77,95,018	2,77,95,018	10,82,152	2,89,06,170	1,78,656
14	Kheriar	4,89,83,537	11,10,000	4,00,000	5,89,000			69,41,375	3,85,66,751	4,54,86,126	13,97,341	4,89,82,467	1,070
15	Koraput	4,68,32,695	5,35,000	2,00,000	3,20,000			1,05,12,950	3,52,36,333	4,57,51,283	21,26,411	4,68,32,694	1
16	Malkangiri	3,60,69,368	11,10,000	4,00,000	5,60,000			98,79,655	1,07,40,455	2,83,20,110	21,84,307	3,25,54,417	35,14,951
17	Parlakhemundi	5,06,46,880	5,89,000	2,00,000	2,80,000	10,006		82,96,129	3,72,79,990	4,55,76,119		4,66,21,115	40,25,474
18	Phulbani	5,03,78,839	5,89,000	2,00,000	2,80,000	10,000		1,22,16,453	3,60,51,461	4,91,47,914	1,19,348	5,03,08,262	70,577
19	Rayagada	6,23,64,337	8,79,750	1,59,000	2,88,000		6,25,000	2,21,85,076	3,23,95,358	5,45,80,434	9,99,573	5,72,31,757	51,32,581
20	Rourkela	3,74,65,705	5,42,400	2,00,000	2,70,000		9,95,200	1,11,25,963	2,33,68,127	3,45,01,109	5,75,869	3,70,86,878	3,78,825
21	Sutkonia (WL)	46,41,469	-	-	29,000	10,000		-	36,75,774	36,75,774		37,14,774	9,26,695
22	Nabarangpur	3,52,64,340	10,96,500	10,00,000	13,04,920			3,18,49,215	-	3,18,49,215		3,52,50,640	13,700
23	Rairakhol	31,71,800	69,800	1,60,000	8,750			-	-	-		2,38,550	29,33,250
24	PMU	90,77,829	-		6,20,329	4,75,958				-		10,96,287	80,81,542
	Grand Total	**95,87,51,052**	**1,27,33,008**	**59,74,909**	**85,41,206**	**5,61,966**	**36,29,415**	**21,58,51,866**	**56,71,87,943**	**78,30,39,809**	**1,21,51,158**	**82,76,31,468**	**3,10,99,584**

** Rs. 3,10,99,584/- has been surrendered to PCCF & HoFF.

(CMPIME)

(Accounts Manager)

(DEO Accounts)

11. Physical and Financial Achievements from Divisions

The physical and financial achievements data as shared by the divisions has been submitted in the USB drive along with this report.

Annexure C

Photographs, Snapshots of records verified have been submitted in the USB drive along with this report.

Evaluation of Projects Undertaken under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) in the state of Odisha (2017-18, 2019-20 and 2020-21)