



Third Party Evaluation of works Undertaken
under Compensatory Afforestation Fund
Management and Planning Authority (CAMPA)
in Odisha for the year 2021-22



Submitted to:

Chief Executive Officer
State CAMPA, Odisha
Aranya Bhawan, Bhubaneswar-23

Submitted by:

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CAMPA Evaluation Report

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Submitted to
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Executive Summary:

Introduction: A study was commissioned by PCCF & HOFF to understand the status of different activities taken up under CAMPA APO 2021-22 across different forest divisions in Odisha. The scope of work covers assessing plantation activities, infrastructure development initiatives, AJY interventions, bamboo plantation, SSO measures taken in bamboo sites and maintenance activities taken up under CAMPA APO 2021-22. The scope also includes looking at wildlife management and other activities implemented as per the APO. Major components of CAMPA intervention includes [1] site specific mandatory activities, [2] integrated wildlife management, [3] NPV 80% and 20%, and [4] interest 60% and 40%.

Approach and Methodology: To assess the interventions taken up under CAMPA APO 2021-22, observational study design was employed. The study framework entailed [1] ground truthing and site-specific measurements, [2] field observation, [3] conducting FGDs with locals / JFM members, [4] Key Informant Interview (KII), and [5] discussions with forest officials involved for CAMPA implementation at different implementation levels (State to Beat level). The study adopted a mixed method approach to assess the range of activities undertaken under CAMPA. Available secondary data were collected from different operational levels, such as office of CAMPA authority / office of PCCF & HOFF, divisional and range offices of the forest department.

The study covered 8 forest circles, 37 territorial forest divisions, and 14 wildlife divisions. In addition to it, Nandan Kanan zoo was also covered under the assessment. Based on the component specific types of interventions in different categories (plantation, infrastructure, wildlife, SMC etc.), different sampling plan was adopted. Detail sample plan was prepared and finalized after due consultation with the concerned officials at the office of CAMPA authority and at Forest Division level. To draw sample, stratification was done based on the specific parameters. In cases where a specific intervention in a particular division is limited, purposive sampling was adopted for coverage under assessment.

For assessment of plantation measures, 10.0 percent of the total plantation area was considered (APO year 2021-22) for each forest division. For the evaluation of different aspects (plant growth, GBH, survival rate etc.) sample plots of 0.1 ha. were demarcated and measurement / counting taken up for estimation as per the approved norms. Total plots demarcated for intensive study represent 10.0 percent of the sample area and approximately 1.0 percent level to the total universe (total area under plantation in the forest division level under different plantation categories). In the case of linear plantation, 10.0 percent of the overall linear plantation sites and consequently 100-meter length for each of the selected 1 RKM plantation length were considered for assessment. In the case of linear plantation in rows, considering the length of each row in RKM, 100-meter sample plot per each Km. linear plantation was considered. The study covered 431 sites across the forest divisions.

Plantation: The assessment covered 192 Forest Ranges of 46 Forest Divisions and 431 sites were assessed, covering different aspects. The assessment covered plantations that were taken up during the Year 2021-22 in different categories of forest. Along with this, the assessment covered different model of plantations taken up under CAMPA, under different components of plantation such as (1) AJY (2) CA / PCA (3) NPV 80 % and (4) SSWLMP.

Plantation Specifications: Actual area of plantation to demarcated area (gross area) has been 93.63 percent. Seedling norm by unit of plantation (ha.) observed varying by plantation type under different components. In NPV 80 %, seedling norm per ha. varies between 200 to 8,000 (Miyawaki model). In AJY, seedling norm of 200 per ha. was followed in AJY divisions, whereas, in case of CA / PCA, seedling norm varies between a minimum of 250 to a maximum of 1,600. In case of NPV 80%, seedling norm per ha. has been 200 to 8,000 irrespective of plantation models. In SSWLMP, seedling norm varies between 200 to 1600.

Documentation and Transparency: Existence of plantation journal is observed for 89.3 percent sites (both plantation of 2021-22 and maintenance of earlier plantations; 91.2 percent for the year 2021-22). In case of AJY without gap and ANR without gap, registers are maintained. Of the total observed plantation journals, 92.0 percent were found maintained. In case of 2021-22 plantations, map of plantation sites observed in 90.3 percent cases. Micro plans found prepared for all the AJY sites. Similarly, treatment map is observed for 94.91 percent sites where it is required to be prepared, i.e., in case of ANR conditions, including AJY. In case of 2021-22 plantation, treatment map observed for different plantation models of most of the sites (95.56 percent). In case of plantation of 2021-22, signboard observed in 81.7 percent sites whereas signboard is not visible in 9.1 percent sites and in 3.7 percent sites it is in broken condition.

Pillaring of Sites: Apart from this, pillars found posted in assessed sites. In case of plantation of 2021-22, average number of pillars posted per site is about 28 with total posting of 6,147 pillars (excluding avenue plantation). Of the total 20.0 percent pillars (1,228 pillars) witnessed, 91.9 percent are in good condition, and pillars are mostly made up of RCC and found serially numbered.

SMC Measures: Different soil moisture conservation works have been taken up in plantation sites. Among the measures, staggered trench is more prominent (85.2 percent sites). In 5.1 percent sites, more than one SMC measures found taken up. It indicates that SMC measures have been taken for better plant survival and enriching the soil moisture with topsoil restoration. SMC interventions have been taken up in both new plantations and maintenance sites.

Plant Protection Measures: Among the protection measures, “watch and ward” is the most common (98.6 percent), followed by barbed fencing (25.8 percent), bamboo / twig fencing (20.4 percent), green fencing (5.1 percent), and cow foot trench (1.2 percent). Solar fencing (0.5 percent) and stone fencing (0.9 percent) are also observed in specific sites.

Plant Survival Rate: Overall plant survival rate, irrespective of new plantation or maintenance, covering all these parameters, found to be 92.69 percent. In some plots, no casualty is observed after replacement. Plant survival rate for the plantations taken up in 2021-22 found to be 93.86 percent.

Plant Height and GBH: The mean maximum height of the plants planted in 2021-22 found differing by species across different plantation models. For plantation activities taken up during 2021-22, the mean maximum height of the plants, irrespective of other parameters, i.e., plantation models, forest division, forest range, plant type etc. found to be 2.5 meter, and the mean minimum height measured to be 1.5 meter. Similarly, mean maximum, and mean minimum GBH / GCH of the plants planted in the year 2021-22 found to be 12.5 cm and 7.8 cm respectively. Plants under maintenance for previous year plantation found to be higher than plants of 2021-22.

Natural Species: Natural species observed in most of the sites where ANR activities have been taken up. Natural species also observed in different other sites like bald hill plantation, sites under maintenance (different years) and in AR sites. The average number of natural species, irrespective of site characteristics (creation maintenance) and model of plantation, found to be 8. Average number of natural species in ANR Without Gap, RET Species (Creation) found to be high, i.e., about 54.

Regenerated Species: Regenerated species observed in ANR sites, i.e., ANR with gap, ANR without gap, AJY ANR with gap, AJY ANR without gap, and RET ANR without gap. Average number of regenerated species found varying across the sites and by forest divisions and ranges. Average number of regenerated species varies between a minimum of 2 to a maximum of 31, with an average of 14 per site. Growth of coppices also observed, ranging between 2-4 on an average per species in ANR sites / plots.

Plant Biodiversity: In plantation, attempt is made to ensure plant diversity, based on local suitability of the plants. The biodiversity index for plantation activities taken up under AJY (H: 3.218, Simpson Index: 18.041) and NPV 80% (H: 3.446 and Simpson Index: 18.663) seems marginally higher than CA/PCA (H: 2.861, Simpson Index: 10.945) and SSWLMP (H: 2.601, Simpson Index: 10.119).

Miyawaki plantation: Miyawaki plantation is a reforestation technique developed by Japanese botanist Akira Miyawaki, focusing on planting native tree species in densely packed, multi-layered forests to accelerate growth and enhance biodiversity. These forests mature faster and are more resilient to environmental stressors, making them effective in combating deforestation and mitigating climate change impacts (Miyawaki, 2005). This approach has gained popularity globally for its efficiency in restoring degraded ecosystems and sequestering carbon. Owing to the growing relevance of Miyawaki plantation in climate change mitigation process, the Forest, Environment and Climate Change Department, Government of Odisha has accorded priority to such type of plantation activities under CAMPA intervention in APO2021-22. We observed 11 sites of Miyawaki Plantation and Maintenance work in 9 Forest Divisions i.e. Sambalpur, Jharsuguda, Nabarangpur, Malkanagiri, Dhenkanal, Rairangpur, Kalahandi (N), Koraput and Jeypore.

Bamboo Planation: The assessment covered 47 bamboo plantation / maintenance sites in 31 forest divisions and 43 forest ranges. Overall, maintenance aspect is covered in 38.30 percent sites. Among the total sites, 29.79 percent sites (14 nos.) are having plantation in the year 2019-20, 31.91 percent in 2020-21, and remaining 38.30 percent fall in to 2021-22 plantation. About 97.9 percent bamboo plantation / maintenance is done under NPV 80.0 percent. In plantation, sapling norm of 400 plants per hector was followed in all the divisions. Average area of plantation has been 26.70 ha. and average number of saplings planted per site is about 10,681. Among the SMC measures taken up in bamboo plantation sites (In all the bamboo plantation sites, SMC works have been taken up.), staggered trench is most prominent (93.6 percent). Extension of siltation observed to be about 19.97 percent in 76.60 percent sites, irrespective of SMC structures.

Bamboo Protection Measures: Among the protection measures taken (all the sites having protection measures), in 72.34 percent sites, more than one protection measure is taken. Watch and ward is the most common measure taken in all the sites, whereas in 23.4 percent sites bamboo fencing is done, bamboo twinge fencing in 23.4 percent sites and barbed wire fencing in 25.5 percent sites.

Documentation and Transparency: Plantation journal is observed for 95.74 percent sites and in maintained condition. Map of plantation sites is also found along with journals in 95.74 percent sites. Signboard found existing in 93.6 percent sites.

Posting of Pillars: Average number of pillars per site found to be 24 and all the sites having pillar. Of the total pillars verified (20.0 percent), 91.0 percent pillars found to be in good condition and majority of the pillars are serially numbered (97.87 percent sites) and made up of RCC (87.0 percent). Some stone pillars / stone carrions were also observed in certain sites (13.0 percent).

Bamboo Survival Rate: Irrespective of the year of plantation and type (plantation and maintenance), survival rate observed to be 89.1 percent, ranging between a minimum of 65.2 percent to a maximum of 98.4 percent. Survival rate of plantation done in 2019-20 is about 90.6 percent, 86.5 percent for the plantations taken up in 2020-21 and 89.4 percent for the plantation of 2021-22.

Growth of Bamboo Shoots: On an average, 2 new shoots observed per clump in bamboo planted areas, irrespective of year of plantation and its category (plantation / maintenance). In the second-year maintenance plants, number of shoots found to be higher than bamboo plantation of other categories. Similar, average number of culms per clump found to be higher for second year bamboo plantation maintenance site and on an average 5 culms per clump is observed, irrespective of plantation year and type of plantation (plantation / maintenance).

SSO Bamboo: The assessment covered 29 sites from 27 FDs where silvicultural operations taken up during 2021-22 for the regeneration of degraded bamboo forest. In all sites, SSO activities were taken up under NPV 80%. Gross area under silvicultural operation in the 29 sites is 9,097.3 ha. with an average of 313.7 ha. Net area under silviculture is 8,629 ha. (Average of 297.6 ha.) which is 94.85 percent of the gross area. SMC measures observed in 58.6 percent sites and among the SMC measures, 35.29 percent are full moon trench, 52.94 percent are half-moon trench and 11.76 percent are staggered trench. Different SSO operations taken up under CAMPA, like removal of congestion in the clumps / thinning of bamboo groves (95.9 percent plots), soil filling (84.1 percent

plots), and fire line creation (93.1 percent). Site specific additional measures also observed like stone packing (68.3 percent), and soil filling with bamboo twig (2.8 percent).

Regeneration of Clump: Of the total 1,589 clumps, across the studied sites, in 64.57 percent clumps, new shoots of <1 year observed with a mean number of shoots of 1.76. In 94.15 percent clumps one year old shoots observed with an average of 2.93 per clump. Shoots of 2-year-old observed in 91.44 percent clumps with an average of 4.67 shoots per clump. Shoots of more than 2 year also observed in 90.81 percent clumps with an average of 5.36 per clump. Overall, irrespective of age of the shoots, an average of 13.03 shoots per clump observed. The maintained record of 2021-22 highlights existence of 14,491 shoots with an average of 11.22 shoots per clump (for 1292 clumps). Current assessment observed that at present, difference in average number of shoots is 1.81 per clump.

Ama Jangle Yojana (AJY): As a part of participatory forest management, Govt, has been implementing Joint Forest Management (JFM) in collaboration with forest-dependent communities. To further strengthen the participatory forest management, CAMPA funds under APO 2021-22 is also utilized. In all the AJY sites, VSS found existing and operating with different degree. Looking at internal governance mechanism of VSS, it is evident that about 33.3 percent VSSs in Balangir Forest Division are conducting periodic meetings regularly. In rest of the Forest Divisions, there is irregularity in conducting periodic meetings and meetings are organised as per the need.

About 89.1 percent VSSs are of the view that due to their protection measure, they never came across forest fire in the forest area under their jurisdiction. About 7.3 percent of VSSs reported occurrence of forest fire rarely, and in 3.6 percent cases occurrence of forest fire is occasional. Under the aegis of VSSs, several awareness generation programmes against *Podu* cultivation (shifting cultivation) have been taken up. CAMPA intervention has supported VSSs in terms of creating an opportunity for their greater involvement in afforestation activities and employment generation at local level.

Soil Moisture Conservation (SMC): Under APO 2021-22, SMC activities were implemented in different forest divisions / ranges. The assessment covered 20 forest divisions where CAMPA intervention for SMC was carried out during 2021-22. About 80.0 percent of SMC structures are constructed under NPV 80%.

Among the created SMC structures, LBCD is prominent (56.7 percent) in comparison to other created structures. As all the structures are constructed recently, the condition of the created structures was found to be good. Human interference observed to be of low order where cattle pressure is existing in 38.71 percent sites of varying degree. Where SMC measures have been taken up, vegetation found to be "good" in 40.0 percent sites and in "average" in 60.0 percent sites.

Wildlife Management: CAMPA has taken up different activities under wildlife management, including plantation of fruit & fodder species, creation / renovation of waterbodies, solar fencing etc. apart from constructing different supportive structures like anti-poaching barrack, bear cave etc. Of the total infrastructures assessed, about 10 percent antipoaching barracks are yet to be bring into effective operational fold. Non-use of some of the other assets were also observed. Majority of the created assets are viewed to be effective owing to its current use practices.

Performance of WL management asset is assessed on the mean score of the assets on a 10-point nominal scale. Overall asset performance between the range of 8-10 is found among 40 Forest Divisions. In 9 Forest Divisions, this is calculated between the range of 6-8. In Bargarh Forest Division, it is found the lowest at 2.4. The overall mean score of assets created under CAMPA in all Forest Divisions is calculated at 8.7 on a 10-point scale. Thus, the quality of the assets created under CAMPA is found of higher quality.

Infrastructure Development: Infrastructural activities are performed by forest divisions under three broad components such as CA/PCA, NPV 20% and NPV 80%, but majority of such assets are crated under NPV 80%. Different assets created under infrastructural development include barbed fencing, construction of boundary wall, cattle proof trench, construction of quarters, watch tower, water bodies, vegetative fencing etc. In the construction sites, transparency boards are not observed in majority of sites. Most of the assets are found in

used condition like barbed fencing, boundary wall, cattle proof trench, community centre, fire-fighting blower, forest guard quarter etc.

Overall asset performance between the range of 9-10 is found among 32 Forest Divisions. Asset performance between the range of 8-9 is found for 18 Forest Divisions and between the range of 7-8 is found in one Forest Division. The overall performance of infrastructure assets created under CAMPA across Forest Divisions in Odisha is calculated at 9.1 on a 10-point scale which implies that the assets are productive in terms of useability and effectiveness.

Monitoring and Evaluation: Different measures have been taken for monitoring and evaluation of CAMPA activities. Progress as per the plan is regularly monitored by the ACF and DFO of the division and RCCF at the circle level. In addition, officers at the Addl. PCCF and CCF level at the PCCF & HOFF office also monitor work progress and financial utilization. Along with this, PCCF & HOFF also conducts periodic review on the progress of the activities. As per Odisha Forest Departmental Code, the works are inspected by the field officers at regular intervals. Even muster rolls are checked by range officer (50%), ACF (25%), DFO (10%), RCCF (5%) in every activity.

CAMPA has been utilizing information technology to monitor activities. The official establishments are equipped with GIS labs for progress mapping and tracking. Different apps are developed by the Forest Information Technology & Geomatic Centre (FITGC). The forest fire monitoring is being done on MODIS and SNPP satellite platform. There are 23 different apps for implementation / monitoring of different activities aimed towards better forest management and protection. Along with physical and financial monitoring, CAMPA has also been engaging external monitoring and evaluation agency to look at CAMPA activities for APOs.

Research, Training, Awareness and Capacity Building: CAMPA has propagated many tree species in forest divisions. The need of Plus Trees, Clonal Multiplication Gardens, Clonal Seed Orchards, Germ Plasm Banks, Progeny trials etc. are taken up for preserving / conserving and propagation of genetic characters of forest tree species. For the promotion and conservation of biodiversity, and augmentation of natural regeneration, quality planting materials are used in afforestation. Under research, 19 research gardens are established along with 17 plots for species preservation, 32 research sample plots, 4 high-tech nurseries, 52 seed orchards and 23 seed production units. Under research activity in 2021-22, silvicultural research was taken up, along with tree improvement program and adaptive research (NFTP, bamboo etc.). Under APO 2021-22, several training / capacity building measures were taken up for forest officials, VSS and other stakeholders including implementation of awareness programs.

Forest IT & Geomatics: Forest Information Technology & Geomatics Centre (FITGC) has been developed in the State Forest Head Quarters which plays a key role in forest & wildlife management, conservation, and its protection. The center has been monitoring different activities like forest and wildlife protection, forest fire, activities undertaken under CAMPA funding through Odisha Forest Management System, forest cover change detection, afforestation etc. To control/monitor activities, Geomatics and other IT infrastructure has been installed and configured in the State Forest Head Quarter's FITGC cell which is being utilized for the purpose. Two mobile applications, i.e., "KYFL @ Odisha (Know Your Forest Location in Odisha)" and "Mo Jungle: My Odisha Forest" in iOS and Android has been developed to bring transparency in implementation. Geo-referencing of 60,991.33 Sq. KM of forest land is taken up in 4 years using DGPS Survey. CMV & MMV data layers generated through compilation of data collected from divisions, FITGC & ORSAC. Base stations have been established in 8 forest circles.

State Authority CAMPA & State Forest Academy: In APO 2021-22 Rs.1.95 Cr. Has been utilised by State Authority for Remuneration of contractual Manpower deployed in State Authority, Hire charges, POL of Vehicle Deployed in State Authority, Renovation of Monitoring Cell, Sanitization and Security arrangement and Contingent Office expenses, Stationaries, Computer peripherals etc. The works have been executed by 3 I.Os in Dy. CF Hqrs., DFO City Forest Division and DFO Chandaka WL Division.

The Odisha State Forest Academy is to be an institution of excellence to provide education, training and extension services in forestry, environment, natural resource management and sustainable development with

collaborative efforts of various stakeholders at regional, national and international level. The organisational value will be enhanced by partnering with national and international stakeholders and institutions and collaboratively making an effort in building the capacity of the forest department to protect the environmental resources for community development with the deployment of technology and advanced knowledge. The Academy will also serve as a National level center of excellence for training the personnel of State Governments, Judiciary, public representatives and the representatives of NGOs and Vana Samrakshyana Samiti (VSS) on different aspects of natural resource management and sustainable development. Presently, the infrastructure under development includes the Academic Block, Activity Block, Amenity Block, Executive Hostel Block and the Nonexecutive Hostel Block. The residential blocks for staff of the academy will be built as per plan submitted by RITES Ltd.

Carbon Sequestration: Carbon sequestration is also analysed by considering type of plantation activities being carried out under CAMPA APO 2021-22. Broadly, plantation activities are directly afforestation programmes and maintenance of plantation activities which were carried out in previous years. However, there are variations in carbon sequestration based on type of plantation. Carbon sequestration is found higher for the previous year plantations maintained under CAMPA APO 2021-22. Carbon sequestration for the plantation activities carried out during the period 2015-16 to 2020-21 is calculated at 32.512 Kg/ Ha. which is only 3.313 Kg/ Ha. for the plantation activities done in the year 2021-22. The overall carbon sequestration due to CAMPA 2021-22 intervention is calculated at 49.856 Kg. per hectare of plantation area.

Relocation of Village: Funding for voluntary relocation of villages from inside sanctuary and national parks has been given prominence in this APO 2021-22. It is the only way by which human interference in wildlife habitats & retaliatory depredation due to wildlife faced by the people can be minimized. This voluntary relocation seeks to provide an inviolate biome to the wildlife and simultaneously makes an effort to include the villagers of these interior villages in the mainstream & have access to all the basic infrastructural facilities & benefit out of the Govt. sponsored public welfare programme. We observed near about 4 sites for relocation of villages in Similipal South, Satakosia WL and Hirakud WL divisions. From Hirakud WL Division 400 families, Similipal North Division 13 families and Satakosia WL division 22 families have relocated to different places.

Conclusion and Way Forward: Wide range of activities were implemented under CAMPA APO 2021-22 under different components and across different forest divisions. The executed activities found to be qualitative and productive in nature in most cases. However, in certain cases, some additional improvement measures are required, to strengthen the current initiatives further.

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Abbreviations

ANR	Assisted Natural Regeneration
BOD	Board of Directors
CAMPA	Compensatory Afforestation Fund Management and Planning Authority
DPF	Demarcated Protected Forest
FD	Forest Division
FE&CC	Forest, Environment and Climate Change
FY	Financial Year
GBH	Grith at Breast Height
GCH	Grith at Collar Height
HYV	High Yield Variety
IAF	Impact Assessment Framework
KM	Kilo Meter
LBCD	Loose Boulder Check Dam
LSP	Long Slope Plot
PCCF	Principal Chief Conservator of Forest
PF	Protected Forest
PIA	Project Implementing Agency
PWTF	Participatory Water Table Fluctuation
RDF	Regeneration of Degraded Forest
RF	Reserve Forest
RKM	Running Kilo Meter
SMC	Soil Moisture Conservation
SSP	Short Slope Plot
TSS	Total Suspended Soil
UP	Urban Plantation
VSS	Vana Surakshya Samiti
WHS	Water Harvesting Structure
WL	Wildlife
WLBCD	Wire Mesh Loose Boulder Check Dam







Chapter I: Introduction and Background

1.1 Background:

Forest in India comprises of several diverse forest types and reserved areas designated as National Parks and Wildlife Sanctuaries which account about 23.0% of Geographical area of the country. Forest provides livelihood support to the people living in and adjoining forests. At all India level there are about 1,73,000 forest fringe villages and the inhabitants of those villages are immensely benefitted from multiple ecosystem services from forest. Article 48A of the Constitution of India requires that the State shall endeavor to protect and improve the environment and to safeguard the forest and wildlife of the country. Under Article 51A, it is the duty of every citizen to protect and improve the natural environment including forests, lakes, rivers, and wildlife for which the forest sector requires conservation and continuous protection. In India, due to excessive forest dependence of human beings and for developmental purposes, extent of deforestation rate was relatively higher in British rule (1880-1950s) and early decades after independence.

With the objective of conserving and protecting forest resources, Forest (Conservation) Act was enforced in the year 1980. The Forest (Conservation) Act 1980 mandated that whenever forest land is to be diverted for non-forestry purpose usually the conditions relating to transfer, mutation, and declaration as Reserve Forest/ Protected Forest the equivalent non-forest land for compensatory afforestation and funds for raising compensatory afforestation etc. are to be imposed. For mining purposes additional conditions like maintaining a safety zone area, fencing and regeneration etc. and for major and medium irrigation projects, catchment area treatment plans are to be stipulated¹. As per the Forest (Conservation) Act 1980, as far as possible, the non-forest land for Compensatory Afforestation (CA) was to be identified contiguous to or in the proximity of Reserved Forest or Protected Forest. In case, non-forest land of CA was not available in the same district, non-forest land for CA was to be identified anywhere else in the State/Union Territory. If non-forest land was unavailable in the entire State/ UT, funds for raising CA in double the area in extent of the forest land diverted had to be provided by the user agency. The non-availability of suitable non-forest land for CA in the State / Union Territory would be accepted by the Central Government only on the Certificate of the Chief Secretary to the State/Union Territory Government to that effect. In case of central government/ central undertaking projects, extraction of minor mineral from the riverbeds above 500-hectare, construction of link road, small water works, minor irrigation works, laying of transmission line up to 220 KVA etc., CA was to be raised on degraded forest land twice the forest area being diverted without insisting for the certificate of Chief Secretary regarding non-availability of non-forest land².

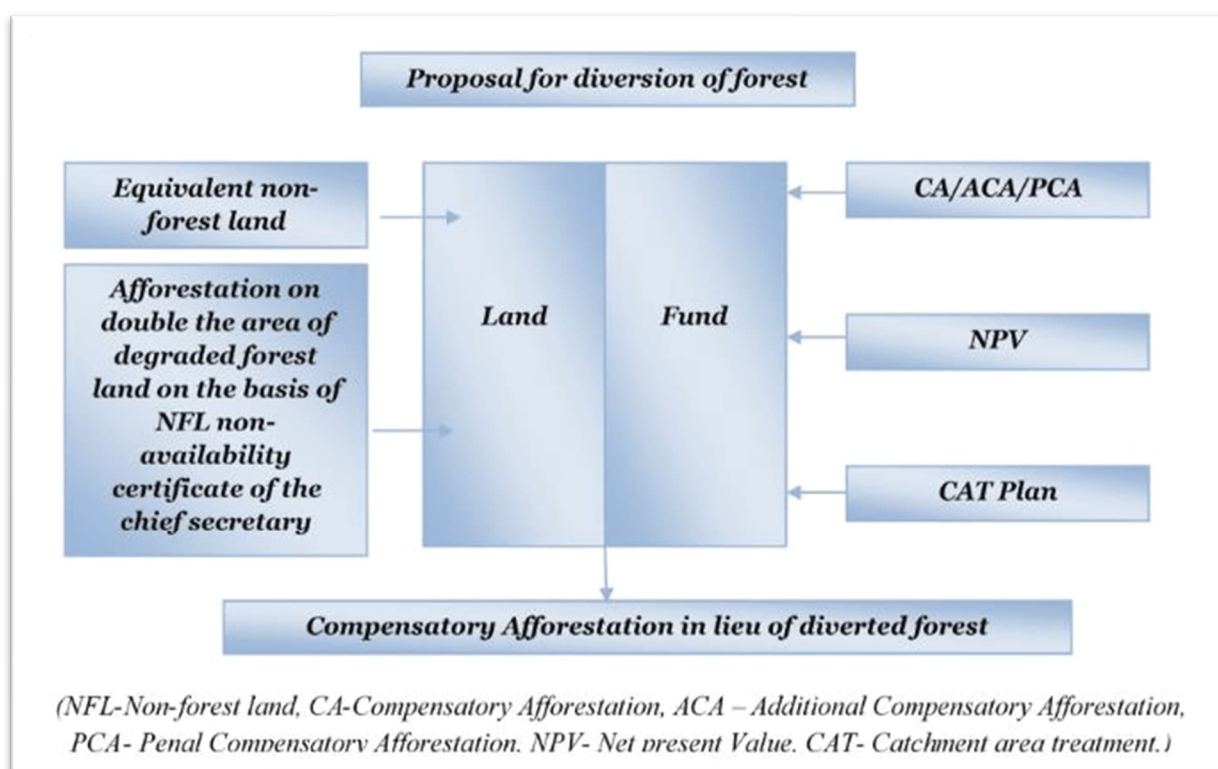
The funds for CA were to be recovered from the user agencies based on the rates fixed by the State Forest Department which were site specific and varied according to the species, type of forest and site. The money received for Compensatory Afforestation, Additional Compensatory Afforestation etc. was to be used as per site specific schemes submitted by the State along with the approved proposals for diversion of forest land. After receipt of the money, the State Forest Department was to accomplish the afforestation for which money is deposited in the Compensatory Afforestation Fund within a period of one year or two growing seasons. These funds were to be used towards the development, maintenance and protection of forest and wildlife management³.

¹ CAG Report on Compensatory Afforestation in India

² Ibid

³ Ibid





To compensate for the loss of tangible as well as intangible benefits from the forest lands which has been diverted for non-forest use, the net present value of the land was to be recovered from the user agencies to adequately compensate for the loss of natural forests. Such funds were to be used for natural assisted regeneration, forest management and protection, infrastructure development, wildlife protection and management, supply of wood and other forest produce saving devices and other allied activities⁴. Between 1980 and May 2004 about 9.21 lakh hectare¹ forest land had been diverted for non-forestry uses and forest land aggregating up to 1.14 lakh hectare² had been diverted after formation of Ad-hoc CAMPA till March 2012⁵.

1.2 Pre-CAMPA Scenario:

Due to certain discrepancies in the implementation of compensatory afforestation, some NGOs approached the Supreme Court of India, about the non-utilization of funds collected for afforestation programs in lieu of the depleted forest coverage in the country. Looking at the provisions of Forest (Conservation) Act 1980, on 29th October 2002, the Supreme Court of India directed that a 'Compensatory Afforestation Fund' was to be created in which all the money received from the user agencies towards compensatory afforestation, additional compensatory afforestation, penal compensatory afforestation, NPV of forest land, Catchment Area Treatment Plan Funds, etc. were to be deposited. Consequent to the Supreme court's order, the Ministry of Environment and Forests, Govt. of India notified on Compensatory Afforestation Fund Management and Planning Authority (CAMPA) on 23rd April 2004. In 2006, the Supreme court ordered the formation of Ad hoc CAMPA.

⁴ Ibid

⁵ Ibid

1.3 Formation of CAMPA National Advisory Council:

The Supreme Court of India on 10th July 2009 issued orders that there will be a Compensatory Afforestation Fund Management and Planning Authority (CAMPA) as National Advisory Council under the chairmanship of the Union Minister of Environment & Forests for monitoring, technical assistance, and evaluation of compensatory afforestation activities. This came to be known as National CAMPA Advisory Council. The state CAMPA upon receipt of funds from National CAMPA Advisory Council, utilises the funds for planned intervention as per the for the Annual Plan of operations (APOs) prepared by the state CAMPA at the beginning of the financial year. The key activities, as per CAMPA intervention Guidelines consist of providing an integrated framework for utilizing multiple sources of funding and activities relating to protection and management of forests and wildlife alongside of regenerating natural forests and building up the institutional framework engaged in the task of creation, conservation, and regeneration of forest-based biodiversity in the state. Thus, the prime task of state CAMPA, is regenerating natural forests and building up the institutional mechanism engaged in State Forest Department.



1.4 CAMPA Act:

CAG report, in 2013, identified that the funds under CAMPA has been underutilized. The Compensatory Afforestation Fund Bill 2015 was introduced by the government in Lok Sabha on May 8th, 2015, to regulate collected funds. The bill was sent for examination under a standing committee. It was passed by Rajya Sabha on 28th July 2016. CAMPA Act or Compensatory Afforestation Fund Management and Planning Authority bill is an Indian legislation that seeks to provide an appropriate institutional mechanism, both at the Centre and in each State and Union Territory, to ensure expeditious utilization in efficient and transparent manner of amounts released in lieu of forest land diverted for non-forest purpose which would mitigate impact of diversion of such forest land. The legislation established the Compensatory Afforestation Management and Planning Authority (CAMPA) and the Compensatory Afforestation Fund (CAF). The legislation sought expeditious utilization of accumulated unspent amounts available with the Ad hoc Compensatory Afforestation Fund Management and Planning Authority (Ad hoc CAMPA). At that time, it was estimated that an amount of Rs. 39,000 crore was the unspent compensatory fund for forest regeneration and an interest on accumulated unspent balance, amounting to approximately Rs. 6,000 crore per annum. The act intended for an efficient fund management of the previously accumulated funds in a transparent manner. The key highlights of CAMPA Act, 2016 are:

1. It seeks to establish the National Compensatory Afforestation Fund under the Public Account of India, and a State Compensatory Afforestation Fund under the Public Account of each state.
2. The payments into the funds include compensatory afforestation, NPV, reforestation and any project specific payments. The National Fund will get 10% of funds collected and the remaining 90% will go to respective State Fund.
3. The collected funds will be utilized for afforestation, regeneration of forest ecosystem, wildlife protection and infrastructure development.
4. The bill also seeks to establish National and State Compensatory Afforestation Fund Management and Planning Authorities to manage the funds.
5. The determination of NPV will be delegated to an expert committee constituted by the central government.



Overarching Objectives and Core Principles:

1. An Authority, known as the “State Compensatory Afforestation Fund Management and Planning Authority” (State CAMPA) is intended as an instrument to accelerate activities for preservation of natural forests, management of wildlife, infrastructure development in the sector and other allied works.
2. The State CAMPA would receive funds collected from user agencies towards compensatory afforestation, additional compensatory afforestation, penal compensatory afforestation, Net Present Value (NPV) and all other amounts recovered from such agencies under the Forest (Conservation) Act, 1980 and presently lying with the Ad hoc CAMPA
3. The State CAMPA would administer the amount received from the Ad hoc CAMPA and utilize the funds collected for undertaking compensatory afforestation, assisted natural regeneration, conservation and protection of forests, infrastructure development, wildlife conservation and protection and other related activities and for matters connected therewith or incidental there to.
4. State CAMPA would serve as a common repository of funds accruing due to compensatory afforestation and NPV. It would deploy funds as per guidelines governing the use of funds for conservation, protection and management of forests. The amounts would also be deployed for wildlife preservation and enhancement of wildlife habitats.
5. State CAMPA would provide an integrated framework for utilizing multiple sources of funding and activities relating to protection and management of forests and wildlife. Its prime task would be regenerating natural forests and building up the institution engaged in this work in the State Forest Department including training of the forest officials of various levels with an emphasis on training of the staff at cutting edge level (forest range level). The amount received by it will also be utilized for providing residential accommodation to the field staff and necessary machines and equipment to them. These include appropriate arrangements for their conveyance during inspections and protection duty. In short, the department would be modernized to protect and regenerate the forests and wildlife habitat.
6. The State CAMPA may decide to utilize a minor part of its funds for contractual engagement of personnel wherever there is shortage of personnel. This should be done cautiously to avoid recurring revenue expenditure on the State Government. It may also take up State- specific activity relevant to the State, in keeping with the core objectives.
7. The State CAMPA would also promote a voluntary movement of youth and students for supporting conservation activities initiated/ongoing in the State Forest Department.
8. Aims and Objectives State CAMPA shall seek to promote: (a) conservation, protection, regeneration and management of existing natural forests; (b) conservation, protection and management of wildlife and its habitat within and outside protected areas including the consolidation of the protected areas; (c) compensatory afforestation; (d) environmental services, which include:- (i) provision of goods such as wood, non-timber forest products, fuel, fodder and water, and provision of services such as grazing, tourism, wildlife protection and life support; (ii) regulating services such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes; (iii) non-material benefits obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational and symbolic; and (iv) supporting such other services necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production. (e) Research, training, and capacity building.



9. The Functions of State CAMPA shall include, inter alia– (i) funding, overseeing and promoting compensatory afforestation done in lieu of diversion of forest land for non-forestry use under the Forest (Conservation) Act, 1980 (ii) overseeing forest and wildlife conservation and protection works within forest areas undertaken and financed under the program. (iii) maintaining a separate account in respect of the funds received for conservation and protection of Protected Areas. (iv) creating transparency for the program and mobilizing citizen support; and (v) earmarking up to two percent of the funds for monitoring and evaluation.

1.5 Establishment of State CAMPA:

The Govt. of Odisha, Forest and Environment Department have established State Compensatory Afforestation Fund, Odisha (in short state Fund) in accordance with the provisions of Sub Section (1) of Section 4 of the Compensatory Afforestation Fund Act, 2016. Accordingly, CAMPA, Odisha has been constituted by the State Government in F& E Department, Govt. of Odisha for the management of state CAMPA fund (State Fund). CAMPA, Odisha has been constituted by the State Government vide Notification dated 29.09.2018 which is responsible for the management of State Fund.⁶ The State Funds are spent through the provisions of the Annual Plan of Operations prepared at the beginning of every financial year and approved by the State Level Steering Committee.⁷ Funds released from State Fund to different Implementing Officers are used for CAMPA mandated activities, i.e., creation, conservation, and regeneration of forest resources; and strengthening the institutional mechanism for strengthening the forest resources in the state. The details of funds received by the state CAMPA, Odisha, from CAMPA NAC is highlighted in the matrix.

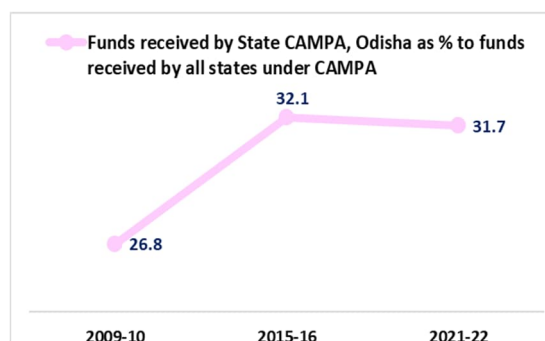


Table 1: Funds Transferred by GOI to State CAMPA, Odisha

SN	Year	Funds Received by Odisha (Lakh Rs.)	Funds Received by All States (Lakh Rs.)	Share of Odisha (%)
1	2009-10	13,106	48,859	26.8
2	2015-16	42,600	1,32,901	32.1
3	2021-22	90,303	2,84,694	31.7

Source: <http://pib.gov.in>

Study Objective:

Given the scope of the study, the following objectives, but not limited to, were examined. The points not covered below but incidental upon the expected outputs and outcomes of CAMPA intervention were also considered in the evaluation process.

1. To understand the status of different plantation activities taken up under CAMPA activities across forest divisions in Odisha;
2. To understand the species diversity, species density, height, survival performance of the trees under different plantation conditions;
3. To understand the protection measures on site as well as off-site, adopted for different type of plantation activities;
4. To assess different type of activities taken up under ANR and SSO bamboo & timber;
5. To analyse the support of CAMPA fund for AJY and type of community involvement in the protection, conservation, and regeneration of forest biomass in AJY areas;

⁶ Forest and Environment Department (2019), Resolution, No-10 F (Cons)67/2019, dated 30.08.2019.

⁷ State CAMPA (2019), "Compensatory Afforestation Management Fund Acts, Rules and Other Important Notification", Forest Department, Govt. of Odisha.



6. To document the best practices followed for CAMPA supported plantation activities in terms of creation, conservation, and regeneration;
7. To understand the nature of implementation of all other non-plantation activities and the type of outputs created under non plantation activities;

Scope of the Study:

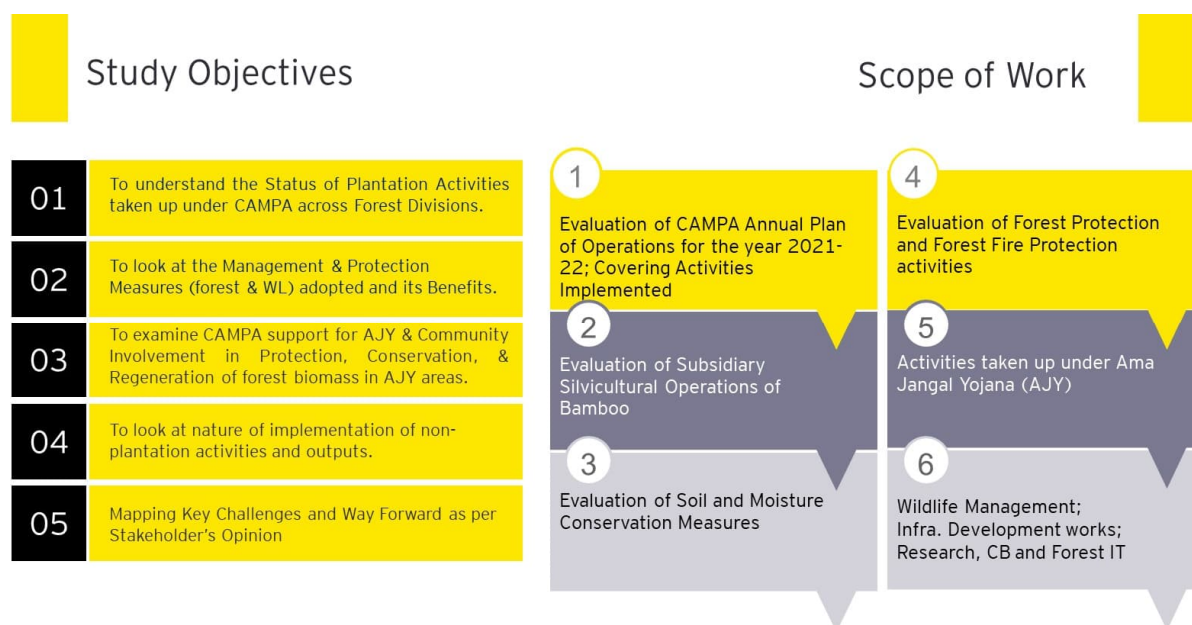
To evaluate the different type of activities taken up under state CAMPA, Odisha for the APO 2021-22, the state CAMPA, Odisha has commissioned the third-party evaluation study to EY LLP, Bhubaneswar with the following scope of the evaluation framework (Letter No-3568/10F-CAMPA-53/2022 Dated 23.02.2023).



Latitude: 20.071176
Longitude: 85.553183
Elevation: 91.86±4 m
Accuracy: 2.5 m
Time: 25-08-2023 11:54
Note: Signboard elephant crossing point Tangi

1.6 Approach and Methodology

The scope of the evaluation study is limited to the APO 2021-22; and thus, it is quite early to assess the desired outcome and impact of the overall intervention. So, the evaluation is limited to assessing the activities which were taken up in APO 2021-22 under CAMPA along with selected activities taken up in previous years.



The evaluation principles advocated by the DAC criteria of Organization for Economic Cooperation and Development (OECD) is considered as a robust evaluation framework. OECD DAC criteria stipulate evaluation methodology to be carried out in the light of Relevance, Coherence, Efficiency, Effectiveness, Impact, and sustainability. However, considering the very limited period of post CAMPA intervention of APO 2021-22, the activity evaluation study is to consider a part of the DAC criteria, i.e., relevance, coherence, and effectiveness of CAMPA intervention for the APO 2021-22. These three aspects resemble analyzing Implementation performance, output and expected outcome performance. The expected outcomes are incidental upon the actual outputs because of CAMPA current intervention (APO 2021-22). Thus, the evaluation looked at analyzing implementation performance, output performance and outcome performance in specific areas of intervention.

Considering the objectives and scope of study, broadly the evaluation followed inputs, Outputs, and Outcome framework. For analyzing the implementation performance for all the components and sub-components, adherence of the interventions to APO and CAMPA guidelines were examined. Based on the inputs, intervention outputs (physical progress) were compared with the APO. The expected outcomes from the range of outputs were assessed from the point of functional efficiency of the outputs from the points of view of ultimate users. The functional efficiency of the created assets was attributed to completeness and expected usability of the asset created under CAMPA.

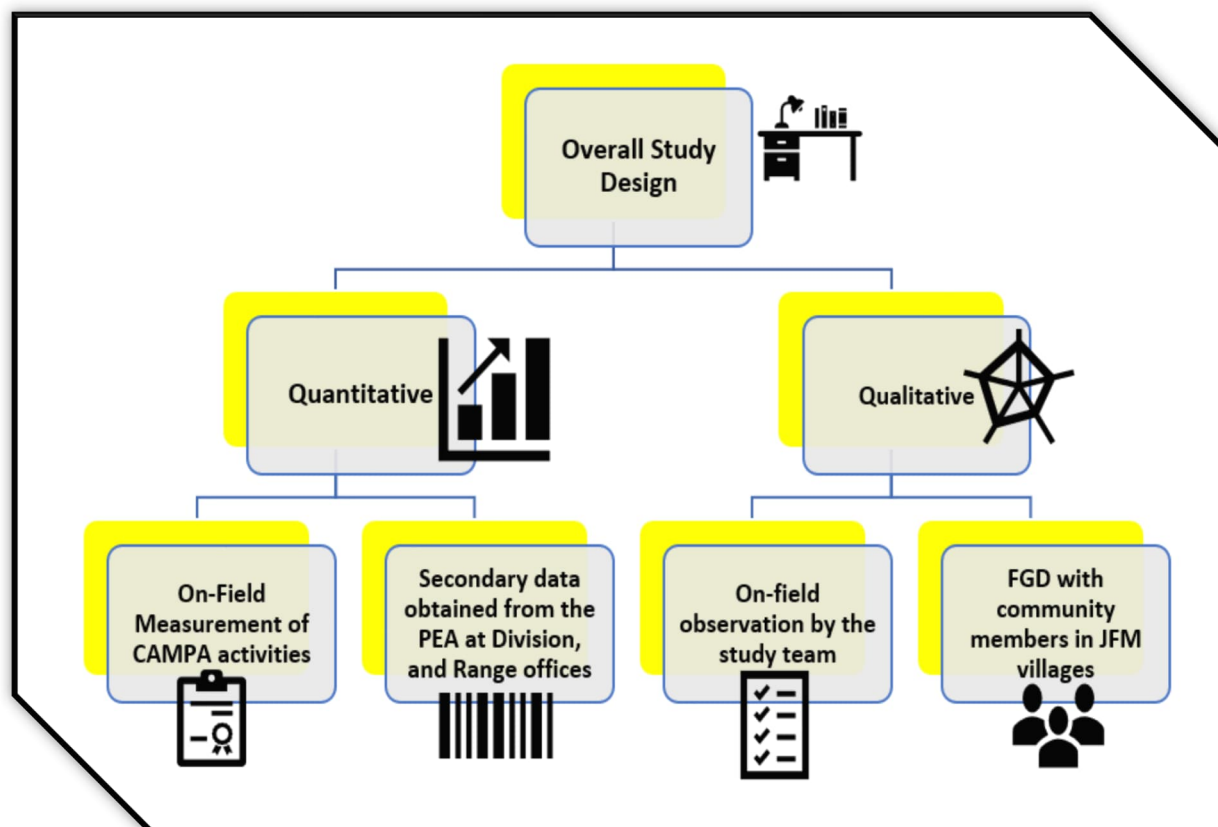
The analysis of output performance for interventions in the broad category of "plantation" and "other than plantation" have been "indicator" as well as "scoring" based. The score-based measurement is done as per 10-point nominal scale. Looking at the quantitative and qualitative dimensions of each of the intervention including plantation and other than plantation activities, the evaluator in consultation with departmental officials (PEAs), local community members, assigned scores from 10 point to each of the outputs of CAMPA. The outputs were evaluated based on completeness of the activity as per guidelines, current usability, and perceived use (positive outcome) of the project.



In a linear scale, each of the CAMPA activities based on predetermined parameters were evaluated, using 10 points scale. However, the average performance of different outputs was categorized as 1-2, 2-4, 4-6, 6-8, and 8-10 respectively. The superiority of linear method over ordinal method is that a linear scale is continuous scale and other hand a Likert scale is discontinuous for which it is not amenable to usual statistical process such as calculating the mean score. Following this method, all outputs are said to be statistically amenable for inter Forest Division and intra Forest Division comparisons.

1.6.1 Study Design

The study design for undertaking the evaluation, as per the framework, entails [1] field measurement and assessment, [2] field observation, [3] Focus Group Discussion (FGD) with local community members / JFM members, [4] Key Informant Interview (KII), and [5] discussions with forest officials involved for CAMPA implementation (at different implementation levels). The study used quantitative and qualitative research techniques to evaluate the range of activities undertaken under CAMPA funds. While doing so, some of the activities might seem similar but not done under CAMPA funds were selectively excluded from evaluation. The secondary data as per the requirement of the study were obtained from different operational levels, such as office of CAMPA authority / office of PCCF & HOFF, divisional and range offices of forest department. Besides, the study was also utilized time series data (based on availability) about the interventions for all the components and sub-components. The evaluation also covered JFM activities, supported by CAMPA in different project areas.



1.6.2 Sample Design

For evaluating CAMPA activities, activities executed under CAMPA APO 2021-22 were considered, including (1) plantation, (2) creation of SMC structures, (3) forest protection, (4) wildlife management, and (5) infrastructure development. The evaluation covered all the CAMPA components, taking a sample of 10.0 percent of the total activities executed under APO 2021-22 in different forest circles and divisions. The aspects broadly covered are plantation (both CA & Non-CA), Infrastructures created under CAMPA, SMC works taken up in different locations

and Wildlife Management interventions. Apart from this, the evaluation also looked into other aspects taken up under CAMPA in sample forest divisions and ranges.

The design and methodology have been comprehensive in assessment of multiple components and sub-components. The geographical spread of intervention under CAMPA funds is also spread across all the forest divisions of the State. As CAMPA activities needed to be evaluated for the intervention divisions, different activities undertaken under each forest division were evaluated based on sample of each of the activities implemented under CAMPA. So, forest division in each forest circle was considered as the unit of study, covering all the forest circles of the State. The study covered 8 forest circles, 37 territorial forest divisions, and 14 wildlife divisions. In addition to it, Nandan Kanan zoo was also assessed based on the utilization of CAMPA funds. As the sampling procedure is to be different for different activities, component wise information required, source of data and sampling requirement for each component is separately shown in the subsequent section. Detail sample plan was prepared and finalized after due consultation with the concerned officials at the office of CAMPA authority and at Forest Division level. To draw sample, stratification was done based on the agreed parameters, for example year of plantation / activity implemented, area under plantation, no. of works in different ranges of the forest division, type of works executed in different forest divisions etc. In cases, where a specific intervention in a particular division is limited, purposive sampling was adopted for coverage under assessment.

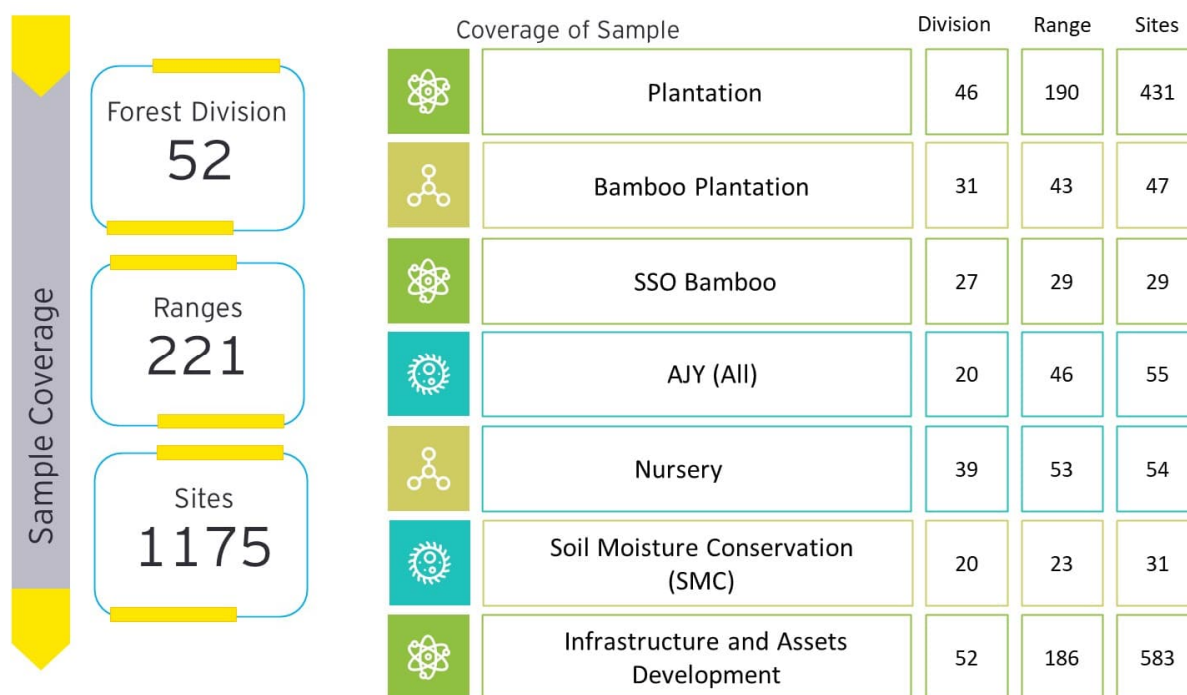


Table 2: Coverage of Sites

SN	Activities	No of Divisions Visited	No of Ranges Visited	No of Sites Visited
1	Plantation	46	190	431
i	Plantation (Creation)	46	133	203
ii	Plantation (Maintenance)	46	120	176
iii	ANR without gap	21	34	52
2	Infrastructure & Assets	52	186	583
i	CAMPA (Infrastructure)	51	131	264
ii	CAMPA (Assets)	35	44	51
lii	Wildlife (Infrastructure)	12	14	15
i	Wildlife (Assets)	50	122	253

With respect to plantation evaluation, 10.0 percent of the total plantation area was considered (APO year 2021-22) for each forest division. For the evaluation of different aspects (plant growth, GBH, survival rate etc.) sample plots of 0.1 ha. were demarcated and measurement / counting taken up for estimation as per the approved norms. Total plots demarcated for intensive study represents 10.0 percent of the sample area and approximately 1.0 percent level to the total universe (total area under plantation in the forest division level under different plantation categories). In the case of linear plantation, 10.0 percent of the overall linear plantation sites and consequently 100-meter length for each of the selected 1 RKM plantation length were considered for assessment. In the case of linear plantation in rows, considering the length of each row in RKM, 100-meter sample plot per each Km. linear plantation was considered. Methodology by CAMPA aspects is presented in the matrix.

Table 3: Methodology by Key Aspects

Components	Sub-Component	Measurable Indicators	Methodology	Tools
Plantation	Block Plantation; Bald Hill Plantation; CA Avenue Plantation; RDF/ANR- with or without gap plantation Silvicultural Operations (Bamboo, Timber) Distribution of Seedlings	Area Covered (Ha.); Plant Survival Rate. Plant Growth Rate. Plant Biodiversity.	Secondary Data Analysis. Sample Plot Measurement. Consultation with Local Community.	Questionary
Soil and Moisture Conservation (SMC) Works	Different types of SMC work Undertaken, like Check Dam Loose Boulder Structure etc.	Improvement in Soil Moisture Regime / water availability	Physical Observation. Secondary Data Analysis. Consultation with Local Community;	Questionary
Forest Protection	General Protection Fire Protection	Reduction in illegal wood cutting / felling; Reduction in fire incidences and loses;	Secondary Data Analysis. Consultation with Local Community. Consultation with Dept. Officials.	Questionary
Infrastructure development	Types of Infrastructures Created, Buildings, Roads, Causeway, Culvert, Bridges Water bodies Tube well Seizure Yard, Malkhana Protection Activities	Efficient use of the created structures. Improvement in function and operation. Improvement in quality-of-service delivery	Physical Observation. Consultation with Dept. Officials	Questionary
Wildlife Management	Anti-Depredation Activities Communication Infrastructure Development Habitat Improvement Zoo Management Training & Capacity Building	Reduction in wild animal poaching. Reduced human-animal conflict. Access of animals to created facilities. Community Association in wildlife protection	Secondary data analysis. Physical Observation. Consultation with Local Com The evaluation will look at following key indicators that are linked to the overall objective of CAMPA initiative in the State, along with / apart from indicators mentioned in each section. The available baseline figure at the Dept. level will be utilized to map the outcome / impact indicators. Community. Consultation along with Dept. Officials	Questionary
AJY	Type of plantation activities, support received by the community members	Plantation performance- height, GBH, Survival rate	Secondary data analysis. Physical Observation. Consultation	Checklist



Components	Sub-Component	Measurable Indicators	Methodology	Tools
	from CAMPA, Type of forest protection measures undertaken by community members			
IT GIS	Type of IT and GIS measures undertaken	Impact on forest protection		
Research & Capacity Building	Type of capacity building measures, Duration of training program, No. of training beneficiaries, Training modules and resource personnel involved in providing training.			

1.6.3 Sample Plots on Selected Plantation Sites

To measure performance of different type of plantation activities such as survival, height, collar breadth, species diversity etc., sample plots were laid on the selected plantation site. As suggested in the ToR of the study, square plots consisting of 33.33-meter length and 33.33-meter breadth plots (1000 sq. meter) plots were considered. In exception cases, where practically it becomes non-feasible to consider square plots, rectangle plots of 1000 sq. meter area were substituted. While doing so, representative number of plots were taken from different grids of the plantation sites. Further, the sample number of plots for each plantation site is subject to linear or nonlinear plantation. In the case of avenue plantation, sample plots were decided considering the length of plantation. For ensuring representativeness of the entire length of avenue plantation, the sample plots were selected from both the ends as well as middle portion of avenue plantation. Similarly, in situations where avenue plantations have been undertaken in parallel rows, the sample plots were selected from each of the row. Each selected plot was visited by the study team, and the details mentioned in the box were documented.

- Plot location and area
- Plantation model type and design
- Age of the plantation
- Number of saplings planted initially (species wise)
- Height of the saplings when planted
- Number of plants surviving at the time of field study.
- Average height of surviving plants
- Species composition and distribution
- Protection system and maintenance
- Anthropogenic pressure (Grazing Pressure or illicit cutting)

Table 4: Sample Plots for selected sites

SN	Plantation Area and Number of Plots			
	Non-linear plantation		Avenue (Linear) Plantation	
	Plantation Area	No. of Sample Plots	Plantation Area	No. of Sample Plots
1	< 20 Ha.	1	1 RKM	1
2	21-40 Ha.	2	2 RKM	2
3	41-60 Ha.	3	3 RKM	3
4	61-80 Ha.	4	4 RKM	4
5	> 80 Ha.	5	>4 RKM	5



1.6.4 Analysis of Sample Data for Evaluating CAMPA Activities

The statistical analysis for evaluation study is both aggregative as well as disaggregate in nature. The database is broadly classified under Plantation, ANR and SSO works, SMC works and Infrastructure activities. The collected information was both quantitative as well as qualitative in nature. All the data were aggregated into division wise analysis first and subsequently disaggregated by type of interventions taken up in each year, including 2021-22. The evaluation looked at the following key indicators that are linked to the overall objective of CAMPA initiative in the State, along with / apart from indicators mentioned in each section. The component wise indicators outlined in the following tables were aligned with performance under implementation, output, and outcome framework. The different activities taken up CAMPA components were based on the information pooled from the APO prepared under CAMPA.

Data analysis of different components of CAMPA intervention taken up in the following manner.

Table 5: Data Analysis for Plantation Activities

Parameters	Evaluation Aspects	Data Type	Data Source
General Information	Division, Range, section, Beat, Site Map, Selection of site for plantation Sight specific choice of species	Secondary data	FD / Range
Plantation Site/S	Site name, year of plantation, type of plantation, plantation area (ha.)	Secondary data	FD / Range
Plantation Journal	Status of maintenance (fully/partly) No of ranges maintaining Journal	Physical Observation	FD / Range
Micro Plan	Preparation of Plans at range level Participation of JFM / VSS Plan execution status	Physical Verification Consultation-JFMC	FD / Range JFM / VSS
Treatment Map	Availability of Treatment Map	Physical Verification	FD / Range
Plantation Area	Area of Plantation (Ha.); Net Area planted	Secondary data	FD / Range
Installation Of Pillars	No of pillars posted / installed; Area Demarcated (ha.); Numbering of pillars.	Primary & Secondary	Field Assessment (20%) Observations
Control / Comparable Plot	Delineated of 4 Hectare plot	Primary & Secondary	Field Observations FD / Range Office Data
Plantation	Area coverage under different plantation categories. Selection of Species and Species Planted; Total seedling Planted. Inter plant spacing adopted (mt.); Plant Survival Rate. Height of trees (mt.) species wise; GBH of trees / silviculture (cm.); Canopy Cover (%); Species diversity. No. of pillars Installed.	Primary Survey Secondary Data	On field assessment; Secondary data analysis.
RDF	Extent of naturally regenerated area: Assessment at sample plantation sites; Gap Planting area: Assessment at sample plantation sites	Primary Survey	On field assessment; Secondary data analysis.
SMC	Type of SMC activities taken up in the plantation area. Total Expenditure on SMC activity (item- wise).	Primary & Secondary	On field assessment. Secondary data analysis.
Participation Of JFMC / VSS In Plantation Protection	Maintenance of register No of meeting conducted/ year Mode of protection of plantation Fire incident in the plantation site Usufruct obtained from the plantation site	Field Assessment; Secondary data	Interaction with JFMC / VSS FD / Range Data Analysis



Table 6: Data Analysis for SMC Works

Parameters	Evaluation Aspects	Data Type	Data Source
SMC Structures	Type of structures. No of SMC structures created; Area coverage (ha.) Structures inside / outside plantation area;	Primary & Secondary Data	FC / FD / Range office Data. Physical Observation. Community FGD / Discussion.
Siltation	Extent of topsoil conservation / silt deposition	Sample based estimate. Primary & Secondary Data	Field Measurement. FD/Rage Office Data
Suitability	Locational suitability of the created SMC structure/s	Primary & Secondary Data (DPR)	Field Observation; FD/Rage Office Data

Table 7: Data Analysis for Forest Protection Measures

Parameters	Evaluation Aspects	Data Type	Data Source
Change In The Green Cover In The Sample Site	Observed changes	Primary / Secondary	Consultations FGD / KII; Records
Maintenance of Movement Register	Sub-division wise ranges maintaining movement register	Primary / Secondary	FC / FD / Range office Data;
Protection Mechanisms	No of forest check gates per range. Boundary wall per range (in kms); Vehicle availability. No of watch guards/ para staff Emergency calls per month Quantity of forest produce ceased; No of cases reported / filed-Annual trend	Secondary data	FC / FD / Range office Data;
Extent of Cooperation of Villagers In Forest Protection.	No of functioning JFMC / VSS associated in forest protection	Secondary data	Range office
Forest Fire Protection	Fire line (Km.) prepared; Plantation area (Ha.) having fire line. No of fire-fighting squads employed /deployed. Incidence of fire incidence trend; Association of JFMC / VSS; Adequacy of forest fire-fighting equipment. No of personnel trained on fire fighting	Primary / Secondary	FC / FD / Range office Data. Consultation with officials; Consultation with Villagers / JFMC / VSS;



Table 8: Data Analysis for Infrastructural Activities

Parameters	Evaluation Aspects	Data Type	Data Source
Buildings	Types of buildings constructed. No of buildings currently used; No of buildings having water and electricity facility. No of building with liveable; condition Benefits to the officials / community.	Primary & Secondary Data	Observation FGD / KII
Roads/ Causeway/ Culverts/ Bridges	No of Roads/ causeway/ Culverts/ Bridges constructed. No of Roads/ causeway/ Culverts/ Bridges handed over to Gram Panchayats / used by people Benefits to the local community	Primary & Secondary Data	Observation FGD / KII
Water Bodies	No. of water bodies created, No of habitations dependent upon No of wild animals visiting the tank per day. Source Suitability: perennial / seasonal. Average water level in the water body. Benefits to the local community	Secondary data Primary data	Consultation FGD / KII FD / Range office Data
Tube-Wells	No of tube-wells installed; Functional status of tube-wells; Benefit to the local community	Secondary data Primary data	Consultation FGD / KII FD / Range office Data
Seizure Yard / Makhana	No. of units existing and its coverage. Size of malkhana (in Sq. meters); No of stolen cases registered.	Primary & Secondary data	Observation. Area Measurement. FD / Range office data

Table 9: Data Analysis for Capacity Building and Research

Parameters	Evaluation Aspects	Data Type	Data Source
Capacity Building	No of Training Programmes conducted (annual & Total) No of People trained per year; Changes that have happened due to capacity building	Secondary data	FC / FD / Range office
Research	Types of research activities taken up; Implication of research outcomes	Secondary data	FC / FD / Range office

Table 10: Data Analysis for Wildlife Management Activities

Parameters	Evaluation Aspects	Data Type	Data Source
General Protection	Quantity of forest produce ceased; No of accused arrested. Trend of offence incidents; Change in the green cover. No of poaching cases detected; Increase/reduction in poaching; Patrolling Mechanisms. No of animals rescued & rehabilitated.	Primary & Secondary data	Observation; Consultation. FD / Range office Data. Interview / FGD.
Anti-Depredation Activities	Type of activities undertaken. No of times wild animals visible to community members. Maintenance of movement register of squad/s Extent of involvement of villages in Anti- depredation activity Status of tracking and trend of depredation	Secondary data Primary data	FD / Range office Community members



Parameters	Evaluation Aspects	Data Type	Data Source
Human Animal Conflict	No of such cases reported& trend; Type of mitigation measures adopted Association of Local Community	Primary & Secondary data	FD / Range office FGD / Interview
Usability of Anti-Depredation Equipment	Availability of anti-depredation equipment. Use of anti- depredation equipment; Usability of VHF/ Mobile phones Effectiveness of network system	Primary & Secondary data	FD / Range office; FGD / Consultation
Maintenance of Communication Register	Extent of bits maintaining communication register	Secondary data	Range office

1.6.5 Data Collection

Primary Data: Primary data by project interventions were collected using designed tools. Tools were designed for separate components / sub-components of CAMPA interventions. Primary data collected based on field measurements, observations, interview, and consultation with different stakeholders.

Secondary Data: Secondary data are mostly related to various activities undertaken in CAMPA which were collected from the office of PCCF & HOFF, Divisional Offices and Range Offices, separately with the aid of pre-designed check lists.

Focus Group Discussion (FGDs): FGDs were conducted with the VSS committee members of the Ama Jungle Yojana. The FGDs with AJY members were conducted only for those Forest Ranges, where AJY has been supported under CAMPA.

Key Informant Interview (KII) and Consultation with Forest Officials: KIIs and consultations were conducted with a range of forest officers involved at various stages of CAMPA execution.

Field Observation: The study team, while visiting different plantations, infrastructures, SMC measures, and other sites, also prepared notes based on their physical observations which were also analyzed and presented in the report.

1.6.6 Case Analysis:

Identified learning cases were documented in specific Forest Divisions and Ranges during the assessment process for cascading such learning in other areas wherever applicable.

Instruments for Data Collection
Check List for Secondary Data from Forest Division and Range Offices.
Plantation Assessment Format
Format for Soil and Moisture Conservation Works
Wildlife Assessment Format
Infrastructure Assessment Format

Techniques to be used for Data Collection

- Primary Data
- Secondary Data
- Field Experiment
- Field Observation
- KII and Consultation with Forest Officials
- Need based FGD with forest fringe community to assess the outcomes and impacts





Chapter II: Progress of CAMPA in Odisha

This section provides an overview of activities taken up under different components of CAMPA in the year 2021-22. The physical and financial progress of different components of CAMPA intervention is also discussed.

2.1 Components of CAMPA Intervention

The State Compensatory Afforestation Fund Management & Planning Authority (CAMPA), Odisha was constituted vide Notification No. 13995/F & E dated 14.08.2009. Since then, the State CAMPA has been consistently working for Conservation, Protection, Regeneration and Management of existing natural forests, wildlife and their habitats and raising site specific Compensatory Afforestation (CA), Penal Compensatory Afforestation (PCA) etc. Each year with the formulation Annual Plan of Operation (APO), implementation of CAMPA funded activities is taking place across Forest Divisions in Odisha. Since 2009-10, each year Annual Plans of Operation (APO) is formulated and accordingly CAMPA supported activities are carried out by the Forest Department in all the forest divisions of the State. After promulgation of CAF Act. 2016 and CAF Rule 2018 the interventions are implemented as per Act. and Rules since the APO 2019-20.

2.2 CAMPA Activity in Odisha in 2021-22

Details of activities undertaken under CAMPA intervention in Odisha for the year 2021-22 as shown in the above chart reveals that CA/PCA is the major intervention followed by plantation, nursery and seedling, infrastructure development, forest protection, fire protection, creation of SMC and other activities. CA/PCA based plantation activities and other plantation activities jointly account for around 67.1 percent of the overall CAMPA intervention in Odisha. Plantation is a major activity of CAMPA intervention. AR, ANR with gap plantation, block plantation, bald hill plantation, bamboo plantation, block plantation etc. are found as major plantation activities. Apart from fresh plantation, maintenance of previous year plantation activities i.e., 1st year, 2nd year, 3rd year, 4th year, 5th year maintenance and management activities are also undertaken. Different components of intervention under CAMPA in 2021-22 are summed up in the following table.

Table 11: CAMPA Implementation in Odisha, 2021-22

SN	Components of CAMPA Intervention	Financial Outlay (approved by National Authority) (Rs. in Cr.)	Amount Spent (Rs. in Cr.)
I	CA, PCA		
1.1	CA, PCA (CATP, Others)	68.23	50.93
1.2	Site Specific Wildlife Conservation Plan	32.81	5.27
1.3	Implementation of RWLMP	30.00	30.26
1.4	Relocation of Villages	50.00	96.87
	Sub Total	181.04	183.33
II	80% Activities under NPV		
2.1	AR Plantation P.O. + 1 st Year	10.37	9.09
2.2	ANR@200 plants (P.O. + 1 st Year)	87.73	82.42
2.3	Bald Hill Plantation (P.O. + 1 st Year)	26.05	24.78
2.4	Bamboo @400plants (P.O. + 1 st Year)	7.34	6.42
2.5	Miyawaki plantation (7sites)	5.07	4.68
2.6	P.O. for fodder and fruit	0.12	0.10
2.7	Fodder and Fruit 1 st year plantation	4.51	1.23
2.8	Conservation of RET species	1.38	1.21
2.9	Regeneration of degraded bamboo	18.48	17.85
2.1	SMC works in 20 Divisions	22.40	22.40
	Sub Total	183.45	170.18



SN	Components of CAMPA Intervention	Financial Outlay (approved by National Authority) (Rs. in Cr.)	Amount Spent (Rs. in Cr.)
3.0	Maintenance of Old Plantation (2 nd Year)		
3.1	AR Plantation (2 nd year maintenance)	4.97	4.26
3.2	ANR@200 plants (2 nd year maintenance)	32.36	29.96
3.3	Bald Hill Plantation (2 nd year maintenance)	4.2	3.61
3.4	Bamboo@400 plants (2 nd year maintenance)	2.07	1.48
3.5	Fodder and Fruit (2 nd Year maintenance)	0.07	0.07
3.6	Fodder and Fruit (2 nd Year maintenance) urban mode	1.31	1.77
3.7	Miyawaki Plantation (2 nd Year maintenance)	0.37	0.35
3.8	Conservation of RET species (2 nd year with gap)	0.07	0.06
3.9	Conservation of RET species (2 nd year without gap)	0.44	0.36
	Sub Total	45.86	41.92
4.0	Maintenance of Old Plantation (3 rd Year)		
4.1	AR Plantation (3 rd year maintenance)	3.98	3.68
4.2	ANR@200 plants/Ha. (3 rd year maintenance)	6.92	6.30
4.3	Bamboo Plantation @400 plants (3 rd year maintenance)	2.95	2.74
4.4	Avenue Plantation (3 rd year maintenance)	0.30	0.28
	Sub Total	14.15	13.00
5.0	Maintenance of Old Plantation (4 th Year)		
5.1	ANR 200 plants/Ha. (4 th year maintenance)	8.28	7.8
5.2	Bald Hill 4 th year maintenance	2.19	1.94
	Sub Total	10.47	9.74
6.0	Total Forest Protection (227 no. of forest protection squads with vehicle support in 219 ranges of 37 Forest Divisions)	46.96	45.58
7.0	Total Fire Protection (Fire protection squad, vehicle, creation, and maintenance of Fireline)	16.98	21.81
8.0	Wildlife Management		
8.1	Wildlife Protection	66.90	47.84
8.2	Fire protection	6.90	6.69
8.3	Habitat Improvement	20.67	19.36
8.4	Operation of Animal Rescue Centre	15.00	3.50
8.5	Others (Communication System and IT)	3.50	2.63
	Sub Total	112.97	80.02
9.0	Ama Jangala Yojana	107.00	101.81
III	NPV 20% (Forest Wings)		
10.0	Forest Infrastructure Development		
10.1	Construction of Range Office	3.99	3.56
10.2	Range Officers' Residence	2.93	2.86
10.3	Forest Quarters	12.10	11.40
10.4	Forest Guard Quarters	24.08	22.00
10.5	Seizure Yard	1.20	1.15
10.6	Construction, Upgradation, and maintenance of Forest Road	6.90	6.77
10.7	Culvert	1.07	1.06
10.8	Causeway	1.06	1.06
10.9	Boundary Wall	10.00	9.78
10.10	Tube well	1.50	1.48
10.11	Research and Capacity Building	2.00	2.00
10.12	Upgradation of Forest IT and Digitisation of forest boundaries	20.00	19.99
10.13	Monitoring and Evaluation	5.00	5.00
	Sub Total	91.83	88.11



SN	Components of CAMPA Intervention	Financial Outlay (approved by National Authority) (Rs. in Cr.)	Amount Spent (Rs. in Cr.)
IV	NPV 20% (Wildlife Wings)		
11.0	Infrastructure Development for Wildlife		
11.1	Road/ Inspection Path	5.18	5.15
11.2	Anti-poaching barrack	2.00	1.94
11.3	Floating Jetty	0.05	0.04
11.4	Construction of Watchtower	1.00	0.92
	Sub Total	8.23	8.05
V	60% Interest Component		
12.0	Raising and maintenance of 18-month-old seedlings	68.30	71.57
VI	40% Interest Component		
13.1	Construction of state Capacity Building Centre	10.00	5.00
13.2	Expenses of State Authority	5.79	1.55
	Sub Total	15.79	6.55
	Grand Total	903.03	841.67

Source: Computed from the CAMPA official database for the APO year 2021-22

2.3 Major Components and Subcomponents of CAMPA Intervention

A range of activities have been taken up under CAMPA implementation for the objective for preservation and development of natural forests, afforestation of degraded forest area, forest protection, forest fire management, management of wildlife, capacity building, research and development, infrastructure development and other allied activities.

Table 12: Components & Sub-Components of CAMPA Intervention

SN	Major Components	Sub- Components	Activities Taken Up Under CAMPA
1	Mandatory Site Specific Activities	Compensatory Afforestation (CA), Additional Compensatory afforestation (Addl. CA), Penal Compensatory Afforestation (PCA)	→ Catchment Area Treatment Plan (CATP) → Other Activity: SMC, Fencing, EPA
2	Integrated Wildlife Management Plan (WLMP)	Regional WLMP Site Specific Wildlife Conservation Plan (WCP)	→ Relocation of villages from PA → 21 new projects and 79 old projects
3	NPV	NPV-80%: Plantation	→ New Plantation → Maintenance of old Plantations → Conservation of RET species → Bamboo SSO → Soil and Moisture Conservation Works → Forest Protection (forest protection, fire protection and Fireline) → Wildlife Management → Ama Jangala Yojana
		NPV-20%: Infrastructure (Infrastructure) Development	→ Infrastructure activities → Research, and Development → Training, Awareness and Capacity Building → Forest IT & Geo-metrics → Monitoring and Evaluation
4	Interest	Interest-60%	→ Raising Nursery including Permanent and Mega nursery → Maintenance of 18-month-old seedling raised in the previous year



SN	Major Components	Sub- Components	Activities Taken Up Under CAMPA
			→ Offsetting the escalated expenditure due to wage rate enhancement
		Interest-40%	→ Construction of state capacity building Centre → Expenses of State Authority

Source: State Authority, CAMPA, Annual Plan of Operations:2021-22, P-154

The details of components and sub-components of CAMPA intervention and the activities taken up under different components are highlighted in the matrix.

- a) **Compensatory Afforestation:** Compensatory Afforestation (CA) refers to afforestation and regeneration activities carried out as a way of compensating for forest land diverted for non-forest purposes. CA, PCA component cover Block Plantation, ANR with Gap Plantation, ANR Without Gap, Bald Hill, Avenue Plantation and it's ancillary work and maintenance of previous year plantations i.e. 2nd, 3rd, 4th, 5th, 6th year and preliminary operations for 2022-23 plantations will also be taken up.
- b) **Integrated Wildlife Management Plan (IWMP):** For ensuring adequate protection and for ensuring increased biodiversity in forest areas, IWMPs are undertaken in Wildlife Divisions. It has several components including Wildlife Protection and Management, implementation of Regional Wildlife Management Plan and implementation of Site-specific Wildlife Conservation Plan.
- c) **NPV 80% (Forest Wings):** Various forestry activities undertaken under NPV 80% in different divisions in Odisha. It includes different type of plantations and previous year maintenance.
 - i. Plantation & Maintenance of previous year Plantation (AR, ANR with Gap, Bald Hill Plantation, Bamboo Plantation, Miyawaki Plantation, Fodder and Fruit Plantation, Conservation of RET species with Gap, Conservation of RET species Without Gap, Regeneration of degraded Bamboo etc.)
 - ii. SMC Work
 - iii. Ama Jangala Yojana (AJY): (ANR With Gap- 1st year operation and previous year maintenance, ANR Without Gap and previous year maintenance)
 - iv. Forest Protection & Fire Protection
- d) **NPV 80% (Wildlife Wings):** Various Wildlife Protection and Management activities undertaken under NPV 80% (Wildlife Wings) in different divisions of Odisha. It includes the following activities-
 - i. Protection and Anti-Depredation Activities
 - ii. Forest Fire Prevention and Control
 - iii. Improvement of Wildlife Habitat
 - iv. Establishment, Operation and Maintenance of Animal Rescue Centre and Veterinary Treatment facilities for Wild Animals
 - v. Supply of wood-saving cooking appliances and other forest produce saving devices in forest frings villages
- e) **NPV 20% (Forest Wings):** Different type of development work, research, training& capacity building and Monitoring & Evaluation work has been done under NPV 20% as per below:
 - i. Infrastructure Development
 - ii. Research, Training, Awareness & Capacity Building
 - iii. Forest IT & Geo-metrics
 - iv. Monitoring & Evaluation

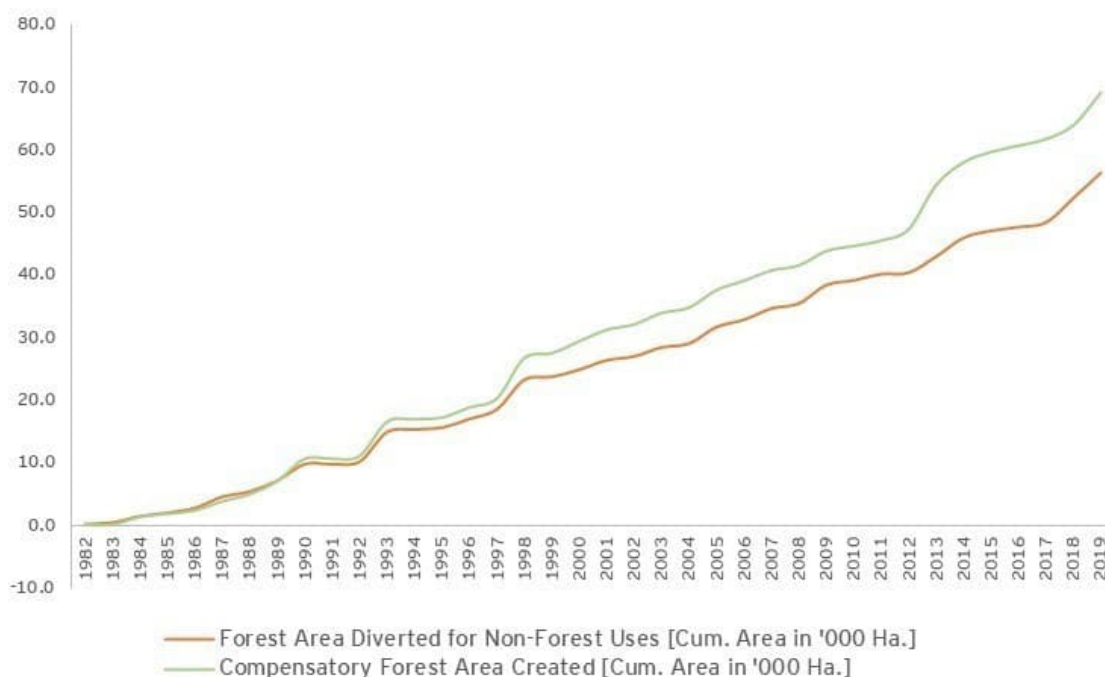


- f) NPV 20% (Wildlife Wings): Strengthening of Communication, Construction & Maintenance, Research & Publicity Awareness programme has been going under NPV 20% (Wildlife Wings) as per below:
 - i. Strengthening of Communication facilities for Protection of Wildlife
 - ii. Construction & Maintenance of Infrastructure for Protection of Wildlife
 - iii. Research Activities
 - iv. Publicity & Awareness Programme
- g) Utilization of Interest Money under 60% Activities: The enrichment of the forest by supplementing massive plantations in and around the forest areas is the most effective mechanism for enhancing the green cover in Odisha. Therefore raised 18 months old seedlings in different nurseries of various divisions of the State under APO 2021-22.
 - i. P.O. doe 18 months seedlings
 - ii. Maintenance of 18-month-Old Seedling raised in APO 2020-21
 - iii. Offsetting of the escalated expenditure due to wage rate enhancement.
- h) Utilization of Interest Money under 40% Activities: 1
 - i. Construction of State Capacity Building Centre
 - ii. Expenses of State Authority CAMPA

2.4 Afforestation by CAMPA:

Analysis of historical data from 1982 to 2019 reveals there have been substantial plantation and afforestation activities for which forest loss is duly compensated by afforestation activities. This implies annual forest creation stands higher than the forest loss in the State. The divergence has sharply emerged in recent years particularly after 2016 due to massive afforestation program with the creation of state CAMPA in the year 2016.

Forest Area Diversion & CA ('000 Ha.)





Chapter III

Plantation / Afforestation

3.1 Study Area and Coverage:

In afforestation, the assessment covered 192 Forest Ranges of 46 Forest Divisions. A total of 431 sites were assessed, covering different aspects. Observations of plantation assessment in different aspects are discussed in this section.

Table 13: Distribution of Measurement Sites by Forest Division

SN	FD	No. of Sites	SN	FD	No. of Sites
1	Angul	13	25	Kalahandi(N)	16
2	Athagarh	8	26	Karanjia	6
3	Athamallik	8	27	Keonjhar	9
4	Balangir	13	28	Keonjhar WL	10
5	Balasore WL	6	29	Khariar	15
6	Baliguda	23	30	Khordha	7
7	Bamra WL	9	31	Koraput	11
8	Baragarh	8	32	Malkangiri	8
9	Baripada	8	33	Nabarangpur	12
10	Berhampur	8	34	Nayagarh	6
11	Bhadrakh WL	2	35	Paralakemundi	9
12	Bonai	10	36	Phulbani	11
13	Boudh	7	37	Puri WL	7
14	Chandaka	7	38	Rairakhol	7
15	Chilika WL	7	39	Rairangpur	10
16	CT Forest Division, Bhubaneswar	2	40	Rajnagar WL	7
17	Cuttack	10	41	Rayagada	14
18	Deogarh	7	42	Rourkela	13
19	Dhenkanal	9	43	Sambalpur	12
20	Ghumasar south	8	44	Subarnapur	10
21	Ghumasura North	5	45	Sunabeda WL	6
22	Jeypore	13	46	Sundargarh	11
23	Jharsuguda	11		Total	431
24	Kalahandi (S)	12			

3.2 Type of Plantation:

The assessment covered plantations that were taken up during the Year 2021-22 in different categories of forest, i.e., Reserve Forest (RF: 207 sites, 48.0 percent), Protected Reserve Forest (PRF: 73 sites, 16.0 percent), Demarcated Protected Forest (DPF: 40 sites, 9.3 percent), Avenue Plantation (AP: 4 sites, 0.9 percent), Village Forest (VF: 41 sites, 9.5 percent), Khasara Forest (KF, 19 sites, 4.4 percent), Revenue Forest Land (33 sites, 7.7 percent) and plantation of other categories (14 sites, 3.2 percent). Along with this, the assessment covered different models of plantations taken up under CAMPA, under different components of plantation such as (1) AJY (2) CA / PCA (3) NPV 80 % and (4) SSWLMP. Type of plantation models are taken up in different years is presented in the matrix.



Table 14: Type of Plantation by Year

Type of Plantation	Year of Plantation							Total
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
AJY ANR @ 200 (2nd Year Maintenance)						1		1
AJY ANR With Gap @ 200 Creation							26	26
AJY ANR Without Gap (2nd Year Maintenance)						14		14
AJY ANR Without Gap (3rd year maintenance)					4			4
AJY ANR Without Gap Creation							12	12
ANR @ 200 - Tall Tree							1	1
ANR @ 200 (2nd Year Maintenance)						57		57
ANR @ 200 (3rd Year Maintenance)					24			24
ANR @ 200 (4th Year Maintenance)				24				24
ANR @ 200 (6th Year Maintenance)		2						2
ANR @ 200 (DWARF)							1	1
ANR @ 200 Creation							84	84
ANR @ 400 (2nd Year Maintenance)						2		2
ANR @ 400 (3rd Year Maintenance)					1			1
ANR @ 400 (4th Year Maintenance)				1				1
ANR @ 400 Creation							4	4
ANR @ 600 (3rd Year Maintenance)					1			1
ANR @ 600 Creation							4	4
ANR @ 800 (2nd year Maintenance)						1		1
ANR @ 800 Creation							1	1
ANR @200 -RET (2nd Year Maintenance)						2		2
ANR Without Gap- RET Species (2nd Year Maintenance)						6		6
ANR Without Gap- RET Species (Creation)							2	2
AR (2nd Year Maintenance)						14		14
AR (3rd Year Maintenance)					16			16
AR (4th year Maintenance)				1				1
AR (4th Year Maintenance)				1				1
AR (5th Year Maintenance)			1					1
AR (7th Year Maintenance)	2							2
AR Plantation							39	39
AR Plantation (DWARF)							2	2
Avenue Plantation							2	2
Avenue Plantation (2nd Year Maintenance)						1		1
Avenue Plantation (4th year maintenance)				1				1
Bald hill plantation							3	3
Bald Hill Plantation							24	24
Bald Hill Plantation (2nd year Maintenance)						10		10
Bald Hill Plantation (3rd year Maintenance)					1			1
Bald Hill Plantation (4th year Maintenance)				5				5
Cannel Bank Avenue Plantation (3rd Year Maintenance)					1			1
Food & Fodder Plantation (2nd Year Maintenance)						2		2
Food & Fodder Plantation (4th Year Maintenance)				1				1
Food and fodder Plantation							3	3
Food and fodder Plantation (2nd year Maintenance)						11		11
Food and fodder Plantation (3rd Year Maintenance)					1			1
Miyawaki Plantation							8	8
Miyawaki Plantation (2nd Year Maintenance)						2		2
Miyawaki Plantation (3rd year maintenance)					1			1
Urban Plantation							1	1
Urban Plantation (2nd Year Maintenance)						1		1
Urban Plantation (3rd Year Maintenance)					1			1
Total	2	2	1	34	51	124	217	431



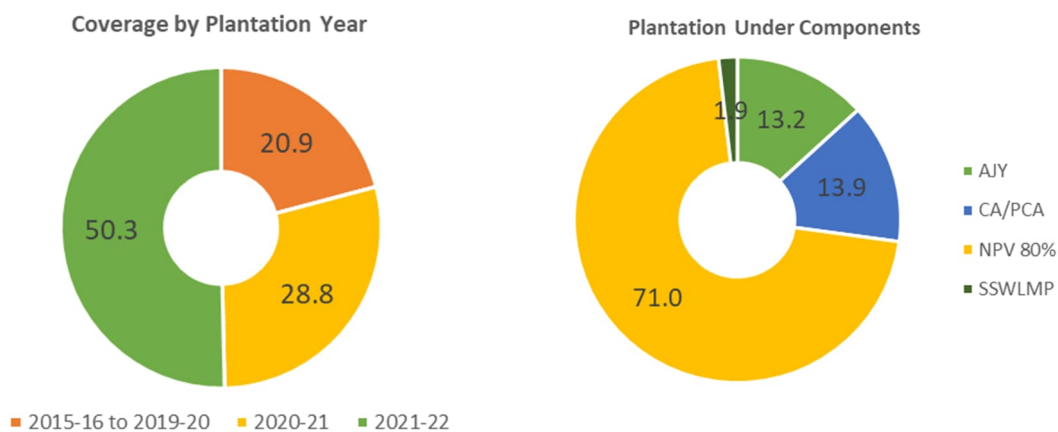


Figure 1: Site Coverage by Plantation Year & Components

3.3 Plantation Area:

The demarcated average plantation area / gross area of plantation (ha.) calculated to be 46.21 ha. (Total area of 19,825.26 ha.). The actual average plantation area / net area of plantation found to be 43.27 ha. (Total plantation area of 18,563.30). Actual area of plantation to demarcated area is 93.63 percent.

3.4 Seedling per Unit Area:

Seedling norm by unit of plantation (ha.) observed varying by model / type of plantation under different components. In NPV 80 %, seedling norm per ha. varies between 200 to 8,000 (Miyawaki model). In AJY, seedling norm of 200 per ha. was followed in AJY divisions, whereas, in case of CA / PCA, seedling norm varies between a minimum of 250 to a maximum of 1,600. In case of NPV 80%, seedling norm per ha. has been 200 to 8,000 irrespective of plantation models. In SSWLMP, seedling norm varies between 200 to 1600.

3.5 Plantation Records and Maps:

Plantation journal is observed for 89.3 percent sites (both plantation of 2021-22 and maintenance of earlier plantations; 91.2 percent for the year 2021-22). In case of AJY without gap and ANR without gap, registers are maintained. Of the total observed plantation journals, 92.0 percent were found maintained.

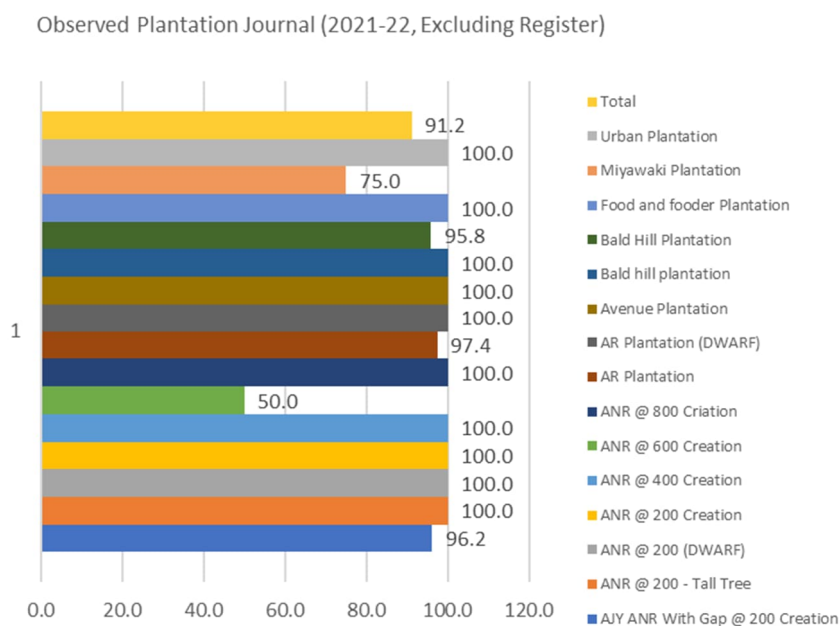


Figure 2: Plantation Journal



Table 15: Observation of Plantation Journal

Year	Plantation Models	Observed	Not Observed	Properly Maintained	Partly Maintained	Registered Maintained
2015-16	AR (7th Year Maintenance)	100.0	-	100.0	-	-
2016-17	ANR @ 200 (6th Year Maintenance)	100.0	-	100.0	-	-
2017-18	AR (5th Year Maintenance)	100.0	-	100.0	-	-
2018-19	ANR @ 200 (4th Year Maintenance)	100.0	-	91.7	8.3	-
	ANR @ 400 (4th Year Maintenance)	100.0	-	100.0	-	-
	AR (4th year Maintenance)	100.0	-	100.0	-	-
	AR (4th Year Maintenance)	100.0	-	100.0	-	-
	Avenue Plantation (4th year maintenance)	100.0	-	-	100.0	-
	Bald Hill Plantation (4th year Maintenance)	100.0	-	100.0	-	-
	Food & Fodder Plantation (4th Year Maintenance)	100.0	-	100.0	-	-
2019-20	AJY ANR Without Gap (3rd year maintenance)	-	100.0			Yes
	ANR @ 200 (3rd Year Maintenance)	91.7	8.3	100.0	-	-
	ANR @ 400 (3rd Year Maintenance)	100.0	-	100.0	-	-
	ANR @ 600 (3rd Year Maintenance)	100.0	-	100.0	-	-
	AR (3rd Year Maintenance)	81.3	18.8	100.0	-	-
	Bald Hill Plantation (3rd year Maintenance)	100.0	-	100.0	-	-
	Cannel Bank Avenue Plantation (3rd Year Maintenance)	-	100.0		-	-
	Food and fodder Plantation (3rd Year Maintenance)	100.0	-	100.0	-	-
	Miyawaki Plantation (3rd year maintenance)	100.0	-	100.0	-	-
2020-21	Urban Plantation (3rd Year Maintenance)	100.0	-	100.0	-	-
	AJY ANR @ 200 (2nd Year Maintenance)	100.0	-	100.0	-	-
	AJY ANR Without Gap (2nd Year Maintenance)	-	100.0			Yes
	ANR @ 200 (2nd Year Maintenance)	93.0	7.0	90.6	9.4	-
	ANR @ 400 (2nd Year Maintenance)	100.0	-	50.0	50.0	-
	ANR @ 800 (2nd year Maintenance)	100.0	-	100.0	-	-
	ANR @200 -RET (2nd Year Maintenance)	100.0	-	100.0	-	-
	ANR Without Gap- RET Species (2nd Year Maintenance)	-	100.0			Yes
	AR (2nd Year Maintenance)	100.0	-	92.9	7.1	-
	Avenue Plantation (2nd Year Maintenance)	100.0	-	-	100.0	-
	Bald Hill Plantation (2nd year Maintenance)	100.0	-	100.0	-	-
	Food & Fodder Plantation (2nd Year Maintenance)	100.0	-	100.0	-	-
	Food and fodder Plantation (2nd year Maintenance)	100.0	-	100.0	-	-
	Miyawaki Plantation (2nd Year Maintenance)	100.0	-	100.0	-	-
2021-22	Urban Plantation (2nd Year Maintenance)	0.0	100.0			-
	AJY ANR With Gap @ 200 Creation	96.2	3.8	100.0	0.0	-
	AJY ANR Without Gap Creation	-	100.0			Yes
	ANR @ 200 - Tall Tree	100.0	-	100.0	-	-
	ANR @ 200 (DWARF)	100.0	-	-	100.0	-
	ANR @ 200 Creation	100.0	-	90.5	9.5	-
	ANR @ 400 Creation	100.0	-	75.0	25.0	-
	ANR @ 600 Creation	50.0	50.0	50.0	-	-
	ANR @ 800 Creation	100.0	-	100.0	-	-
	ANR Without Gap- RET Species (Creation)	-	100.0			-
	AR Plantation	97.4	2.6	92.1	10.5	-
	AR Plantation (DWARF)	100.0	-	100.0	0.0	-
	Avenue Plantation	100.0	-	0.0	100.0	-
	Bald hill plantation	100.0	-	100.0	0.0	-
	Bald Hill Plantation	95.8	4.2	91.3	8.7	-
	Food and fodder Plantation	100.0	-	100.0	0.0	-
Miyawaki Plantation	75.0	25.0	100.0	0.0	-	



Year	Plantation Models	Observed	Not Observed	Properly Maintained	Partly Maintained	Registered Maintained
	Urban Plantation	100.0	-	0.0	100.0	-
Total	AJY ANR @ 200 (2nd Year Maintenance)	100.0	-	100.0	-	-
	AJY ANR With Gap @ 200 Creation	96.2	3.8	100.0	-	-
	AJY ANR Without Gap (2nd Year Maintenance)	-	100.0	-	-	Yes
	AJY ANR Without Gap (3rd year maintenance)	-	100.0	-	-	Yes
	AJY ANR Without Gap Creation	-	100.0	-	-	Yes
	ANR @ 200 - Tall Tree	100.0	-	100.0	-	-
	ANR @ 200 (2nd Year Maintenance)	93.0	7.0	90.6	9.4	-
	ANR @ 200 (3rd Year Maintenance)	91.7	8.3	100.0	-	-
	ANR @ 200 (4th Year Maintenance)	100.0	-	91.7	8.3	-
	ANR @ 200 (6th Year Maintenance)	100.0	-	100.0	0.0	-
	ANR @ 200 (DWARF)	100.0	-	-	100.0	-
	ANR @ 200 Creation	100.0	-	90.5	9.5	-
	ANR @ 400 (2nd Year Maintenance)	100.0	-	50.0	50.0	-
	ANR @ 400 (3rd Year Maintenance)	100.0	-	100.0	-	-
	ANR @ 400 (4th Year Maintenance)	100.0	-	100.0	-	-
	ANR @ 400 Creation	100.0	-	75.0	25.0	-
	ANR @ 600 (3rd Year Maintenance)	100.0	-	100.0	-	-
	ANR @ 600 Creation	50.0	50.0	50.0	-	-
	ANR @ 800 (2nd year Maintenance)	100.0	-	100.0	-	-
	ANR @ 800 Creation	100.0	-	100.0	-	-
	ANR @200 -RET (2nd Year Maintenance)	100.0	-	100.0	-	-
	ANR Without Gap- RET Species (2nd Year Maintenance)	-	100.0	-	-	Yes
	ANR Without Gap- RET Species (Creation)	-	100.0	-	-	-
	AR (2nd Year Maintenance)	100.0	-	92.9	7.1	-
	AR (3rd Year Maintenance)	81.3	18.8	100.0	-	-
	AR (4th year Maintenance)	100.0	-	100.0	-	-
	AR (4th Year Maintenance)	100.0	-	100.0	-	-
	AR (5th Year Maintenance)	100.0	-	100.0	-	-
	AR (7th Year Maintenance)	100.0	-	100.0	-	-
	AR Plantation	97.4	2.6	92.1	10.5	-
	AR Plantation (DWARF)	100.0	-	100.0	-	-
	Avenue Plantation	100.0	-	-	100.0	-
	Avenue Plantation (2nd Year Maintenance)	100.0	-	-	100.0	-
	Avenue Plantation (4th year maintenance)	100.0	-	-	100.0	-
	Bald hill plantation	100.0	-	100.0	-	-
	Bald Hill Plantation	95.8	4.2	91.3	8.7	-
	Bald Hill Plantation (2nd year Maintenance)	100.0	-	100.0	-	-
	Bald Hill Plantation (3rd year Maintenance)	100.0	-	100.0	-	-
	Bald Hill Plantation (4th year Maintenance)	100.0	-	100.0	-	-
	Cannel Bank Avenue Plantation (3rd Year Maintenance)	-	100.0	-	-	-
	Food & Fodder Plantation (2nd Year Maintenance)	100.0	-	100.0	-	-
	Food & Fodder Plantation (4th Year Maintenance)	100.0	-	100.0	-	-
	Food and fodder Plantation	100.0	-	100.0	-	-
	Food and fodder Plantation (2nd year Maintenance)	100.0	-	100.0	-	-
	Food and fodder Plantation (3rd Year Maintenance)	100.0	-	100.0	-	-
Miyawaki Plantation	75.0	25.0	100.0	-	-	
Miyawaki Plantation (2nd Year Maintenance)	100.0	-	100.0	-	-	
Miyawaki Plantation (3rd year maintenance)	100.0	-	100.0	-	-	
Urban Plantation	100.0	-	0.0	100.0	-	
Urban Plantation (2nd Year Maintenance)	-	100.0	-	-	-	
Urban Plantation (3rd Year Maintenance)	100.0	-	100.0	-	-	
Total		89.3	10.7	92.0	8.0	Yes



3.6 Map of Plantation Sites:

Map of the plantation sites observed in 87.2 percent sites, irrespective of year of plantation / maintenance and plantation model. In case of 2021-22 plantations, map of plantation sites observed in 90.3 percent cases. In rest of the cases, either map of the plantation site is not observed, or it is not required to be prepared.

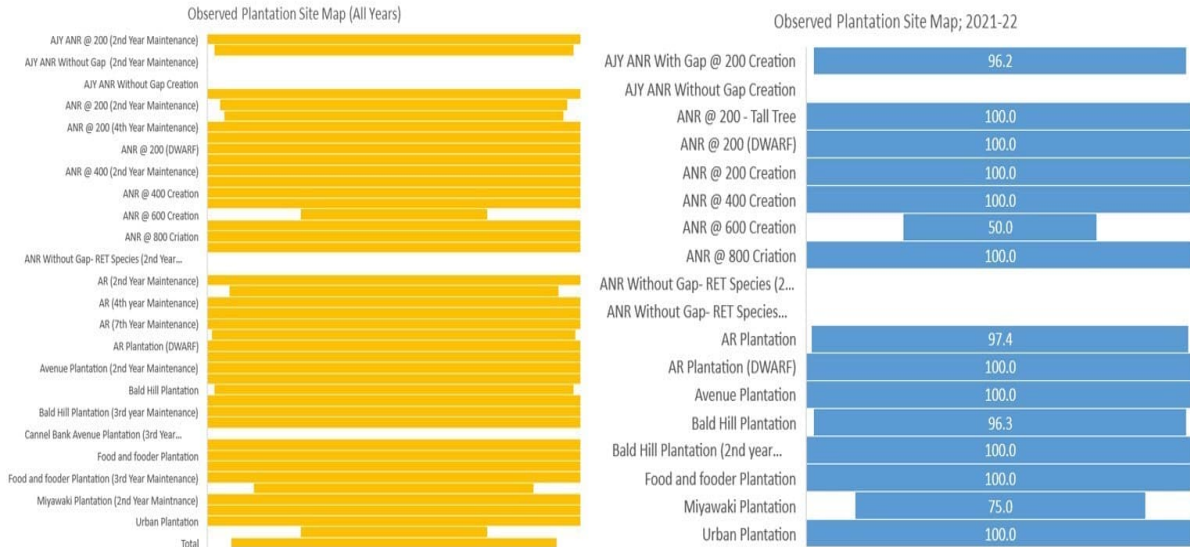


Figure 3: Map of Plantation Sites Observed

3.7 Micro Plan Preparation:

Preparation of micro plan under AJY is one of the important aspects. Apart from VSS membership, different works to be taken up is presented in the micro plan. Discussion with VSS members reveals that micro plan is prepared for all the AJY sites.

3.8 Treatment Map of Plantation Sites:

Treatment map is observed for 94.91 percent sites where it is required to be prepared, i.e., in case of ANR conditions, including AJY. In case of 2021-22 plantation, treatment map observed for different plantation models of most of the sites (95.56 percent) which is presented in figure.

Treatment Map of Plantation Sites, 2021-22

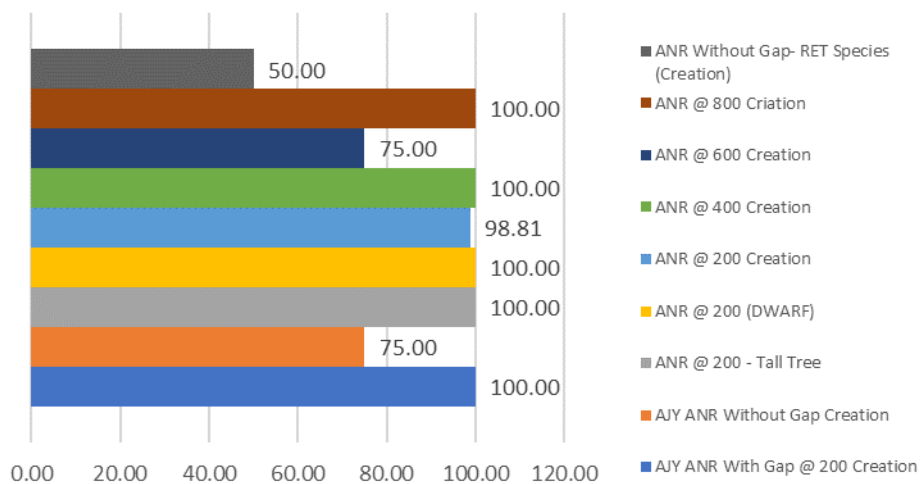


Figure 4: Treatment Map of Plantation Site



Table 16: Treatment Map by Plantation Models & Year

Year	Type of Plantation	Observed	Not Observed	Not Required	Total	
2015-16	AR (7th Year Maintenance)	0.00	0.00	100.00	100.00	
2016-17	ANR @ 200 (6th Year Maintenance)	50.00	50.00	0.00	100.00	
2017-18	AR (5th Year Maintenance)	0.00	0.00	100.00	100.00	
2018-19	ANR @ 200 (4th Year Maintenance)	100.00	0.00	0.00	100.00	
	ANR @ 400 (4th Year Maintenance)	0.00	100.00	0.00	100.00	
	AR (4th year Maintenance)	0.00	0.00	100.00	100.00	
	AR (4th Year Maintenance)	0.00	0.00	100.00	100.00	
	Avenue Plantation (4th year maintenance)	0.00	0.00	100.00	100.00	
	Bald Hill Plantation (4th year Maintenance)	0.00	0.00	100.00	100.00	
	Food & Fodder Plantation (4th Year Maintenance)	0.00	0.00	100.00	100.00	
	2019-20	AJY ANR Without Gap (3rd year maintenance)	100.00	0.00	0.00	100.00
ANR @ 200 (3rd Year Maintenance)		91.67	8.33	0.00	100.00	
ANR @ 400 (3rd Year Maintenance)		100.00	0.00	0.00	100.00	
ANR @ 600 (3rd Year Maintenance)		100.00	0.00	0.00	100.00	
AR (3rd Year Maintenance)		0.00	0.00	100.00	100.00	
Bald Hill Plantation (3rd year Maintenance)		0.00	0.00	100.00	100.00	
Cannel Bank Avenue Plantation (3rd Year Maintenance)		0.00	0.00	100.00	100.00	
Food and fodder Plantation (3rd Year Maintenance)		0.00	0.00	100.00	100.00	
Miyawaki Plantation (3rd year maintenance)		0.00	0.00	100.00	100.00	
Urban Plantation (3rd Year Maintenance)		0.00	0.00	100.00	100.00	
2020-21		AJY ANR @ 200 (2nd Year Maintenance)	100.00	0.00	0.00	100.00
		AJY ANR Without Gap (2nd Year Maintenance)	85.71	14.29	0.00	100.00
		ANR @ 200 (2nd Year Maintenance)	96.49	3.51	0.00	100.00
	ANR @ 400 (2nd Year Maintenance)	100.00	0.00	0.00	100.00	
	ANR @ 800 (2nd year Maintenance)	100.00	0.00	0.00	100.00	
	ANR @200 -RET (2nd Year Maintenance)	100.00	0.00	0.00	100.00	
	ANR Without Gap- RET Species (2nd Year Maintenance)	100.00	0.00	0.00	100.00	
	AR (2nd Year Maintenance)	0.00	0.00	100.00	100.00	
	Avenue Plantation (2nd Year Maintenance)	0.00	0.00	100.00	100.00	
	Bald Hill Plantation (2nd year Maintenance)	0.00	0.00	100.00	100.00	
	Food & Fodder Plantation (2nd Year Maintenance)	0.00	0.00	100.00	100.00	
	Food and fodder Plantation (2nd year Maintenance)	0.00	0.00	100.00	100.00	
	Miyawaki Plantation (2nd Year Maintenance)	0.00	0.00	100.00	100.00	
	Urban Plantation (2nd Year Maintenance)	0.00	0.00	100.00	100.00	
	2021-22	AJY ANR With Gap @ 200 Creation	100.00	0.00	0.00	100.00
		AJY ANR Without Gap Creation	75.00	25.00	0.00	100.00
		ANR @ 200 - Tall Tree	100.00	0.00	0.00	100.00
ANR @ 200 (DWARF)		100.00	0.00	0.00	100.00	
ANR @ 200 Creation		98.81	1.19	0.00	100.00	
ANR @ 400 Creation		100.00	0.00	0.00	100.00	
ANR @ 600 Creation		75.00	25.00	0.00	100.00	
ANR @ 800 Creation		100.00	0.00	0.00	100.00	
ANR Without Gap- RET Species (Creation)		50.00	50.00	0.00	100.00	
AR Plantation		0.00	0.00	100.00	100.00	
AR Plantation (DWARF)		0.00	0.00	100.00	100.00	
Avenue Plantation		0.00	0.00	100.00	100.00	
Bald hill plantation		0.00	0.00	100.00	100.00	
Bald Hill Plantation		0.00	0.00	100.00	100.00	
Food and fodder Plantation		0.00	0.00	100.00	100.00	
Miyawaki Plantation		0.00	0.00	100.00	100.00	
Urban Plantation		0.00	0.00	100.00	100.00	
Total		AJY ANR @ 200 (2nd Year Maintenance)	100.00	0.00	0.00	100.00
		AJY ANR With Gap @ 200 Creation	100.00	0.00	0.00	100.00
		AJY ANR Without Gap (2nd Year Maintenance)	85.71	14.29	0.00	100.00
	AJY ANR Without Gap (3rd year maintenance)	100.00	0.00	0.00	100.00	
	AJY ANR Without Gap Creation	75.00	25.00	0.00	100.00	
	ANR @ 200 - Tall Tree	100.00	0.00	0.00	100.00	
	ANR @ 200 (2nd Year Maintenance)	96.49	3.51	0.00	100.00	



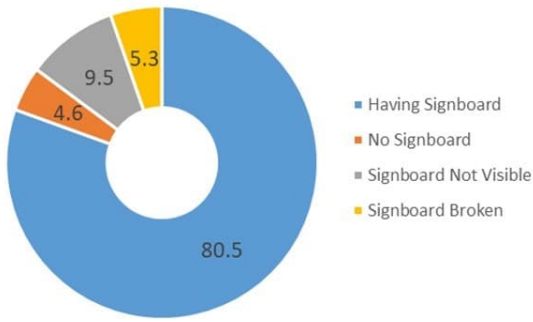
Year	Type of Plantation	Observed	Not Observed	Not Required	Total
	ANR @ 200 (3rd Year Maintenance)	91.67	8.33	0.00	100.00
	ANR @ 200 (4th Year Maintenance)	100.00	0.00	0.00	100.00
	ANR @ 200 (6th Year Maintenance)	50.00	50.00	0.00	100.00
	ANR @ 200 (DWARF)	100.00	0.00	0.00	100.00
	ANR @ 200 Creation	98.81	1.19	0.00	100.00
	ANR @ 400 (2nd Year Maintenance)	100.00	0.00	0.00	100.00
	ANR @ 400 (3rd Year Maintenance)	100.00	0.00	0.00	100.00
	ANR @ 400 (4th Year Maintenance)	0.00	100.00	0.00	100.00
	ANR @ 400 Creation	100.00	0.00	0.00	100.00
	ANR @ 600 (3rd Year Maintenance)	100.00	0.00	0.00	100.00
	ANR @ 600 Creation	75.00	25.00	0.00	100.00
	ANR @ 800 (2nd year Maintenance)	100.00	0.00	0.00	100.00
	ANR @ 800 Creation	100.00	0.00	0.00	100.00
	ANR @200 -RET (2nd Year Maintenance)	100.00	0.00	0.00	100.00
	ANR Without Gap- RET Species (2nd Year Maintenance)	100.00	0.00	0.00	100.00
	ANR Without Gap- RET Species (Creation)	50.00	50.00	0.00	100.00
	AR (2nd Year Maintenance)	0.00	0.00	100.00	100.00
	AR (3rd Year Maintenance)	0.00	0.00	100.00	100.00
	AR (4th year Maintenance)	0.00	0.00	100.00	100.00
	AR (4th Year Maintenance)	0.00	0.00	100.00	100.00
	AR (5th Year Maintenance)	0.00	0.00	100.00	100.00
	AR (7th Year Maintenance)	0.00	0.00	100.00	100.00
	AR Plantation	0.00	0.00	100.00	100.00
	AR Plantation (DWARF)	0.00	0.00	100.00	100.00
	Avenue Plantation	0.00	0.00	100.00	100.00
	Avenue Plantation (2nd Year Maintenance)	0.00	0.00	100.00	100.00
	Avenue Plantation (4th year maintenance)	0.00	0.00	100.00	100.00
	Bald Hill Plantation	0.00	0.00	100.00	100.00
	Bald Hill Plantation (2nd year Maintenance)	0.00	0.00	100.00	100.00
	Bald Hill Plantation (3rd year Maintenance)	0.00	0.00	100.00	100.00
	Bald Hill Plantation (4th year Maintenance)	0.00	0.00	100.00	100.00
	Cannel Bank Avenue Plantation (3rd Year Maintenance)	0.00	0.00	100.00	100.00
	Food & Fodder Plantation (2nd Year Maintenance)	0.00	0.00	100.00	100.00
	Food & Fodder Plantation (4th Year Maintenance)	0.00	0.00	100.00	100.00
	Food and fodder Plantation	0.00	0.00	100.00	100.00
	Food and fodder Plantation (3rd Year Maintenance)	0.00	0.00	100.00	100.00
	Miyawaki Plantation	0.00	0.00	100.00	100.00
	Miyawaki Plantation (2nd Year Maintenance)	0.00	0.00	100.00	100.00
	Miyawaki Plantation (3rd year maintenance)	0.00	0.00	100.00	100.00
	Urban Plantation	0.00	0.00	100.00	100.00
	Urban Plantation (2nd Year Maintenance)	0.00	0.00	100.00	100.00
	Urban Plantation (3rd Year Maintenance)	0.00	0.00	100.00	100.00
	Total	60.56	3.25	36.19	100.00

3.9 Sites Having Signboard:

Irrespective of year of plantation and model of plantation, signboard witnessed in 80.5 percent sites. In 4.6 percent sites no signboard observed, whereas in 9.5 percent sites, signboard is not visible, and signboard found to be in broken condition in 5.3 percent sites.



Signboard in Project Sites for Different Years



Signboard in Project Sites; Plantation Year 2021-22

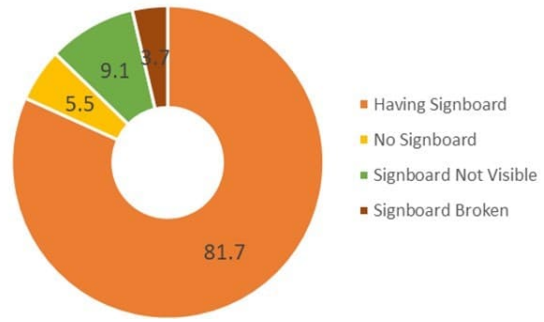
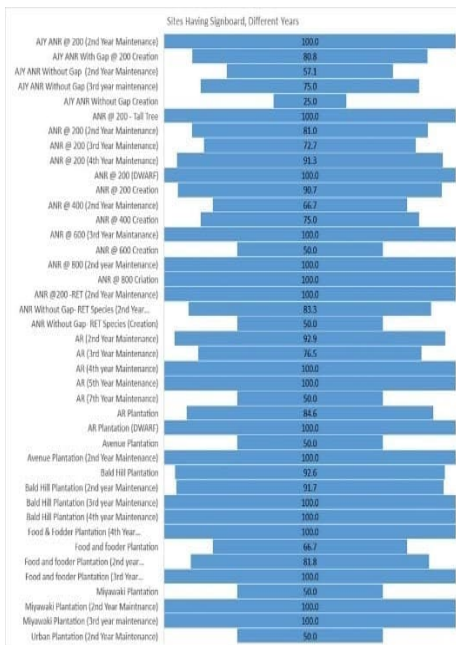


Figure 5: Signboard in Plantation Sites

In case of plantation of 2021-22, signboard observed existing in 81.7 percent sites whereas signboard is not visible in 9.1 percent sites and in 3.7 percent sites it is in broken condition. In about 5.5 percent sites, no signboard observed existing.



Sites Having Signboard, Plantation Year 2021-22

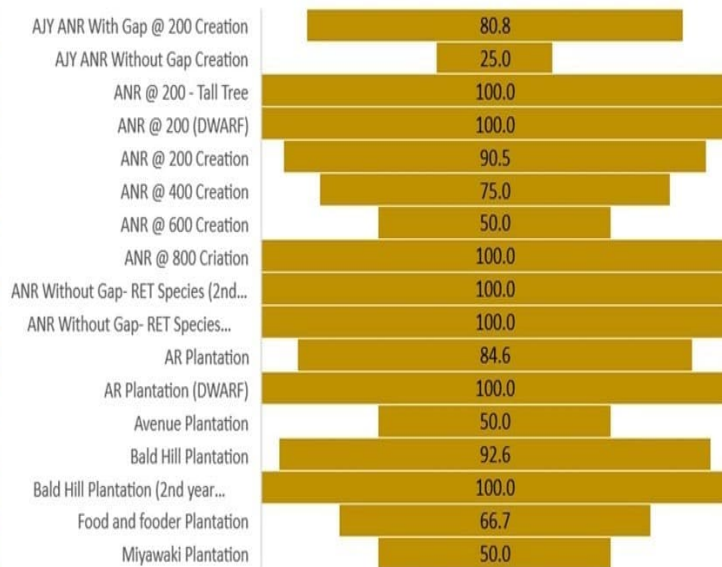


Figure 6: Sites Having Signboard

3.10 Posting of Pillars:

On average, each plantation site (plantation of 2021-22 along with maintenance of previous year's plantation) is having 29 pillars with total number of posted pillars amounts to 12,412. Pillar posting excludes avenue plantation. During the assessment, 20.0 percent pillars (2,454 pillars) of the total posted pillars were assessed to understand the condition of the pillars. Of the total pillars witnessed, 91.0 percent are in good condition, 4.9 percent are in broken / dilapidated condition, and 4.1 percent pillars are not existing. Pillars are found serially numbered (96.06 percent sites). Type of pillars posted are RCC pillars (78.89 percent) and stone pillars (21.11 percent). Based on physical observation, it is found that in 98.84 percent plantation sites, total area of plantation found fully covered, whereas remaining 1.16 percent sites fall under avenue plantation.



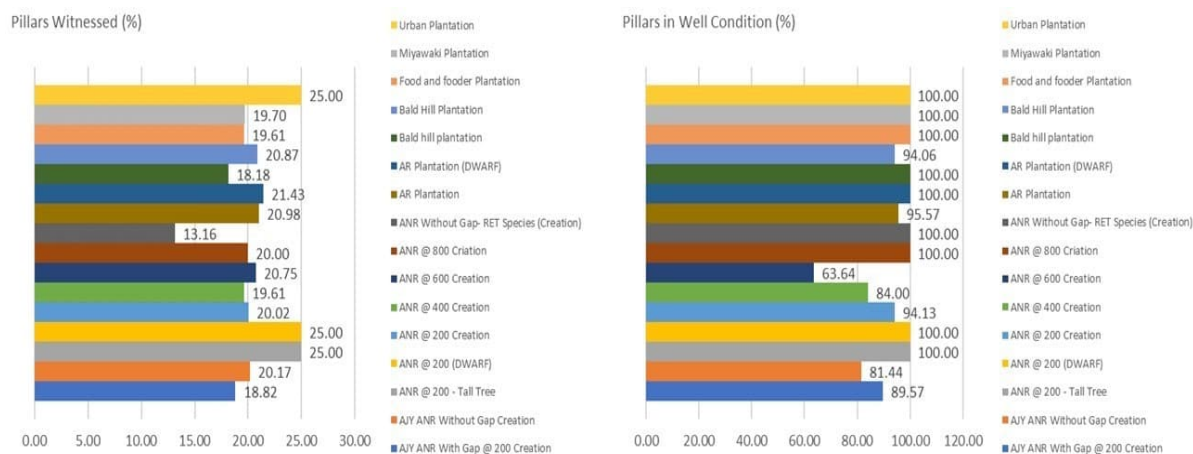


Figure 7: Posting of Pillars & Pillar Condition

Table 17: Posting of Pillars

Year	Plantation Model	Witnessed (%)	Well Condition (%)	Broken Condition (%)	Not in Presence (%)	Total (%)	
2015-16	AR (7th Year Maintenance)	37.78	100.00	0.00	0.00	100.00	
2016-17	ANR @ 200 (6th Year Maintenance)	19.80	65.00	10.00	25.00	100.00	
2017-18	AR (5th Year Maintenance)	23.08	100.00	0.00	0.00	100.00	
2018-19	ANR @ 200 (4th Year Maintenance)	19.48	89.60	8.09	2.31	100.00	
	ANR @ 400 (4th Year Maintenance)	10.48	63.64	0.00	36.36	100.00	
	AR (4th year Maintenance)	19.69	64.00	8.00	28.00	100.00	
	Bald Hill Plantation (4th year Maintenance)	19.82	95.45	4.55	0.00	100.00	
	Food & Fodder Plantation (4th Year Maintenance)	27.27	100.00	0.00	0.00	100.00	
2019-20	AJY ANR Without Gap (3rd year maintenance)	20.20	87.50	7.50	5.00	100.00	
	ANR @ 200 (3rd Year Maintenance)	19.79	93.18	4.55	2.27	100.00	
	ANR @ 400 (3rd Year Maintenance)	18.42	71.43	0.00	28.57	100.00	
	ANR @ 600 (3rd Year Maintenance)	20.59	100.00	0.00	0.00	100.00	
	AR (3rd Year Maintenance)	20.39	93.65	0.00	6.35	100.00	
	Bald Hill Plantation (3rd year Maintenance)	17.39	100.00	0.00	0.00	100.00	
	Food and fodder Plantation (3rd Year Maintenance)	22.22	100.00	0.00	0.00	100.00	
	Miyawaki Plantation (3rd year maintenance)	20.00	100.00	0.00	0.00	100.00	
	Urban Plantation (3rd Year Maintenance)	22.22	83.33	16.67	0.00	100.00	
	2020-21	AJY ANR @ 200 (2nd Year Maintenance)	20.00	80.00	10.00	10.00	100.00
AJY ANR Without Gap (2nd Year Maintenance)		20.29	88.89	8.08	3.03	100.00	
ANR @ 200 (2nd Year Maintenance)		18.96	89.29	4.46	6.25	100.00	
ANR @ 400 (2nd Year Maintenance)		18.75	100.00	0.00	0.00	100.00	
ANR @ 800 (2nd year Maintenance)		22.22	100.00	0.00	0.00	100.00	
ANR @200 -RET (2nd Year Maintenance)		19.18	100.00	0.00	0.00	100.00	
ANR Without Gap- RET Species (2nd Year Maintenance)		19.84	88.00	8.00	4.00	100.00	
AR (2nd Year Maintenance)		19.68	95.35	2.33	2.33	100.00	
Bald Hill Plantation (2nd year Maintenance)		20.26	95.74	4.26	0.00	100.00	
Food & Fodder Plantation (2nd Year Maintenance)		21.05	100.00	0.00	0.00	100.00	
Food and fodder Plantation (2nd year Maintenance)		19.03	95.35	2.33	2.33	100.00	
Miyawaki Plantation (2nd Year Maintenance)		23.08	100.00	0.00	0.00	100.00	
Urban Plantation (2nd Year Maintenance)		20.00	50.00	50.00	0.00	100.00	
2021-22		AJY ANR With Gap @ 200 Creation	18.82	89.57	6.64	3.79	100.00
		AJY ANR Without Gap Creation	20.17	81.44	9.28	9.28	100.00
	ANR @ 200 - Tall Tree	25.00	100.00	0.00	0.00	100.00	
	ANR @ 200 (DWARF)	25.00	100.00	0.00	0.00	100.00	
	ANR @ 200 Creation	20.02	94.13	4.73	1.14	100.00	
	ANR @ 400 Creation	19.61	84.00	6.00	10.00	100.00	
	ANR @ 600 Creation	20.75	63.64	0.00	36.36	100.00	
	ANR @ 800 Creation	20.00	100.00	0.00	0.00	100.00	
ANR Without Gap- RET Species (Creation)	13.16	100.00	0.00	0.00	100.00		

Year	Plantation Model	Witnessed (%)	Well Condition (%)	Broken Condition (%)	Not in Presence (%)	Total (%)
	AR Plantation	20.98	95.57	2.53	1.90	100.00
	AR Plantation (DWARF)	21.43	100.00	0.00	0.00	100.00
	Bald Hill Plantation	20.87	94.06	4.95	0.99	100.00
	Food and fodder Plantation	19.61	100.00	0.00	0.00	100.00
	Miyawaki Plantation	19.70	100.00	0.00	0.00	100.00
	Urban Plantation	25.00	100.00	0.00	0.00	100.00
Total	AJY ANR @ 200 (2nd Year Maintenance)	20.00	80.00	10.00	10.00	100.00
	AJY ANR With Gap @ 200 Creation	18.82	89.57	6.64	3.79	100.00
	AJY ANR Without Gap (2nd Year Maintenance)	20.29	88.89	8.08	3.03	100.00
	AJY ANR Without Gap (3rd year maintenance)	20.20	87.50	7.50	5.00	100.00
	AJY ANR Without Gap Creation	20.17	81.44	9.28	9.28	100.00
	ANR @ 200 - Tall Tree	25.00	100.00	0.00	0.00	100.00
	ANR @ 200 (2nd Year Maintenance)	18.96	89.29	4.46	6.25	100.00
	ANR @ 200 (3rd Year Maintenance)	19.79	93.18	4.55	2.27	100.00
	ANR @ 200 (4th Year Maintenance)	19.48	89.60	8.09	2.31	100.00
	ANR @ 200 (6th Year Maintenance)	19.80	65.00	10.00	25.00	100.00
	ANR @ 200 (DWARF)	25.00	100.00	0.00	0.00	100.00
	ANR @ 200 Creation	20.02	94.13	4.73	1.14	100.00
	ANR @ 400 (2nd Year Maintenance)	18.75	100.00	0.00	0.00	100.00
	ANR @ 400 (3rd Year Maintenance)	18.42	71.43	0.00	28.57	100.00
	ANR @ 400 (4th Year Maintenance)	10.48	63.64	0.00	36.36	100.00
	ANR @ 400 Creation	19.61	84.00	6.00	10.00	100.00
	ANR @ 600 (3rd Year Maintenance)	20.59	100.00	0.00	0.00	100.00
	ANR @ 600 Creation	20.75	63.64	0.00	36.36	100.00
	ANR @ 800 (2nd year Maintenance)	22.22	100.00	0.00	0.00	100.00
	ANR @ 800 Creation	20.00	100.00	0.00	0.00	100.00
	ANR @200 -RET (2nd Year Maintenance)	19.18	100.00	0.00	0.00	100.00
	ANR Without Gap- RET Species (2nd Year Maintenance)	19.84	88.00	8.00	4.00	100.00
	ANR Without Gap- RET Species (Creation)	13.16	100.00	0.00	0.00	100.00
	AR (2nd Year Maintenance)	19.68	95.35	2.33	2.33	100.00
	AR (3rd Year Maintenance)	20.39	93.65	0.00	6.35	100.00
	AR (4th year Maintenance)	19.69	64.00	8.00	28.00	100.00
	AR (4th Year Maintenance)	20.00	100.00	0.00	0.00	100.00
	AR (5th Year Maintenance)	23.08	100.00	0.00	0.00	100.00
	AR (7th Year Maintenance)	37.78	100.00	0.00	0.00	100.00
	AR Plantation	20.98	95.57	2.53	1.90	100.00
	AR Plantation (DWARF)	21.43	100.00	0.00	0.00	100.00
	Bald Hill Plantation	20.87	94.06	4.95	0.99	100.00
	Bald Hill Plantation (2nd year Maintenance)	20.26	95.74	4.26	0.00	100.00
	Bald Hill Plantation (3rd year Maintenance)	17.39	100.00	0.00	0.00	100.00
	Bald Hill Plantation (4th year Maintenance)	19.82	95.45	4.55	0.00	100.00
	Food & Fodder Plantation (2nd Year Maintenance)	21.05	100.00	0.00	0.00	100.00
	Food & Fodder Plantation (4th Year Maintenance)	27.27	100.00	0.00	0.00	100.00
	Food and fodder Plantation	19.61	100.00	0.00	0.00	100.00
	Food and fodder Plantation (2nd year Maintenance)	19.03	95.35	2.33	2.33	100.00
	Food and fodder Plantation (3rd Year Maintenance)	22.22	100.00	0.00	0.00	100.00
	Miyawaki Plantation	19.70	100.00	0.00	0.00	100.00
	Miyawaki Plantation (2nd Year Maintenance)	23.08	100.00	0.00	0.00	100.00
	Miyawaki Plantation (3rd year maintenance)	20.00	100.00	0.00	0.00	100.00
	Urban Plantation	25.00	100.00	0.00	0.00	100.00
	Urban Plantation (2nd Year Maintenance)	20.00	50.00	50.00	0.00	100.00
	Urban Plantation (3rd Year Maintenance)	22.22	83.33	16.67	0.00	100.00
	Total	19.77	90.99	4.93	4.07	100.00

In case of plantation of 2021-22, average number of pillars posted per site is about 28 with total posting of 6,147 pillars (excluding avenue plantation). Of the total 20.0 percent pillars (1,228 pillars) witnessed, 91.9 percent are in good condition, 4.9 percent are in broken / dilapidated condition, and 3.2 percent pillars are not existing. In majority sites, pillars are made up of RCC and found serially numbered.



3.11 SMC Works in Plantation Sites:

Different soil moisture conservation works observed in different plantation sites, among which staggered trench is more prominent (85.2 percent sites). Other SMC measures observed are percolation pits (in 2.3 percent sites), half-moon trench (1.8 percent sites), LBCD (5.6 percent sites) and other SMC measures in 2.1 percent sites. In 9.3 percent sites, no SMC activities observed, or it is not applicable for that plantation sites. In 5.1 percent sites, more than one SMC measures found taken up. It indicates that SMC measures have been taken for better plant survival and enriching the soil moisture with topsoil restoration. SMC interventions have been taken up in both new plantations and maintenance sites.

Table 18: SMC Activities in Different Plantation Sites.

Nature of Plantation	Staggered Trench	Percolation Pit	Half Moon Trench	LBCD	Other	Total
AJY ANR @ 200 (2nd Year Maintenance)	1					1
AJY ANR With Gap @ 200 Creation	24			2		26
AJY ANR Without Gap (2nd Year Maintenance)	13			3		16
AJY ANR Without Gap (3rd year maintenance)	4					4
AJY ANR Without Gap Creation	10	1		2	1	14
ANR @ 200 - Tall Tree	1					1
ANR @ 200 (2nd Year Maintenance)	53	3		3	1	60
ANR @ 200 (3rd Year Maintenance)	20	1		2	1	24
ANR @ 200 (4th Year Maintenance)	23					23
ANR @ 200 (6th Year Maintenance)	2					2
ANR @ 200 (DWARF)	1					1
ANR @ 200 Creation	82	3	1	3	3	92
ANR @ 400 (2nd Year Maintenance)	2				1	3
ANR @ 400 (3rd Year Maintenance)	1					1
ANR @ 400 Creation	3	1		3	1	8
ANR @ 600 Creation	4					4
ANR @ 800 (2nd year Maintenance)	1					1
ANR @ 800 Creation	1					1
ANR @200 -RET (2nd Year Maintenance)	2					2
ANR Without Gap- RET Species (2nd Year Maintenance)	4			1		5
AR (2nd Year Maintenance)	10					10
AR (3rd Year Maintenance)	12			2		14
AR (4th year Maintenance)	1					1
AR (5th Year Maintenance)	1					1
AR (7th Year Maintenance)	1					1
AR Plantation	31			2		33
AR Plantation (DWARF)	2					2
Avenue Plantation	1		1			2
Bald Hill Plantation	26		3	1	1	31
Bald Hill Plantation (2nd year Maintenance)	12					12
Bald Hill Plantation (3rd year Maintenance)	1					1
Bald Hill Plantation (4th year Maintenance)	5	1				6
Food & Fodder Plantation (4th Year Maintenance)	1					1
Food and fodder Plantation	3					3
Food and fodder Plantation (2nd year Maintenance)	6					6
Food and fodder Plantation (3rd Year Maintenance)	1					1
Urban Plantation			1			1
Urban Plantation (2nd Year Maintenance)	1		1			2
Total	367	10	7	24	9	417



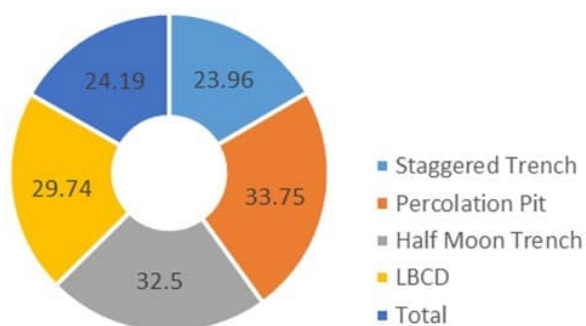
3.12 Extent of Siltation:

In different plantation sites, SMC works have been taken up to arrest topsoil erosion and improve soil moisture regime. It is observed that the created structures have been beneficial in minimizing soil erosion in the sites by arresting it in-situ. In case of half / full moon trenches, percentage of soil deposit is higher in comparison to other structures. Further, by plantation types, reduction in extent of siltation observed comparatively higher in case of Urban Plantation than other type of plantations.

Table 19: Extent of Siltation

Extent of Siltation (%)	No.	Mean	Minimum	Maximum
SMC- Staggered Trench	342	23.96	0.10	90.00
SMC- Percolation Pit	8	33.75	20.00	60.00
SMC-Half Moon Trench	4	32.50	15.00	80.00
SMC- LBCD	19	29.74	10.00	60.00
Total	373	24.19	0.10	90.00

Average Siltation (%)



Maximum Siltation (%)

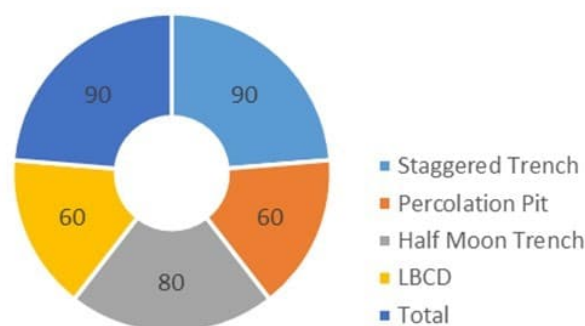


Figure 8: Siltation / Sediment Deposit (%)

3.13 Canopy Cover:

As the plants are at their early stages of growth, average canopy cover; irrespective of plantation types, year of plantation and species found to be 32.66 percent (plantation year 2021-22). Canopy cover found to be relatively higher for the plantations taken up in previous years, but maintenance support provided during the APO 2021-22. Difference in canopy cover observed in different plantation sites for the same year of plantation as it is dependent upon micro climatic and ecosystem conditions along with type of species planted.

Table 20: Canopy Cover (%) by Year of Plantation

Year of Plantation	No. of Sites	Mean	Minimum	Maximum
2015-16	2	70.0	70.0	70.0
2016-17	2	55.0	40.0	70.0
2017-18	1	80.0	80.0	80.0
2018-19	34	42.8	10.0	80.0
2019-20	51	39.9	5.0	90.0
2020-21	124	41.0	5.0	90.0
2021-22	217	32.8	5.0	100.0
Total	431	37.2	5.00	100.00

Table 21: Canopy Cover (%) by Component

Component of Plantation	No. of Sites	Mean	Minimum	Maximum
AJY	57	47.4	5.0	80.0
CA/PCA	60	32.8	5.0	80.0
NPV 80%	306	36.0	5.0	100.0
SSWLMP	8	40.4	15.0	60.0
Total	431	37.2	5.00	100.00



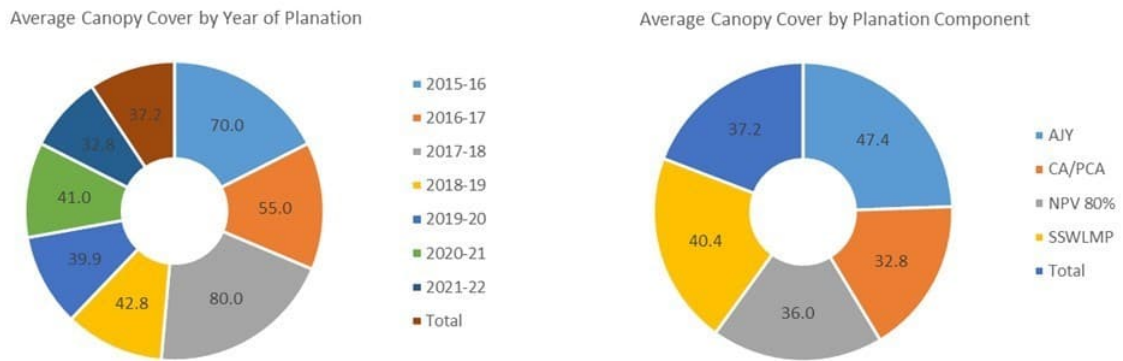


Figure 9: Canopy Cover by Year and Component (%)

Table 22: Canopy Cover by Plantation Models

Type of Plantation	No. of Sites	Mean	Min	Max
AJY ANR @ 200 (2nd Year Maintenance)	1	25.0	25.0	25.0
AJY ANR With Gap @ 200 Creation	26	30.8	5.0	60.0
AJY ANR Without Gap (2nd Year Maintenance)	14	66.1	40.0	80.0
AJY ANR Without Gap (3rd year maintenance)	4	60.0	50.0	70.0
AJY ANR Without Gap Creation	12	59.2	40.0	80.0
ANR @ 200 - Tall Tree	1	10.0	10.0	10.0
ANR @ 200 (2nd Year Maintenance)	57	36.5	10.0	70.0
ANR @ 200 (3rd Year Maintenance)	24	37.3	10.0	80.0
ANR @ 200 (4th Year Maintenance)	24	43.1	10.0	80.0
ANR @ 200 (6th Year Maintenance)	2	55.0	40.0	70.0
ANR @ 200 (DWARF)	1	40.0	40.0	40.0
ANR @ 200 Creation	84	30.3	5.0	70.0
ANR @ 400 (2nd Year Maintenance)	2	35.0	10.0	60.0
ANR @ 400 (3rd Year Maintenance)	1	35.0	35.0	35.0
ANR @ 400 (4th Year Maintenance)	1	50.0	50.0	50.0
ANR @ 400 Creation	4	44.3	22.0	65.0
ANR @ 600 (3rd Year Maintenance)	1	45.0	45.0	45.0
ANR @ 600 Creation	4	21.3	10.0	40.0
ANR @ 800 (2nd year Maintenance)	1	40.0	40.0	40.0
ANR @ 800 Creation	1	25.0	25.0	25.0
ANR @200 -RET (2nd Year Maintenance)	2	30.0	30.0	30.0
ANR Without Gap- RET Species (2nd Year Maintenance)	6	60.0	40.0	80.0
ANR Without Gap- RET Species (Creation)	2	70.0	70.0	70.0
AR (2nd Year Maintenance)	14	38.6	5.0	70.0
AR (3rd Year Maintenance)	16	35.0	5.0	90.0
AR (4th year Maintenance)	1	25.0	25.0	25.0
AR (4th Year Maintenance)	1	75.0	75.0	75.0
AR (5th Year Maintenance)	1	80.0	80.0	80.0
AR (7th Year Maintenance)	2	70.0	70.0	70.0
AR Plantation	39	26.0	5.0	65.0
AR Plantation (DWARF)	2	25.0	10.0	40.0
Avenue Plantation	2	17.5	15.0	20.0
Avenue Plantation (2nd Year Maintenance)	1	15.0	15.0	15.0
Avenue Plantation (4th year maintenance)	1	10.0	10.0	10.0
Bald hill plantation	3	13.3	10.0	20.0
Bald Hill Plantation	24	28.2	10.0	70.0
Bald Hill Plantation (2nd year Maintenance)	10	40.5	10.0	70.0

Type of Plantation	Canopy Coverage (%)			
	No. of Sites	Mean	Min	Max
Bald Hill Plantation (3rd year Maintenance)	1	40.0	40.0	40.0
Bald Hill Plantation (4th year Maintenance)	5	40.0	20.0	65.0
Cannel Bank Avenue Plantation (3rd Year Maintenance)	1	40.0	40.0	40.0
Food & Fodder Plantation (2nd Year Maintenance)	2	14.0	13.0	15.0
Food & Fodder Plantation (4th Year Maintenance)	1	60.0	60.0	60.0
Food and fodder Plantation	3	25.0	10.0	50.0
Food and fodder Plantation (2nd year Maintenance)	11	32.5	10.0	60.0
Food and fodder Plantation (3rd Year Maintenance)	1	40.0	40.0	40.0
Miyawaki Plantation	8	85.6	40.0	100.0
Miyawaki Plantation (2nd Year Maintenance)	2	85.0	80.0	90.0
Miyawaki Plantation (3rd year maintenance)	1	90.0	90.0	90.0
Urban Plantation	1	10.0	10.0	10.0
Urban Plantation (2nd Year Maintenance)	1	10.0	10.0	10.0
Urban Plantation (3rd Year Maintenance)	1	50.0	50.0	50.0
Total	431	37.2	5.0	100.0

Table 23: Canopy Cover (%) of 2021-22 Plantation

Plantation Models (2021-22)	No. of Sites	Mean	Min.	Max.
AJY ANR With Gap @ 200 Creation	26	30.8	5.0	60.0
AJY ANR Without Gap Creation	12	59.2	40.0	80.0
ANR @ 200 - Tall Tree	1	10.0	10.0	10.0
ANR @ 200 (DWARF)	1	40.0	40.0	40.0
ANR @ 200 Creation	84	30.3	5.0	70.0
ANR @ 400 Creation	4	44.3	22.0	65.0
ANR @ 600 Creation	4	21.3	10.0	40.0
ANR @ 800 Creation	1	25.0	25.0	25.0
ANR Without Gap- RET Species (Creation)	2	70.0	70.0	70.0
AR Plantation	39	26.0	5.0	65.0
AR Plantation (DWARF)	2	25.0	10.0	40.0
Avenue Plantation	2	17.5	15.0	20.0
Bald hill plantation	3	13.3	10.0	20.0
Bald Hill Plantation	24	28.2	10.0	70.0
Food and fodder Plantation	3	25.0	10.0	50.0
Miyawaki Plantation	8	85.6	40.0	100.0
Urban Plantation	1	10.0	10.0	10.0
Total	217	32.8	5.0	100.0

3.14 Plant Protection Measures:

Different plant protection measures were taken to ensure greater survival of plants and protecting it from animals and other type of damages. Among the protection measures, “watch and ward” is the most common (98.6 percent) method adopted in different sites. Other plant protection measures taken are green fencing (5.1 percent), barbed fencing (25.8 percent), bamboo / twig fencing (20.4 percent), and cow foot trench (1.2 percent). Solar fencing (0.5 percent) and stone fencing (0.9 percent) are also observed in specific sites.

Table 24: Plant Protection Measures by Plantation Models (% Sites)

Plantation Models (2021-22)	Watch & Ward	Green Fencing	Barbed Fencing	Bamboo / Twig Fencing	Stone Fencing	Solar Fencing	Cow Foot Trench	Other
AJY ANR With Gap @ 200 Creation	100.0	7.7	23.1	15.4	-	-	-	-
AJY ANR Without Gap Creation	100.0	-	-	-	-	-	-	-
ANR @ 200 - Tall Tree	100.0	100.0	-	-	-	-	-	-
ANR @ 200 (DWARF)	100.0	-	100.0	-	-	-	-	-

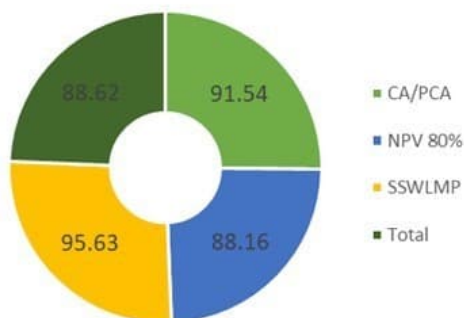


Plantation Models (2021-22)	Watch & Ward	Green Fencing	Barbed Fencing	Bamboo / Twig Fencing	Stone Fencing	Solar Fencing	Cow Foot Trench	Other
ANR @ 200 Creation	100.0	8.3	17.9	25.0	2.4	-	1.2	-
ANR @ 400 Creation	100.0	-	25.0	25.0	-	-	50.0	-
ANR @ 600 Creation	100.0	-	-	25.0	-	-	-	-
ANR @ 800 Creation	100.0	-	-	100.0	-	-	-	-
ANR Without Gap- RET Species (2nd Year Maintenance)	100.0	-	-	-	-	-	-	-
ANR Without Gap- RET Species (Creation)	100.0	-	100.0	-	-	-	-	-
AR Plantation	100.0	5.1	33.3	43.6	-	-	-	-
AR Plantation (DWARF)	100.0	-	100.0	-	-	-	-	-
Avenue Plantation	100.0	-	-	-	-	-	-	50.0
Bald Hill Plantation	100.0	29.6	44.4	37.0	3.7	-	-	-
Bald Hill Plantation (2nd year Maintenance)	100.0	-	100.0	-	-	-	-	-
Food and fodder Plantation	100.0	-	66.7	33.3	-	-	-	-
Miyawaki Plantation	87.5	-	62.5	12.5	-	-	-	-
Urban Plantation	100.0	-	-	-	-	-	-	-

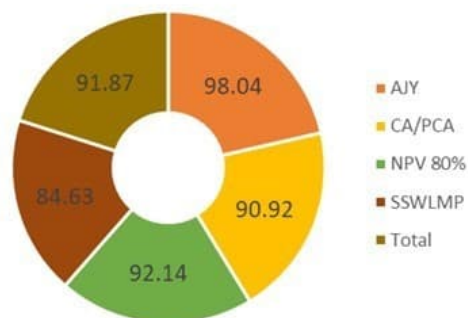
3.15 Plant Survival Rate:

Plant survival rate varies by type of plantation, year of plantation and by forest division / range. Overall plant survival rate, irrespective of new plantation or maintenance, covering all these parameters, found to be 92.69 percent, with highest survival in Bhadrak WL (98.46 percent) and lowest in Sambalpur (80.94 percent). Irrespective of plantation categories, plant survival rate found to be 92.69 percent, based on plot specific assessment. In some plots, no casualty is observed after replacement.

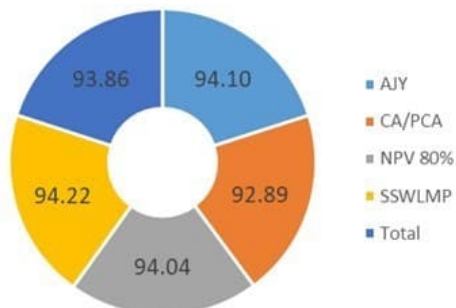
Plant Survival Rate, Plantation of 2019-20



Plant Survival Rate, Plantation of 2020-21



Plant Survival Rate, Plantation of 2021-22



Plant Survival Rate

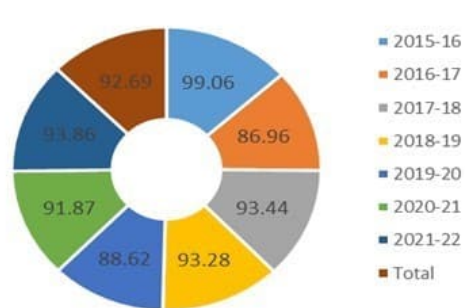


Figure 10: Plant Survival by Plantation Year



Table 25: Plant Survival Rate

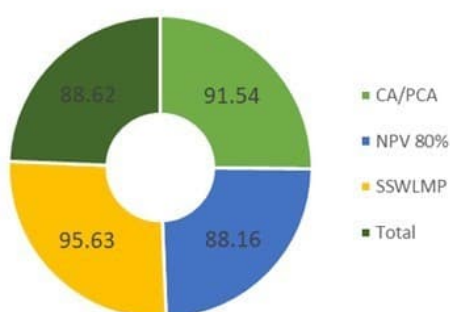
Division	2018-19	2019-20	2020-21	2021-22
Angul	86.7	89.9	94.6	93.3
Athagarh			91.6	91.9
Athamallik	93.4	93.8	96.9	96.8
Balangir		91.7	92.7	91.8
Balasore WL			90.3	91.7
Baliguda	95.7	92.9	94.6	95
Bamra WL	88		93.6	93
Baragarh			84.2	89.2
Baripada	94.7	95.2	97.8	96.2
Berhampur	96.9		96.9	97
Bhadrakh WL			96.9	100
Bonai			93	95.8
Boudh	93.4	92.7	93.7	93.9
Chandaka			95	94.4
Chilika WL	84.1	73.2	84.1	87.7
CT FD, BBSR	76.9			96.7
Cuttack		93.4	91.2	93.1
Deogarh		68.3	79.8	92.6
Dhenkanal		87.7	93.7	93.5
Ghumsar (S)		96.3	95.5	96.1
Ghumsar (N)		95.9	95.5	96.5
Jeypore			93.8	92.7
Jharsuguda	72.3	74.8	76	91.7
Kalahandi (S)			90	91.1
Kalahandi(N)	94.4		94.1	93.1
Karanjia	93.8	91.4	90.8	92.7
Keonjhar		95	95.9	83.2
Keonjhar WL	96.9	87.5		93.5
Khariar	95.6	81.5	98.4	98.2
Khordha	94.4	86.7	87.7	92.7
Koraput		91.7	91.2	93.1
Malkangiri		78.3	68.5	88.1
Nabarangpur		74	93.9	97.1
Nayagarh		81	78.4	91.9
Paralakemundi		95.1	96.5	96.1
Phulbani			84.5	95.6
Puri WL		90.7	87.5	87.6
Rairakhhol		90.4	90.6	92.7
Rairangpur	91.4	94.3	96.1	96.8
Rajnagar WL	97.9		95.3	95.6
Rayagada	92		96.1	94.5
Rourkela		87.7	82.9	93.5



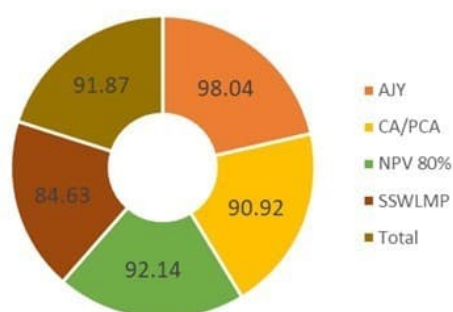
Division	2018-19	2019-20	2020-21	2021-22
Sambalpur		74.7	81	79.8
Subarnapur		90.1	94.9	93
Sunabeda WL			95.1	95.5
Sundargarh	92	94.9	94.8	96
Total	92.1	88.2	91.2	93.2

Survival rate of plants in different plantation sites and by forest division / ranges differs by type of plantation. Division wise plant survival rate is presented in the matrix.

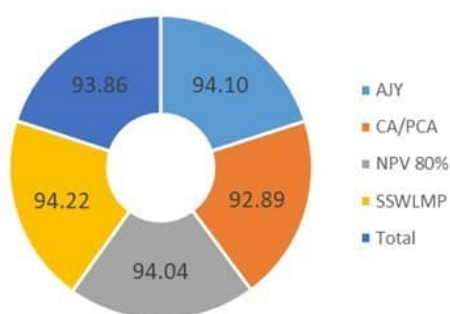
Plant Survival Rate, Plantation of 2019-20



Plant Survival Rate, Plantation of 2020-21



Plant Survival Rate, Plantation of 2021-22



Plant Survival Rate

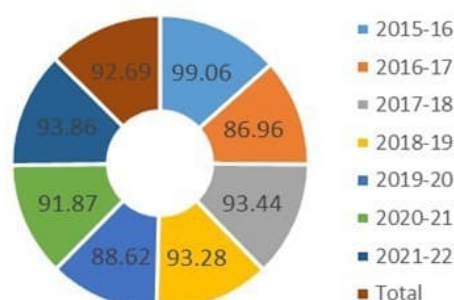
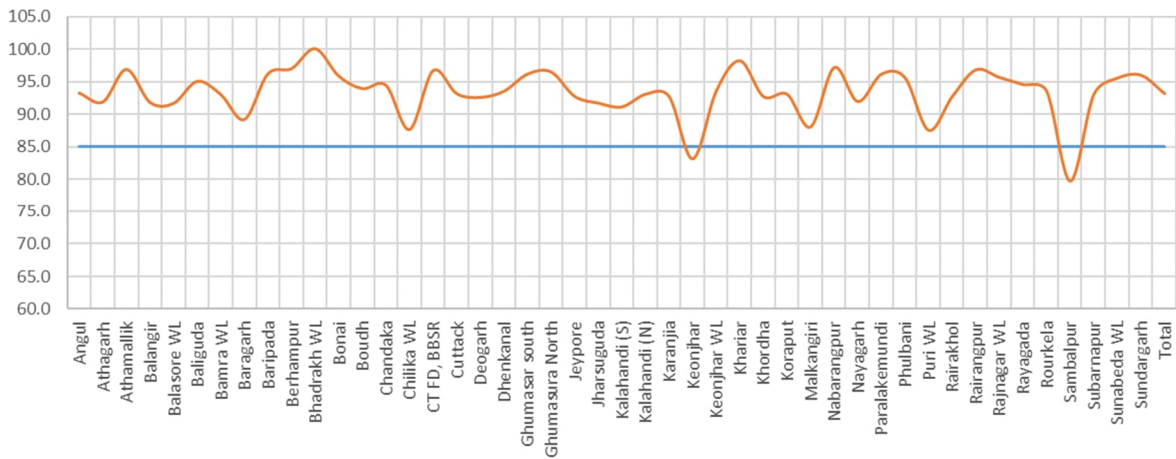


Figure 11: Plant Survival Rate (%)

Based on the rate of survival, plantation sites were grouped in to two broad categories, i.e., survival rate above and below the 85.0 percent benchmark, and 90.0 percent benchmark. Of the total 46 divisions, three wo divisions reflect plant survival below 85.0 percent, i.e., Sambalpur (80.94 percent), Chilika WL (84.09 percent), and Deogarh (83.18 percent). Excluding Sambalpur, Chilika, and Deogarh, there are 6 other divisions where plant survival is below 90.0 percent, i.e., Bargarh (88.12 percent), Jharsuguda (85.92 percent), Karanjia (89.63 percent), Malkangiri (88.81 percent), Nayagarh (88.45 percent), and Puri WL (87.96 percent).



Plant Survival Rate (%) by FD: 2021-22 (Benchmark: 85%)



Plant Survival Rate (%) by FD: 2021-22 (Benchmark: 90%)

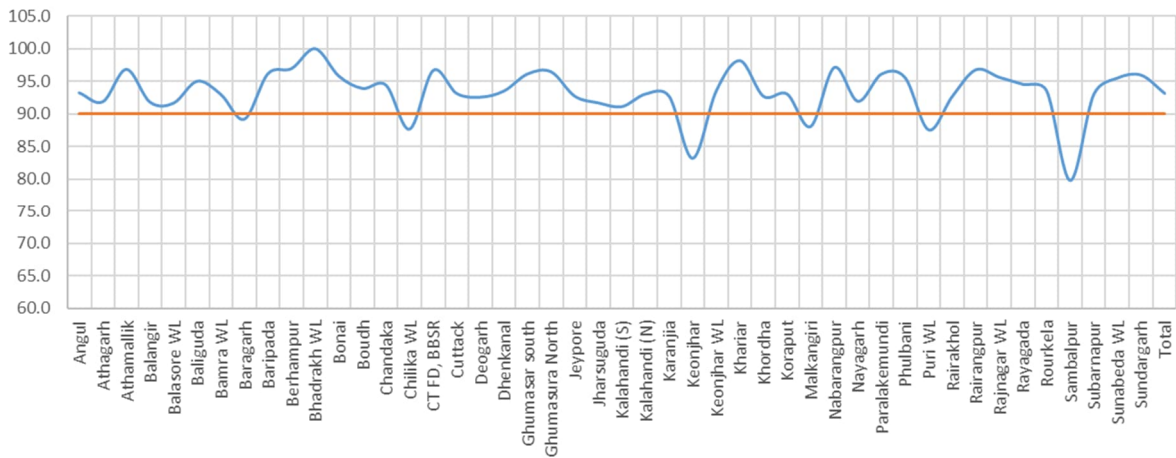


Figure 12: Plant Survival Rate; 85 % & 90 % Benchmark



Plant Survival Rate by Plantation Models, 2021-22

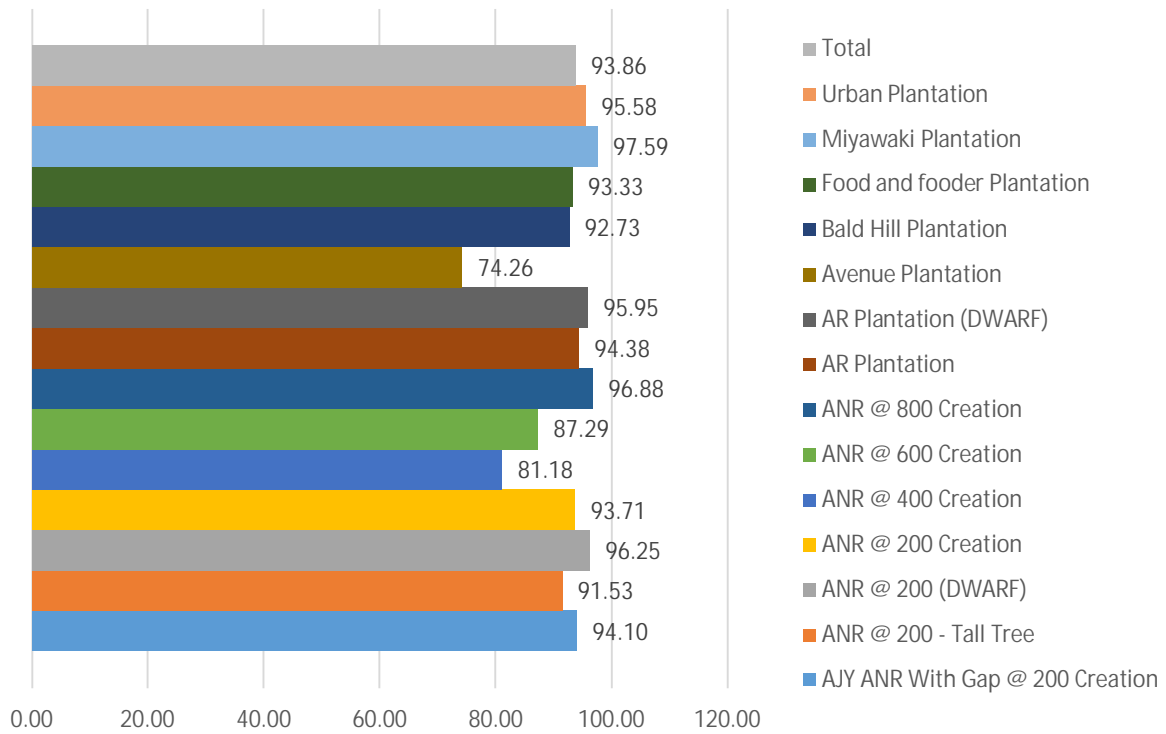
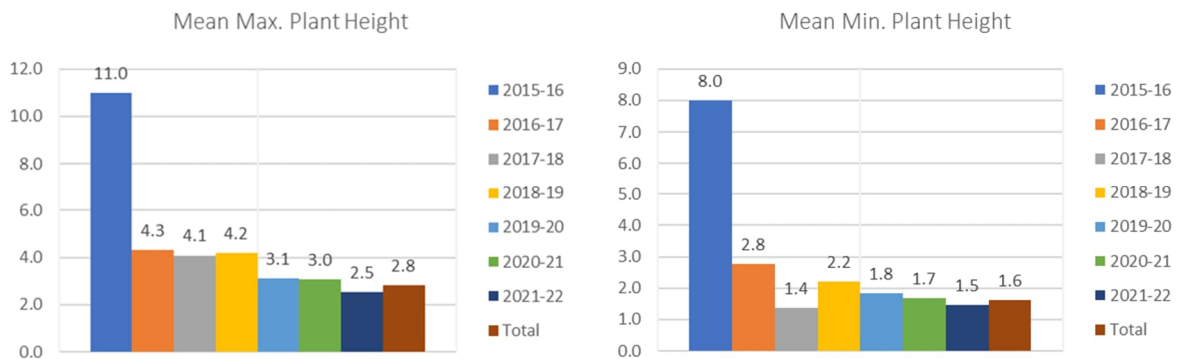


Figure 13: Plant Survival by Plantation Models

3.16 Height of Plants:

In different sample plots of selected sites, height and GBH / GCH of plants were measured to understand the growth of plants. The growth of the plants normally varies by plant types and dependent upon several additional factors like soil profile of the plantation sites, suitability of local environment for the growth of the plants, soil-moisture conditions etc. The mean maximum height of the plants planted in 2021-22 found differing by species across different plantation models. For plantation activities taken up during 2021-22, the mean maximum height of the plants, irrespective of other parameters, i.e., plantation models, forest division, forest range, plant type etc. found to be 2.5 meter, and the mean minimum height measured to be 1.5 meter.



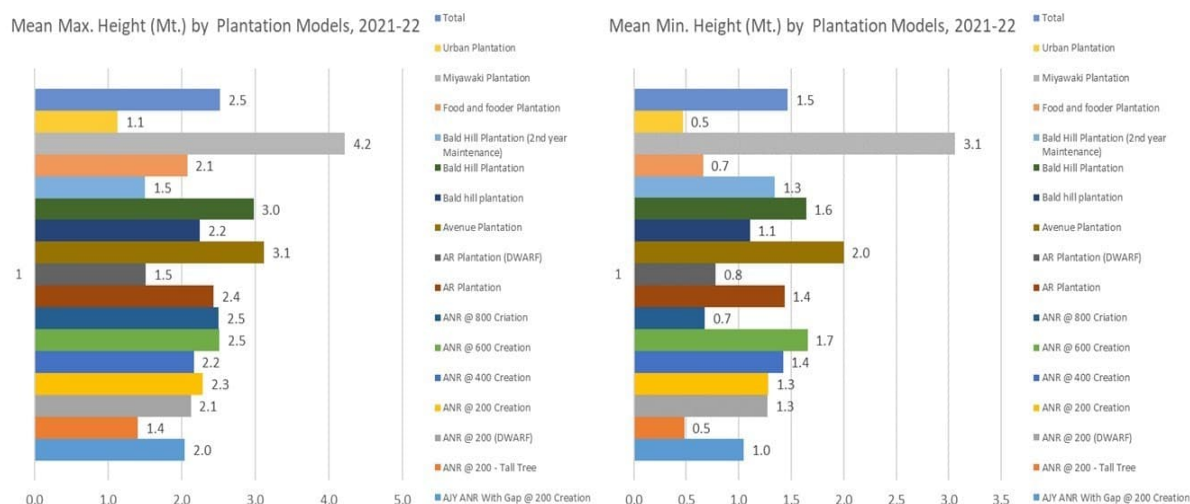


Figure 14: Plant Height

3.16.1 Plant Height by Plantation / Maintenance Year:

Height of plants by year of plantation reflects gradual decrease in height of the plants by year of plantation, irrespective of plant species and type of plantation, excluding the year 2018-19. The mean maximum height of the plans planted maintained in the year 2018-19 seems to have better growth in comparison to plants planed in 2016-17 and 2017-18. As soil characteristics along with environment / climatic factors play an important role in growth of the plants, along with age of the seedling / sapling, still It can be assumed that better care has been helpful to ensure a better growth of plants.

Table 26: Plant Height by Plantation / Maintenance Year

Plantation / Maintenance Year	Mean Max. Height (Mt.)	Mean Min. Height (Mt.)
2015-16	11.0	8.0
2016-17	4.3	2.8
2017-18	4.1	1.4
2018-19	4.2	2.2
2019-20	3.1	1.8
2020-21	3.0	1.7
2021-22	2.5	1.5
Total	2.8	1.6



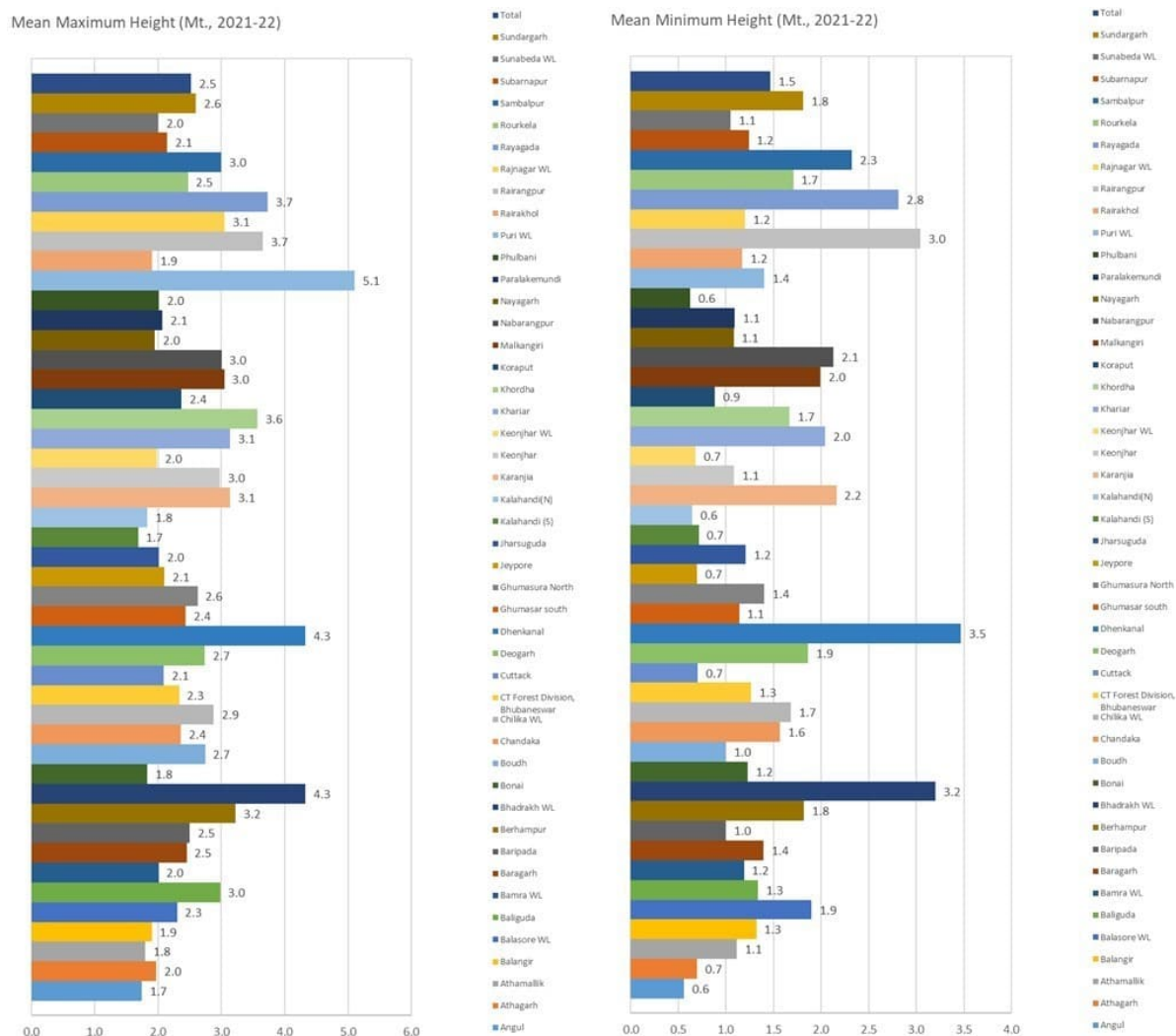


Figure 15: Plant Height, 2021-22 Plantation

Table 27: Height of Plants in Different Sites

Type of Plantation	Mean Max. Height (Mt.)	Mean Min. Height (Mt.)
AJY ANR @ 200 Creation	1.7	0.6
AJY ANR Plantation @ 200	1.9	1.1
ANR @ 200 Creation	2.4	1.3
ANR @ 200 Creation (RET Species)	3.0	0.5
ANR @ 200 With Gap Plantation	1.2	0.9
ANR Plantation @ 200	2.6	1.1
ANR Plantation @ 200 (2nd Year Maintenance)	2.5	1.6
ANR Plantation @ 200 (3rd Year Maintenance)	4.4	2.9
ANR Plantation @ 200 (4th Year Maintenance)	4.2	2.3
ANR Plantation @ 400	1.7	1.0
ANR Plantation @ 600	2.2	1.0
AR Plantation	2.5	1.4
AR Plantation (2nd Year Maintenance)	4.1	2.3
AR Plantation (3rd Year Maintenance)	3.0	2.3



Type of Plantation	Mean Max. Height (Mt.)	Mean Min. Height (Mt.)
AR Plantation (7th Year Maintenance)	14.0	13.0
Avenue Plantation	3.5	4.2
Bald Hill Plantation	3.6	1.6
Bald Hill Plantation (4th Year Maintenance)	7.1	3.1
Bamboo Plantation (3rd Year Maintenance)	6.0	3.0
CA ANR @ 200 Creation	1.5	1.0
CA ANR Plantation @ 200 (2nd Year Maintenance)	2.9	0.7
CA ANR Plantation @ 200	4.5	1.2
CA ANR Plantation @ 200 (2nd Year Maintenance)	2.1	1.6
CA ANR Plantation @ 400	2.5	1.7
CA ANR Plantation @ 400 (2nd Year Maintenance)	2.7	1.3
CA ANR Plantation @ 400 (3rd Year Maintenance)	2.6	2.2
CA ANR Plantation @ 600	2.8	2.1
CA ANR Plantation @ 800 (2nd year Maintenance)	2.4	1.5
CA AR Plantation	2.1	1.0
CA AR Plantation (5th Year Maintenance)	4.8	1.1
CA Bald Hill Plantation	2.8	1.0
CA Bald Hill Plantation (2nd Year Plantation)	3.5	2.8
Fruit & Fodder Plantation	1.5	1.0
Fruit & Fodder Plantation (2nd Year Maintenance)	3.7	2.4
Fruit & Fodder Plantation (4th Year Maintenance)	5.3	2.7
Miyawaki Plantation	4.2	3.2
Protection of RET species, 2nd year maintenance	3.2	2.7
Urban Plantation	12.2	1.5
Total	3.0	1.6

3.17 Plant GBH / GCH:

Like height of the plants, GBH / GCH of the plants also vary by year, mode of plantation and type of species. Mean maximum GBH / GCH of the plant, irrespective of year of plantation. Mode of plantation, and species found to be 14.0 cm and mean minimum GBH / GCH found to be 8.4 cm. Similarly, mean maximum, and mean minimum GBH / GCH of the plants planted in the year 2021-22 found to be 12.5 cm and 7.8 cm respectively. Plants under maintenance for previous year plantation found to be higher than plants of 2021-22 for obvious reasons of age of the plant. The mean maximum and minimum GBH / GCH of the plants, irrespective of species by plantation categories and model of plantation is presented in figure.

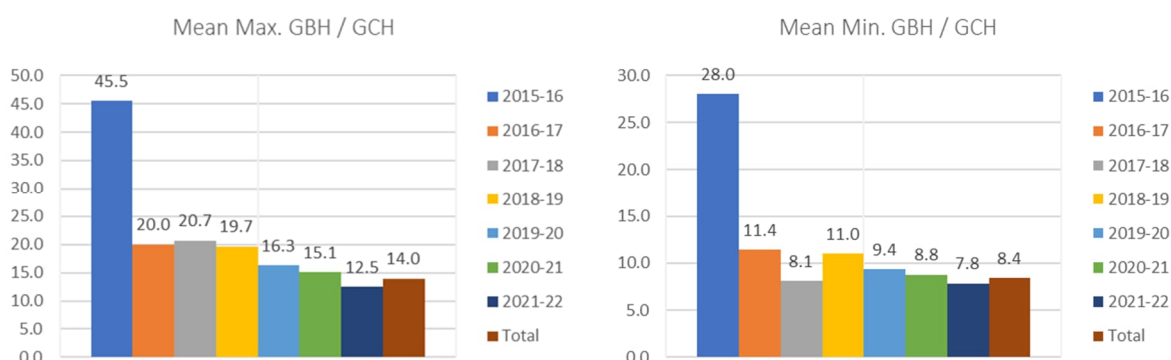
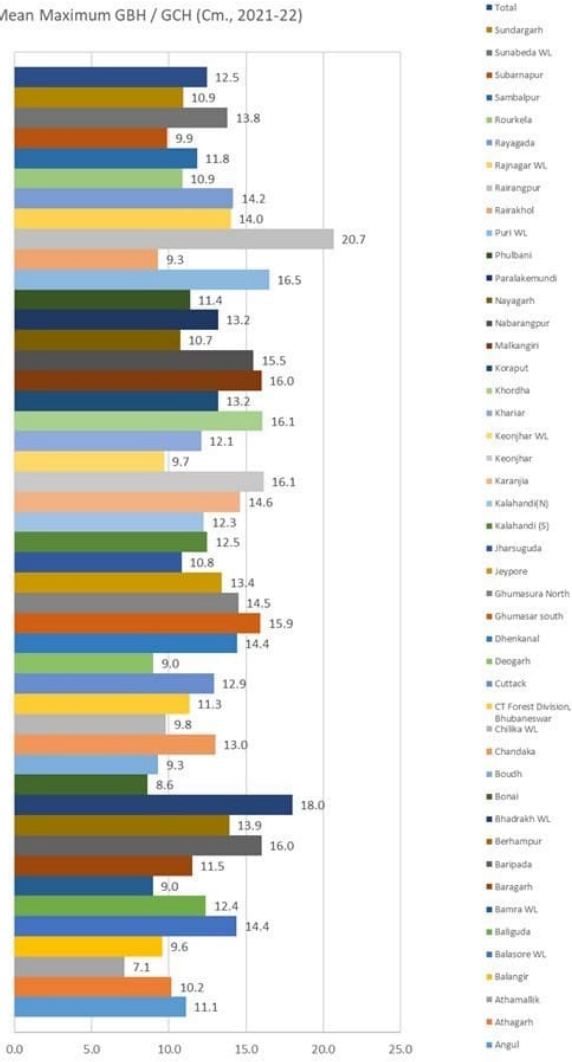


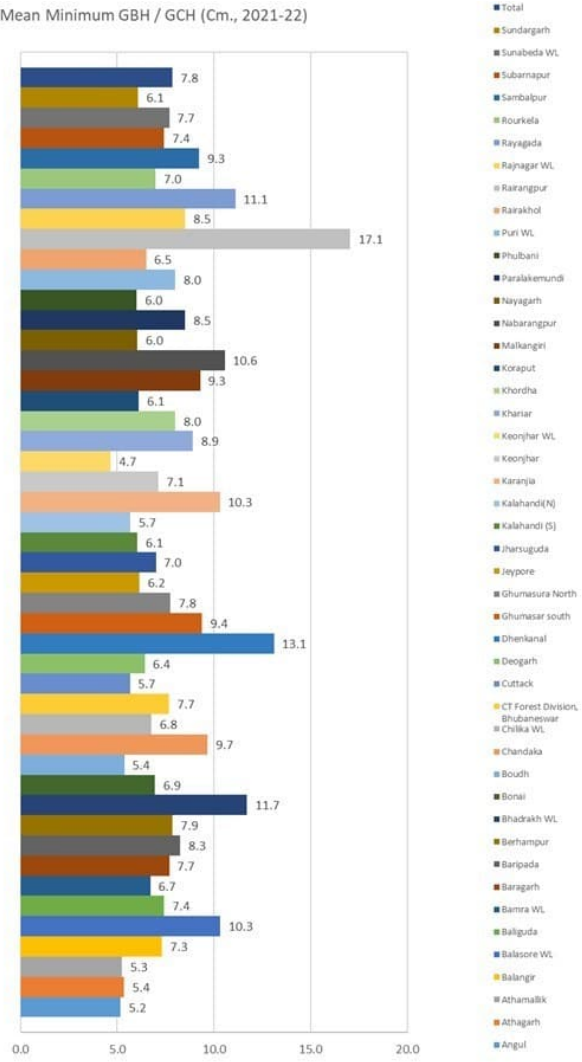
Figure 16: Mean Maximum & Minimum GBH / GCH



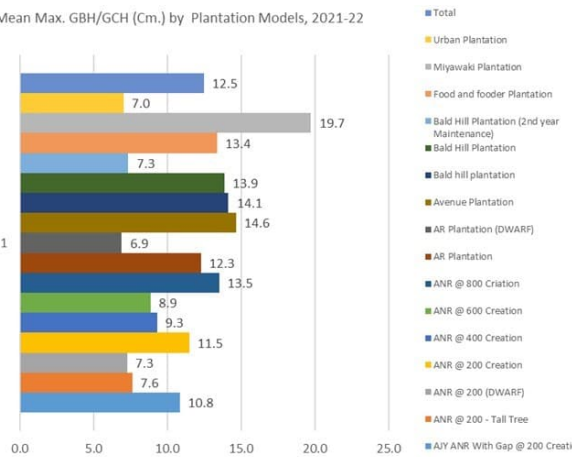
Mean Maximum GBH / GCH (Cm., 2021-22)



Mean Minimum GBH / GCH (Cm., 2021-22)



Mean Max. GBH/GCH (Cm.) by Plantation Models, 2021-22



Mean Min. GBH/GCH (Cm.) by Plantation Models, 2021-22

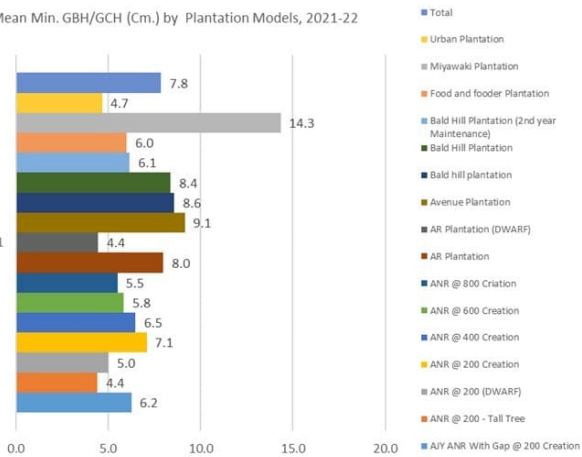


Figure 17: Plant GBH / GCH



3.17.1 Plant GBH / GCH by Plantation / Maintenance Year:

GBH / GCH of plants by year of plantation reflects gradual decrease in grith of the plants by year of plantation, irrespective of plant species and type of plantation, excluding the year 2017-18 and 2018-19. The mean maximum GBH found for the plantation / maintenance for the year 2015-16 and lowest for 2021-22.

Table 28: Plant GBH / GCH by Plantation / Maintenance Year

Plantation / Maintenance Year	Mean Max GBH/ GCH (Cm)	Mean Min. GBH/GCH (Cm)
2015-16	45.5	28.0
2016-17	20.0	11.4
2017-18	20.7	8.1
2018-19	19.7	11.0
2019-20	16.3	9.4
2020-21	15.1	8.8
2021-22	12.5	7.8
Total	14.0	8.4

Table 29: Plant Height and GBH / GCH

Plantation Model (2021-22)	Mean Max. Height (Mt.)	Mean Min. Height (Mt.)	Mean Max GBH/ CBH (cm)	Mean Min. GBH / CBH (cm)
AJY ANR With Gap @ 200 Creation	2.0	1.0	10.8	6.2
ANR @ 200 - Tall Tree	1.4	0.5	7.6	4.4
ANR @ 200 (DWARF)	2.1	1.3	7.3	5.0
ANR @ 200 Creation	2.3	1.3	11.5	7.1
ANR @ 400 Creation	2.2	1.4	9.3	6.5
ANR @ 600 Creation	2.5	1.7	8.9	5.8
ANR @ 800 Creation	2.5	0.7	13.5	5.5
AR Plantation	2.4	1.4	12.3	8.0
AR Plantation (DWARF)	1.5	0.8	6.9	4.4
Avenue Plantation	3.1	2.0	14.6	9.1
Bald hill plantation	2.2	1.1	14.1	8.6
Bald Hill Plantation	3.0	1.6	13.9	8.4
Bald Hill Plantation (2nd year Maintenance)	1.5	1.3	7.3	6.1
Food and fodder Plantation	2.1	0.7	13.4	6.0
Miyawaki Plantation	4.2	3.1	19.7	14.3
Urban Plantation	1.1	0.5	7.0	4.7
Total	2.5	1.5	12.5	7.8

Table 30: Plant Height and GBH / GCH by FD

Forest Division (Plantation 2021-22)	Max. Height (Mt.)	Min. Height (Mt.)	Max GBH/ CBH (cm)	Min. GBH/CBH (cm)
Angul	1.7	0.6	11.1	5.2
Athagarh	2.0	0.7	10.2	5.4
Athamallik	1.8	1.1	7.1	5.3
Balangir	1.9	1.3	9.6	7.3
Balasore WL	2.3	1.9	14.4	10.3
Baliguda	3.0	1.3	12.4	7.4
Bamra WL	2.0	1.2	9.0	6.7
Baragarh	2.5	1.4	11.5	7.7
Baripada	2.5	1.0	16.0	8.3
Berhampur	3.2	1.8	13.9	7.9
Bhadrakh WL	4.3	3.2	18.0	11.7
Bonai	1.8	1.2	8.6	6.9
Boudh	2.7	1.0	9.3	5.4
Chandaka	2.4	1.6	13.0	9.7
Chilika WL	2.9	1.7	9.8	6.8



Forest Division (Plantation 2021-22)	Max. Height (Mt.)	Min. Height (Mt.)	Max GBH/ CBH (cm)	Min. GBH/CBH (cm)
CT FD, BBSR	2.3	1.3	11.3	7.7
Cuttack	2.1	0.7	12.9	5.7
Deogarh	2.7	1.9	9.0	6.4
Dhenkanal	4.3	3.5	14.4	13.1
Ghumasar south	2.4	1.1	15.9	9.4
Ghumasura North	2.6	1.4	14.5	7.8
Jeypore	2.1	0.7	13.4	6.2
Jharsuguda	2.0	1.2	10.8	7.0
Kalahandi (S)	1.7	0.7	12.5	6.1
Kalahandi(N)	1.8	0.6	12.3	5.7
Karanja	3.1	2.2	14.6	10.3
Keonjhar	3.0	1.1	16.1	7.1
Keonjhar WL	2.0	0.7	9.7	4.7
Khariar	3.1	2.0	12.1	8.9
Khordha	3.6	1.7	16.1	8.0
Koraput	2.4	0.9	13.2	6.1
Malkangiri	3.0	2.0	16.0	9.3
Nabarangpur	3.0	2.1	15.5	10.6
Nayagarh	2.0	1.1	10.7	6.0
Paralakemundi	2.1	1.1	13.2	8.5
Phulbani	2.0	0.6	11.4	6.0
Puri WL	5.1	1.4	16.5	8.0
Rairakhol	1.9	1.2	9.3	6.5
Rairangpur	3.7	3.0	20.7	17.1
Rajnagar WL	3.1	1.2	14.0	8.5
Rayagada	3.7	2.8	14.2	11.1
Rourkela	2.5	1.7	10.9	7.0
Sambalpur	3.0	2.3	11.8	9.3
Subarnapur	2.1	1.2	9.9	7.4
Sunabeda WL	2.0	1.1	13.8	7.7
Sundargarh	2.6	1.8	10.9	6.1
Total	2.5	1.5	12.5	7.8

3.18 Natural Species:

In the plantation sites, growth of different nature species was observed like Akasia, Bada Chakunda, Bamboo, Fashi, Gambhari, Jamu, Karanja etc. Average number of natural species observed is 8 which varies by site. Type of natural species observed by category of plantation are presented in the matrix.

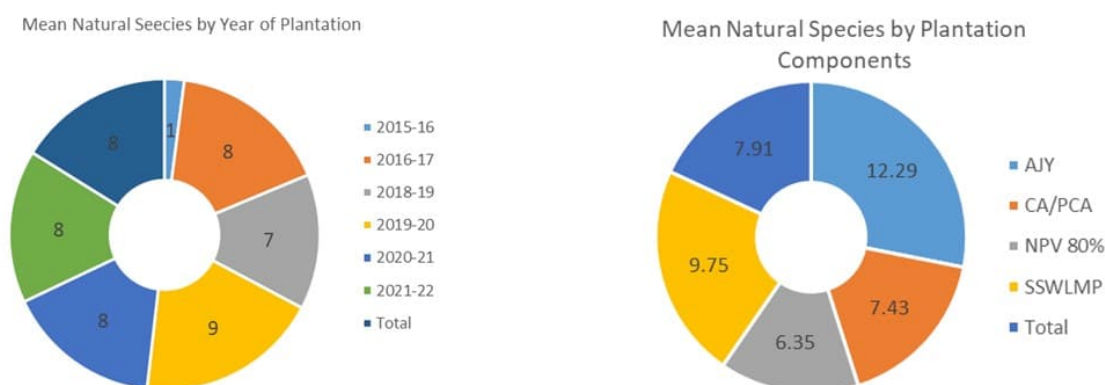


Figure 18: Average Natural Species by Plantation Components



Natural species observed in most of the sites where ANR activities have been taken up. Natural species also observed in different other sites like bald hill plantation, Miyawaki, sites under maintenance (different years) and in AR sites. Average number of natural species, irrespective of site characteristics (creation maintenance) and model of plantation, found to be 8. Average number of natural species in ANR Without Gap, RET Species (Creation) found to be high, i.e., about 54. Natural species that are witnessed in different sites are like Acacia, Amla, Arjuna, Ashana, Sisoo, Chakunda etc.

Table 31: Natural Species in Assessed Sites

SN	Natural Species	Mean No. of Plants	SN	Natural Species	Mean No. of Plants
1	Acacia	7	56	Khaira	8
2	Amla	9	57	Khajuri	5
3	Anchhu	9	58	Khakada	5
4	Arjuna	6	59	Khira	7
5	Ashana	7	60	Kirchi	2
6	Ashoka	5	61	Kochila	2
7	Aswastha	4	62	Kumbhui	3
8	Ata	3	63	Kumkum	2
9	Babul	3	64	Kurein	6
10	Bahada	5	65	Kusuma	6
11	Bali Sisoo	6	66	Mahaneem	7
12	Bamboo	5	67	Mahasindhu	6
13	Bandhan	63	68	Mahula	5
14	Bani	18	69	Mango	4
15	Bara	1	70	Mankadakendu	5
16	Barada	3	71	Masuri	1
17	Baramukulia	7	72	Mayee	8
18	Bela	5	73	Mehegani	5
19	Bhalia	5	74	Mundi	7
20	Cashew	8	75	Naruguni	1
21	Casuarina	13	76	Neem	5
22	Chakunda	6	77	Eucalyptus (Hybrid)	6
23	Champa	3	78	Pahadi Sisoo	13
24	Chandan	6	79	Palasa	7
25	Chara	8	80	Patamasu	6
26	Chhena	16	81	Patuli	5
27	Chorla	6	82	Phanphana	6
28	Dhamana	2	83	Phasi	4
29	Dhaura	9	84	Piasal	15
30	Dhauranja	5	85	Pijuli	15
31	Dhoben	13	86	Pipali	6
32	Dimiri	6	87	Radhachuda	10
33	Eucalyptus	11	88	Rahama	12
34	Gambhari	6	89	Rai	9
35	Gangasiuli	8	90	Rohini	9
36	Garani	25	91	Sahada	2
37	Garuda	2	92	Sahaja	11
38	Ghurudu	7	93	Sala	11
39	Gindhapanasa	4	94	Salapa	4
40	Gohira	5	95	Salei	5
41	Halandu	9	96	Sana Chakunda	10
42	harida	5	97	Sidha	7
43	Harida	5	98	Simarua	14
44	Hinjala	28	99	Simili	6
45	Jamu	5	100	Sina	6
46	Jari	1	101	Sindura	8



SN	Natural Species	Mean No. of Plants	SN	Natural Species	Mean No. of Plants
47	Kadamba	3	102	Sirisa	8
48	Kaitha	4	103	Subabul	1
49	Kamalgundi	1	104	Sunari	6
50	Kanchana	11	105	Tala	1
51	Kangada	2	106	Tangini	9
52	Karada	12	107	Teak	20
53	Karanja	4	108	Tentuli	7
54	Kasi	6	109	Veru	8
55	Kendu	6		Total	8

Note: Name of the Plants are as per Local Name



Natural Species (Mean Plants by Plantation Model)

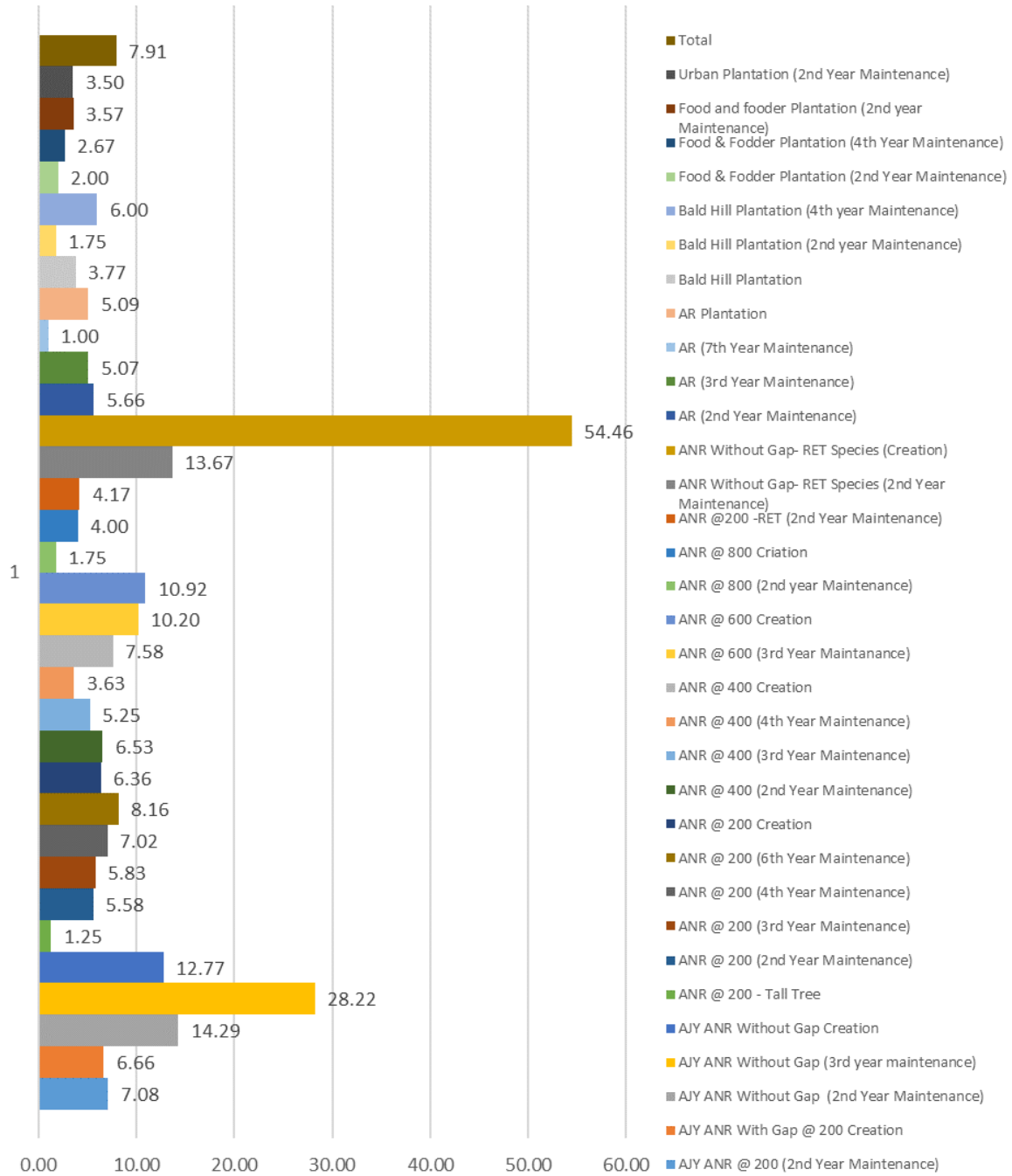


Figure 19: Mean Natural Species Per Site



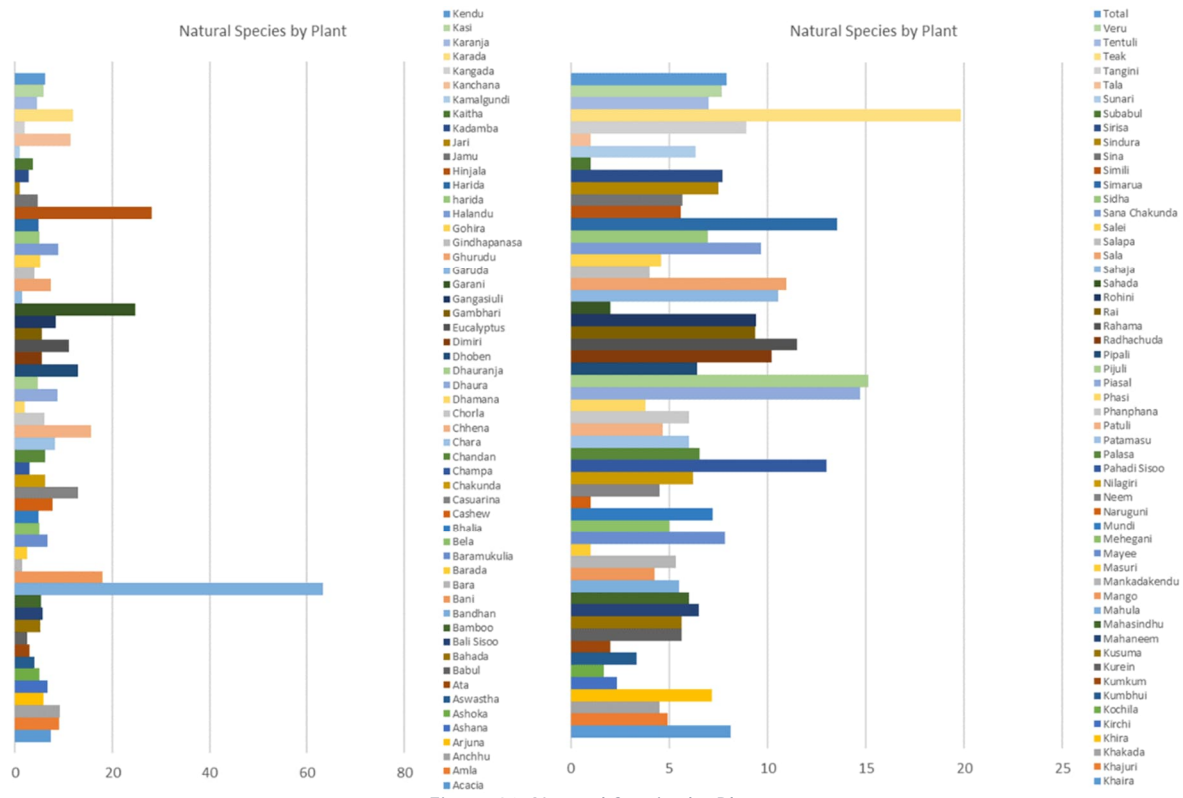
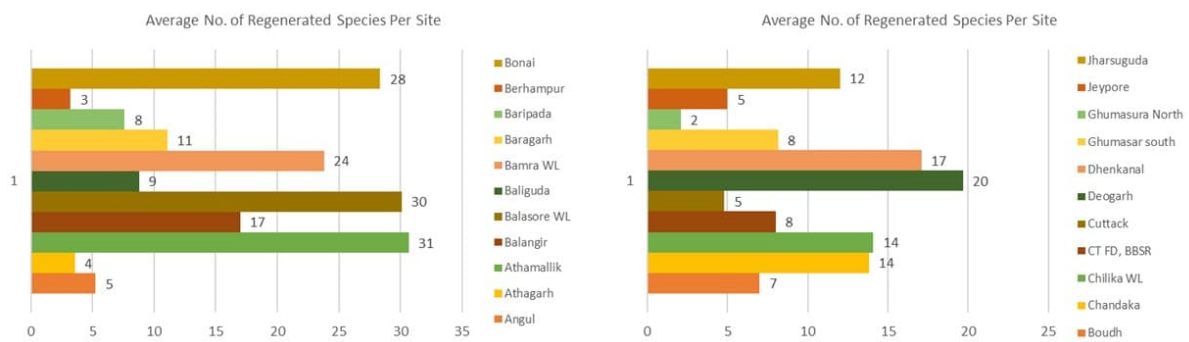


Figure 20: Natural Species by Plant

3.19 Regenerated Species:

Apart from natural species, certain species also found at regenerated stage with different number of coppices in plantation areas. Regenerated species observed in ANR sites, i.e., ANR with gap, ANR without gap, AJY ANR with gap, AJY ANR without gap, and RET ANR without gap. Average number of regenerated species found varying across the sites and by forest divisions and ranges. Average number of regenerated species varies between a minimum of 2 to a maximum of 31, with an average of 14 per site.



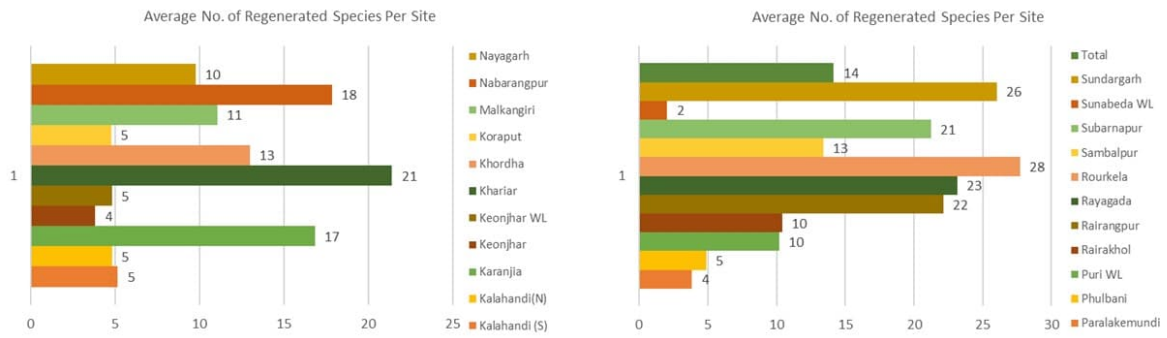


Figure 21: Average No. of Regenerated Species

The assessment also witnessed growth of coppices, ranging between 2-4 on an average per species in ANR sites / plots. It indicates that measures taken under ANR have yield results in terms of regenerating species.

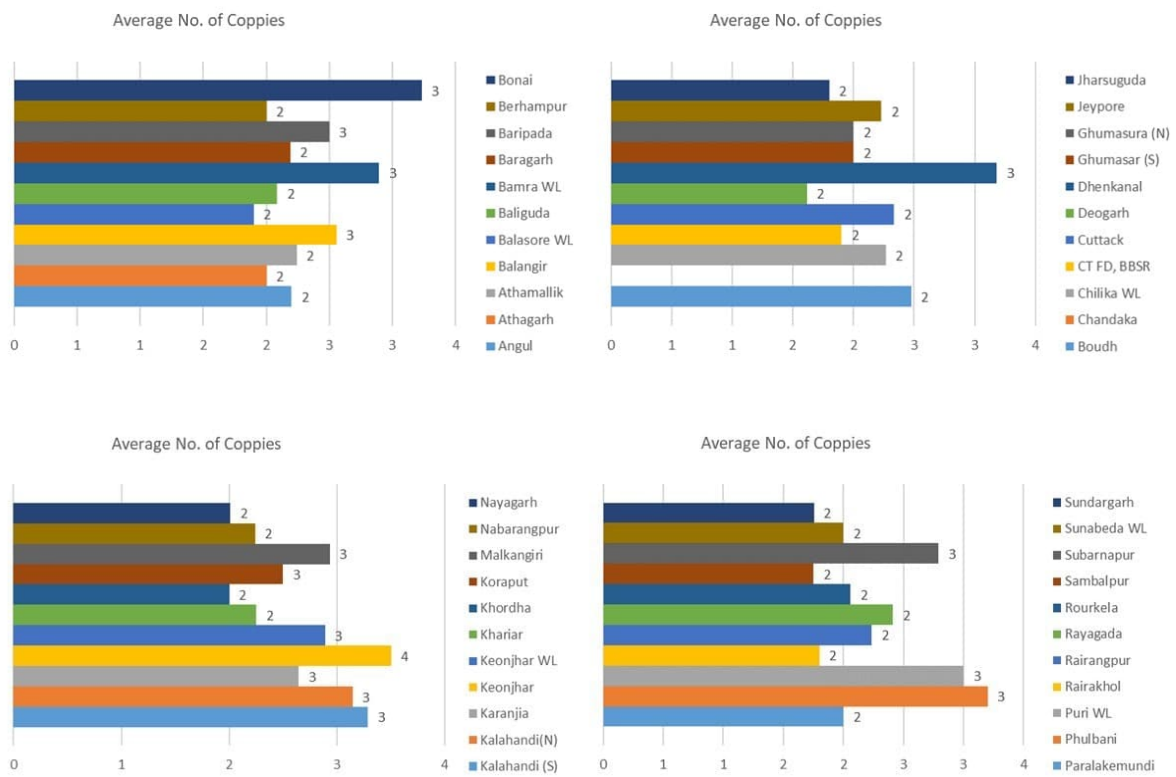


Figure 22: Average Number of Coppices

Height of the regenerated species was also measured to understand the growth of the plants. The mean maximum height of the regenerated species found to be 1.05 meter, varying between 1-3 meters across the assessed sites / plots. Similarly, mean minimum height of the regenerated species found to be 0.58 meter, ranging between less than 1 to 2 meters.



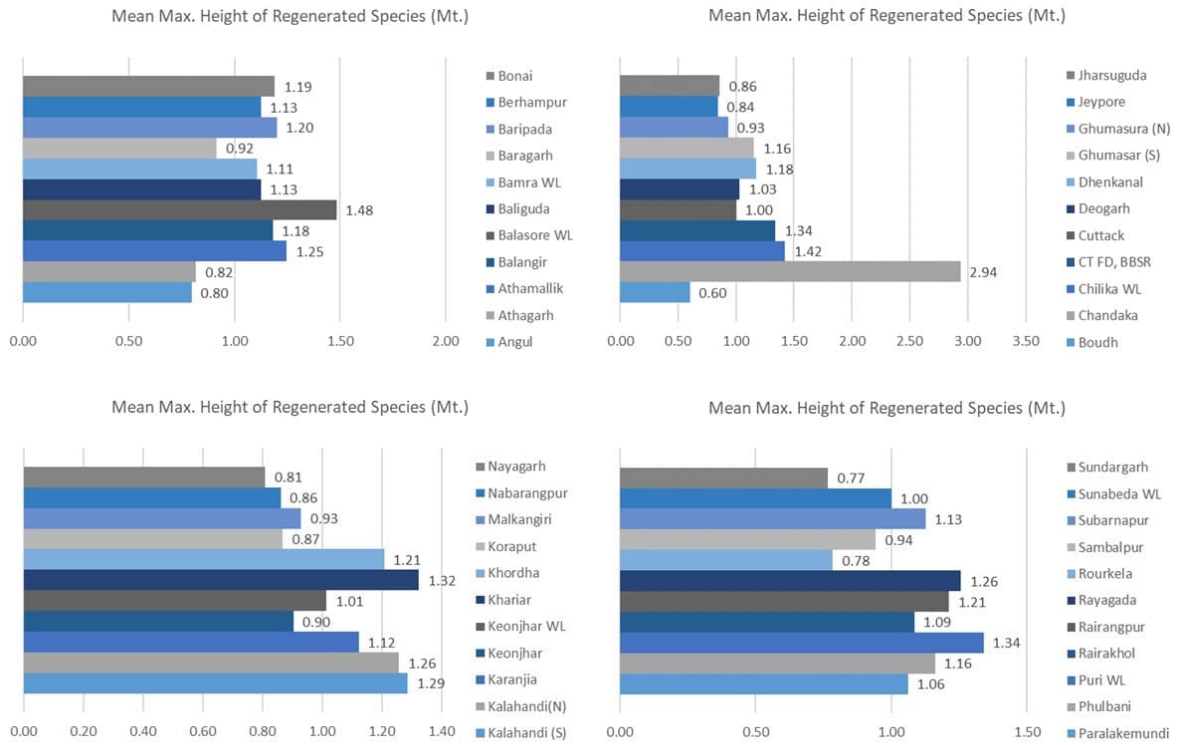


Figure 23: Mean Max. Height of Regenerated Species

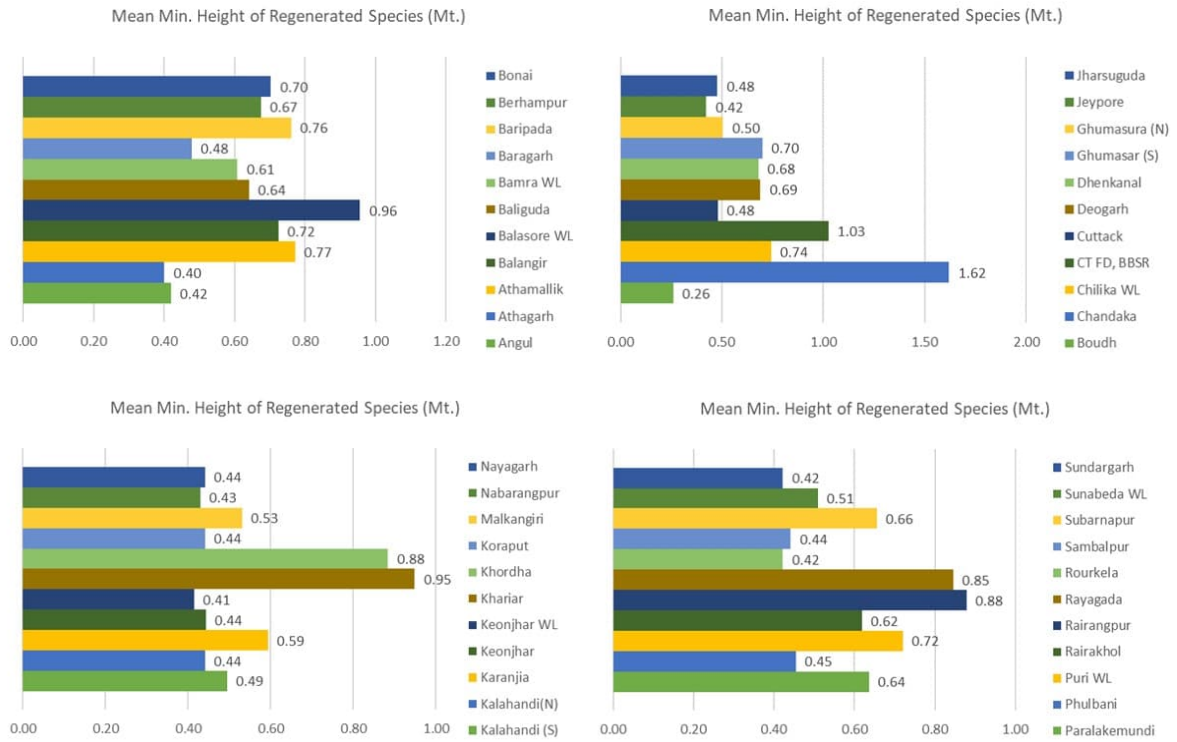


Figure 24: Mean Min. Height of Regenerated Species



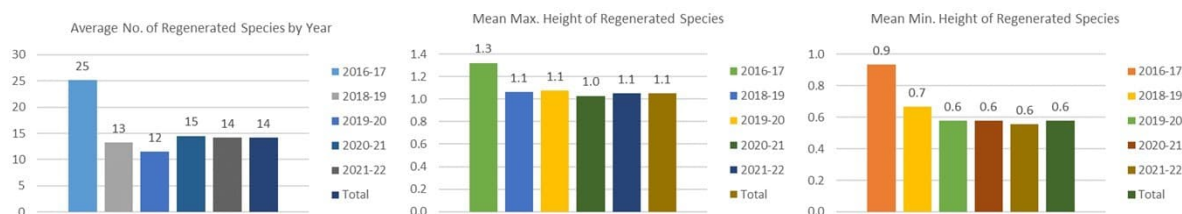


Figure 25: Species Regeneration by Year

Table 32: Regenerated Species and Coppices

Year	Plantation Model	Average No. of Regenerated Species	Average No. of Coppices	Max. Height (mt.)	Min Height (mt.)
2016-17	ANR @ 200 (6th Year Maintenance)	25.13	1.823	1.322	0.934
2018-19	ANR @ 200 (4th Year Maintenance)	13.33	2.102	1.063	0.674
	ANR @ 400 (4th Year Maintenance)	11.75	2.300	1.050	0.500
2019-20	AJY ANR Without Gap (3rd year maintenance)	12.85	2.231	1.200	0.630
	ANR @ 200 (3rd Year Maintenance)	10.82	2.165	1.074	0.579
	ANR @ 400 (3rd Year Maintenance)	23.86		0.486	0.257
2020-21	ANR @ 600 (3rd Year Maintenance)	11.80	3.000	1.520	0.860
	AJY ANR @ 200 (2nd Year Maintenance)	15.27	1.560	0.736	0.464
	AJY ANR Without Gap (2nd Year Maintenance)	16.31	2.405	1.151	0.678
	ANR @ 200 (2nd Year Maintenance)	13.68	2.285	0.988	0.547
	ANR @ 400 (2nd Year Maintenance)	18.00	2.343	1.189	0.600
2021-22	ANR @ 800 (2nd year Maintenance)	24.00	2.750	1.080	0.560
	ANR @200 -RET (2nd Year Maintenance)	6.75	2.500	0.750	0.375
	ANR Without Gap- RET Species (2nd Year Maintenance)	16.97	2.857	1.152	0.652
	AJY ANR With Gap @ 200 Creation	12.77	2.618	1.077	0.524
	AJY ANR Without Gap Creation	13.92	2.090	0.989	0.603
Total	ANR @ 200 - Tall Tree	2.50	2.000	0.875	0.675
	ANR @ 200 (DWARF)	30.00	2.000	1.500	1.133
	ANR @ 200 Creation	13.89	2.429	1.051	0.538
	ANR @ 400 Creation	16.45	1.909	0.996	0.513
	ANR @ 600 Creation	24.26	1.714	1.100	0.711
	ANR @ 800 Creation	6.00		1.000	0.500
	ANR Without Gap- RET Species (Creation)	15.23	2.000	1.462	0.983
	AJY ANR @ 200 (2nd Year Maintenance)	15.27	1.560	0.736	0.464
	AJY ANR With Gap @ 200 Creation	12.77	2.618	1.077	0.524
	AJY ANR Without Gap (2nd Year Maintenance)	16.31	2.405	1.151	0.678
	AJY ANR Without Gap (3rd year maintenance)	12.85	2.231	1.200	0.630
	AJY ANR Without Gap Creation	13.92	2.090	0.989	0.603
	ANR @ 200 - Tall Tree	2.50	2.000	0.875	0.675
	ANR @ 200 (2nd Year Maintenance)	13.68	2.285	0.988	0.547
	ANR @ 200 (3rd Year Maintenance)	10.82	2.165	1.074	0.579
ANR @ 200 (4th Year Maintenance)	13.33	2.102	1.063	0.674	
ANR @ 200 (6th Year Maintenance)	25.13	1.823	1.322	0.934	
ANR @ 200 (DWARF)	30.00	2.000	1.500	1.133	
ANR @ 200 Creation	13.89	2.429	1.051	0.538	
ANR @ 400 (2nd Year Maintenance)	18.00	2.343	1.189	0.600	
ANR @ 400 (3rd Year Maintenance)	23.86		0.486	0.257	
ANR @ 400 (4th Year Maintenance)	11.75	2.300	1.050	0.500	
ANR @ 400 Creation	16.45	1.909	0.996	0.513	
ANR @ 600 (3rd Year Maintenance)	11.80	3.000	1.520	0.860	
ANR @ 600 Creation	24.26	1.714	1.100	0.711	
ANR @ 800 (2nd year Maintenance)	24.00	2.750	1.080	0.560	
ANR @ 800 Creation	6.00		1.000	0.500	
ANR @200 -RET (2nd Year Maintenance)	6.75	2.500	0.750	0.375	
ANR Without Gap- RET Species (2nd Year Maintenance)	16.97	2.857	1.152	0.652	
ANR Without Gap- RET Species (Creation)	15.23	2.000	1.462	0.983	
Total		14.15	2.289	1.051	0.578

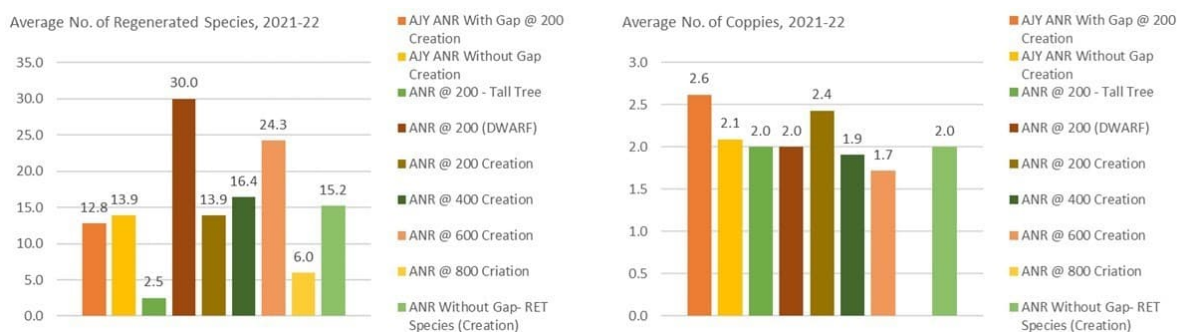


Figure 26: Regenerated Species and Coppices

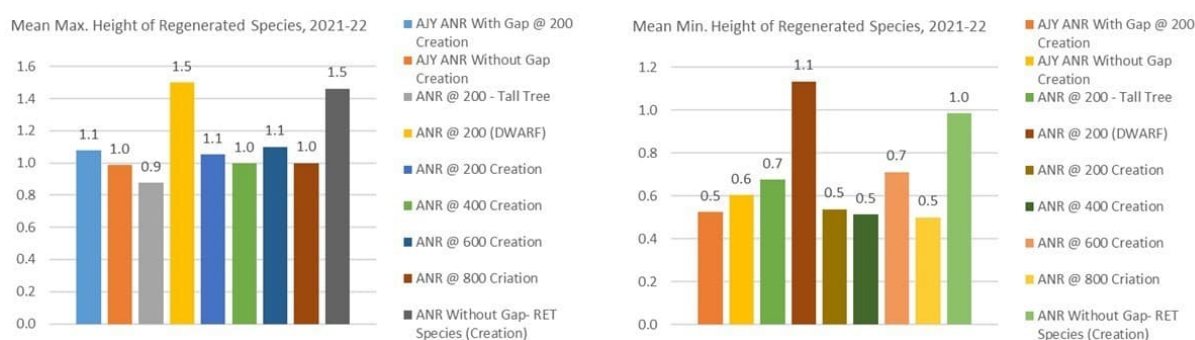


Figure 27: Mean Max. & Min. Height of Regenerated Species

3.20 Plant Biodiversity:

It was assumed that plantation activities, including silvicultural operations would have brought a certain degree of changes in the floral biodiversity due to purposeful selection of species to promote biodiversity. To understand bio-diversity empirical evidence measurement plots were collected (intervention only). The size of each plot for plant bio-diversity measurement (in case of trees) was 10 meters x 10 meters. Different plant species were counted within the plot (excluding herbs and shrubs) to understand their type and prevalence within the plot area. Based on the number of species and their prevalence (number of plants of each species), two indices were computed, i.e., Simpson's Reciprocal Index and Shannon-Weiner Bio-Diversity Index. Both the indices are computed taking tree species only by plantation components and year of plantation which is presented in the matrix below.

Table 33: Plant Bio-Diversity Index

Year	Component	Shannon Winner Index		Simpson Index
		HI (Diversity Index)	ES (Effective Species)	
2016-17	CA/PCA	1.042	2.836	2.223
2017-18	CA/PCA	1.382	3.984	4.045
2017-18	NPV 80%	1.496	4.464	4.325
2017-18	Total	2.118	8.312	8.332
2018-19	CA/PCA	1.363	3.907	3.125
2018-19	NPV 80%	2.443	11.511	4.929
2018-19	Total	2.512	12.326	5.406
2019-20	CA/PCA	2.366	10.653	8.570
2019-20	NPV 80%	3.214	24.881	18.540
2019-20	SSWLMP	1.626	5.085	4.138
2019-20	Total	3.215	24.913	18.408
2020-21	AJY	1.986	7.290	6.522



Year	Component	Shannon Winner Index		Simpson Index
		HI (Diversity Index)	ES (Effective Species)	
2020-21	CA/PCA	2.629	13.856	10.164
2020-21	NPV 80%	3.283	26.652	16.689
2020-21	SSWLMP	2.186	8.902	8.075
2020-21	Total	3.250	25.790	16.007
2021-22	AJY	3.222	25.082	18.379
2021-22	CA/PCA	2.655	14.219	8.495
2021-22	NPV 80%	3.344	28.322	15.645
2021-22	SSWLMP	2.546	12.756	9.823
2021-22	Total	3.315	27.518	14.990
Total	AJY	3.218	24.986	18.041
	CA/PCA	2.861	17.487	10.945
	NPV 80%	3.446	31.381	18.663
	SSWLMP	2.601	13.477	10.119
	Total	3.405	30.114	17.616





3.21 Bamboo Plantation

3.21.1 Assessment Coverage:

The assessment covered 47 bamboo plantation / maintenance sites in 31 forest divisions, 43 forest ranges and 46 forest blocks. Of the total assessed sites, second year maintenance is covered in 19.15 percent and third year maintenance is covered in same percentage of sites. Overall, maintenance aspect is covered in 38.30 percent (18 numbers) sites. Further, among the total sites, 29.79 percent sites (14 nos.) are having plantation in the year 2019-20, 31.91 percent in 2020-21, and remaining 38.30 percent fall in to 2021-22 plantation.

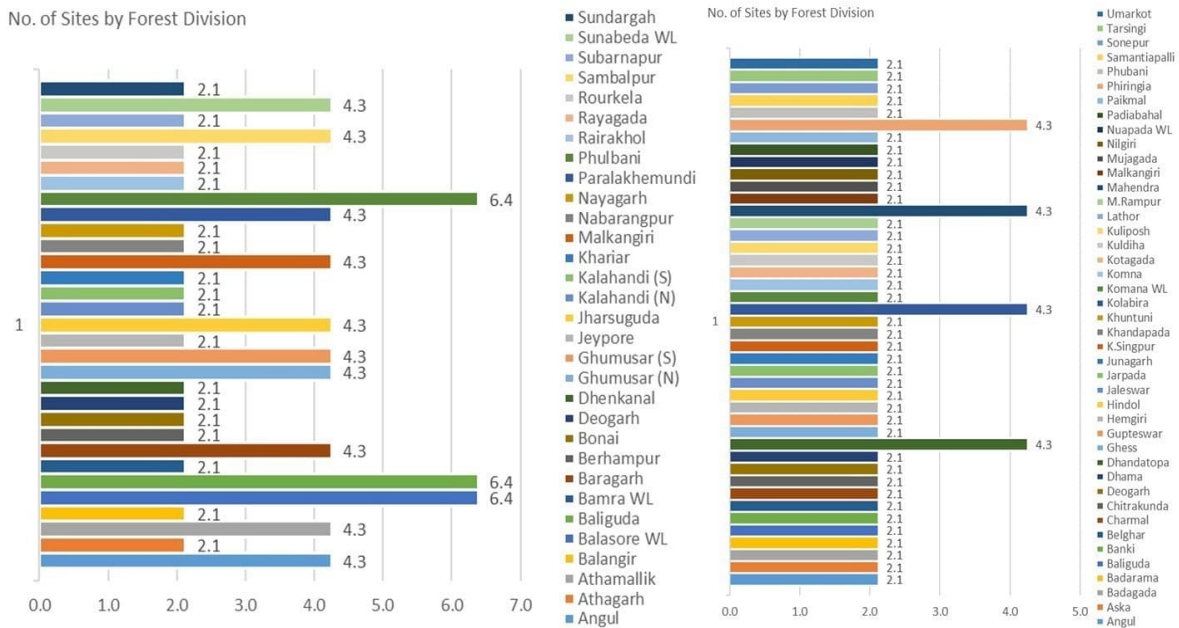


Figure 28: Assessment of Bamboo Plantation Sites by FD

About 97.9 percent bamboo plantation / maintenance is done under NPV 80.0 percent. Only in 2.1 percent site (one site), it is done under CA/PCA. In plantation, sapling norm of 400 plants per hectore was followed in all the divisions. Average area of plantation has been 26.70 ha. with total plantation area of 1,255 ha. Average number of saplings planted per site is about 10,681 with total saplings planted is 5,02,000.

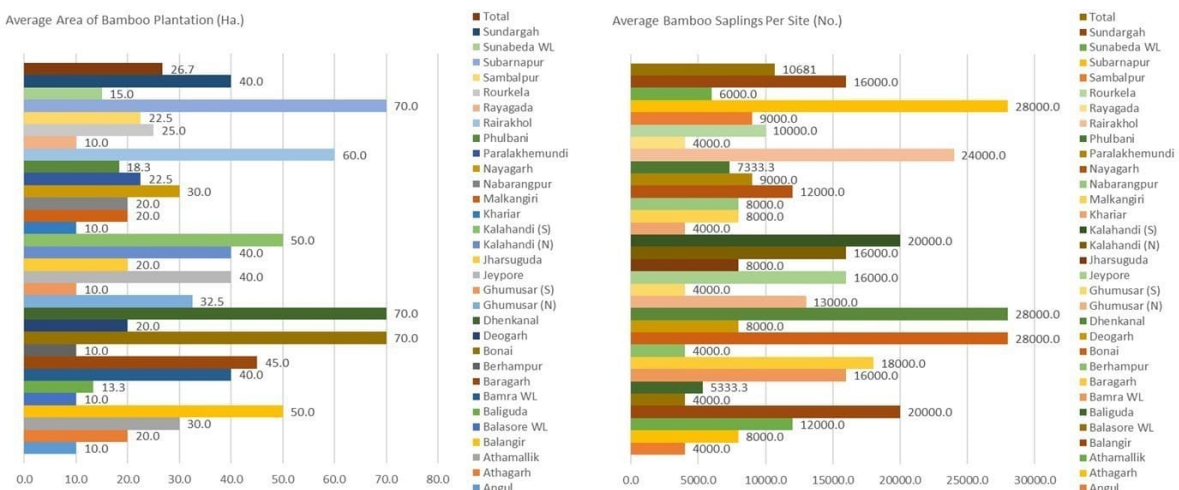


Figure 29: Average Area of Plantation (Ha.) and Saplings



3.21.2 SMC Works in Plantation Sites:

In all the bamboo plantation sites, SMC works have been taken up. Among the SMC measures, staggered trench is most prominent in bamboo plantation sites (93.6 percent), Check dam, LBCD structure and percolation pit were observed in remaining sites (one such SMC measure in one site each). In one site, multiple SMC measures was observed, i.e., LBCD and WLBCD structure along with staggered trench.

Table 34: SMC Measures in Bamboo Plantation Sites

Plantation	LBCD	Percolation Pit	Staggered Trench	Total
Bamboo Plantation	5.6	-	94.4	100.0
Bamboo Plantation (2nd Year Maintenance)	-	-	100.0	100.0
Bamboo Plantation (3rd Year Maintenance)	-	7.1	92.9	100.0
Total	2.1	2.1	93.6	100.0

Extension of siltation / sediment deposit were measured in SMC structures. Extension of siltation observed to be about 19.97 percent, irrespective of SMC structures in 76.60 percent sites. Difference in sediment deposit is observed in staggered trench and LBCD structures existing near bamboo plantation sites of 2021-22.

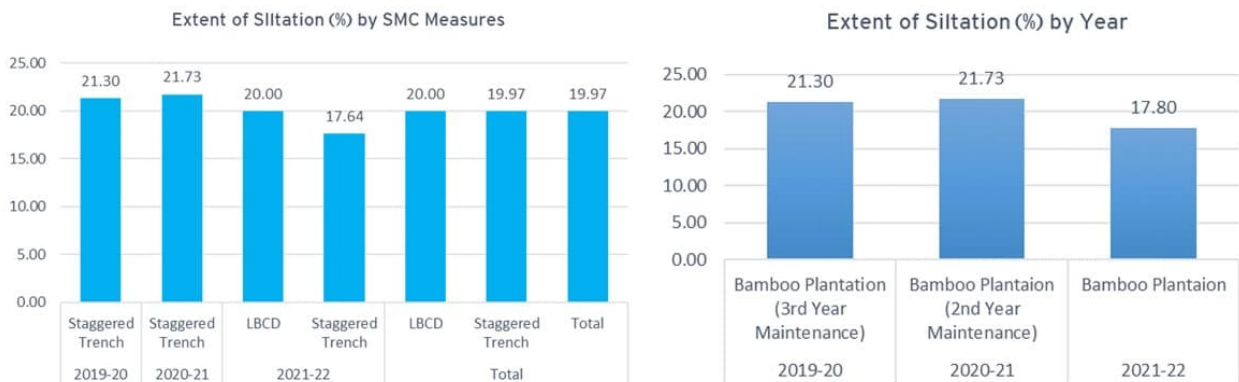


Figure 30: Extent of Siltation by SMC Structures & Year of Plantation

3.21.3 Plant Protection Measures:

Plant protection measures observed in all the sites and in 72.34 percent sites, more than one protection measure is taken to ensure plant survival. Watch and ward is the most common measure taken in all the sites, whereas in 23.4 percent sites bamboo fencing is done, bamboo twinge fencing in 23.4 percent sites and barbed wire fencing in 25.5 percent sites.

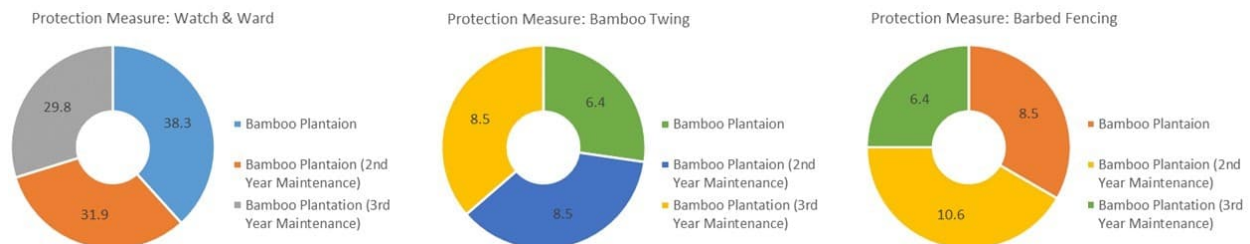


Figure 31: Plant Protection Measures



Table 35: Bamboo Plantation Protection Measures

Plantation	Watch & Ward	Bamboo Fencing	Bamboo Twinge Fencing	Barbed Fencing	Total
Bamboo Plantation	38.3	12.8	6.4	8.5	61.7
Bamboo Plantation (2nd Year Maintenance)	31.9	6.4	8.5	10.6	19.1
Bamboo Plantation (3rd Year Maintenance)	29.8	4.3	8.5	6.4	19.1
Total	100.0	23.4	23.4	25.5	100.0

3.21.4 Plantation Journal & Signboard:

Plantation journal is observed for almost all the sites (95.74 percent) and in maintained condition. Maps of plantation sites is also found along with journals in 95.74 percent of sites. Signboard found existing in 93.6 percent sites whereas in 2.1 percent sites, signboard is not visible and in 4.3 percent sites, it is in broken condition.

Table 36: Signboard in Bamboo Plantation Sites

Plantation / Maintenance	Signboard			Total
	Signboard Existing	Signboard Not Visible	Broken Condition	
Bamboo Plantation	88.9	5.5	5.6	100.0
Bamboo Plantation (2nd Year Maintenance)	100.0	-	-	100.0
Bamboo Plantation (3rd Year Maintenance)	92.9	-	7.1	100.0
Total	93.6	2.1	4.3	100.0

3.21.5 Posting of Pillars:

In all the plantation site, pillars found posted for demarcating the plantation area. The average number of pillars per site found to be 24 with a total of 1,120 pillars. Of the total posted pillars, 20.0 percent pillars (221 pillars) were physically verified. Of the total pillars verified, 91.0 percent pillars found to be in good condition, whereas remaining 9.0 percent pillars are either in broken / dilapidated condition or not in presence. Majority of the pillars are serially numbered (97.87 percent sites) and made up of RCC (87.0 percent). Some stone pillars / stone carriages were also observed in certain sites (13.0 percent). Area of bamboo plantation / maintenance found to be fully covered in all the sites, where pillars are observed posted.

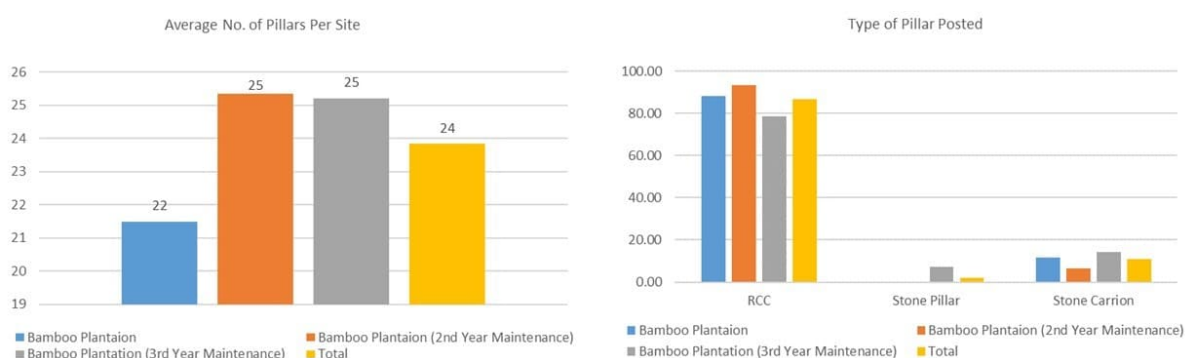
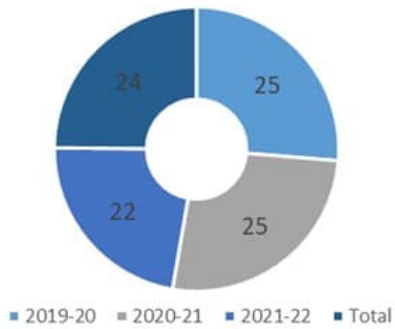


Figure 32: Posting of Pillars



Average Pillars Per Site by Year of Plantation

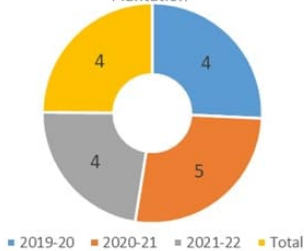


Pillars Assessed Per Site by Year of Plantation



Figure 33: Average Pillars Per Site & Pillars Assessed

Pillars in Well Condition Per Site by Year of Plantation



Pillars in Broken Condition Per Site by Year of Plantation



Pillars Not Observed Per Site by Year of Plantation

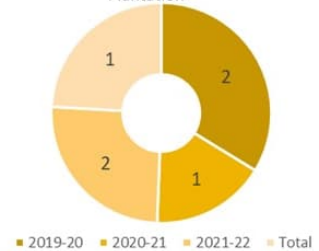


Figure 34: Condition of the Pillars

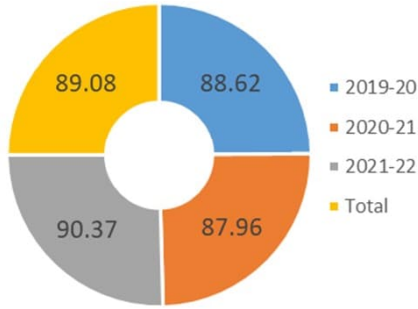
The assessment conducted plot specific measurement across the bamboo plantation sites. A total of 78 plots were assessed in 47 sites to calculate plant survival rate, spacing of plants, plant height and GBH / GCH of plants. Row to row and plant to plant spacing in bamboo plantation found to be on an average 4-5 meters. In certain cases, based on the topographic situation and need of the site, spacing is observed to be marginally higher. While in almost all the plantation sites SMC measures have been taken, in the selected 94.87 percent plots, SMC measures are observed which further indicates that soil moisture conservation measures have been taken in the plantation sites, based on its suitability.

3.21.6 Plant Survival Rate:

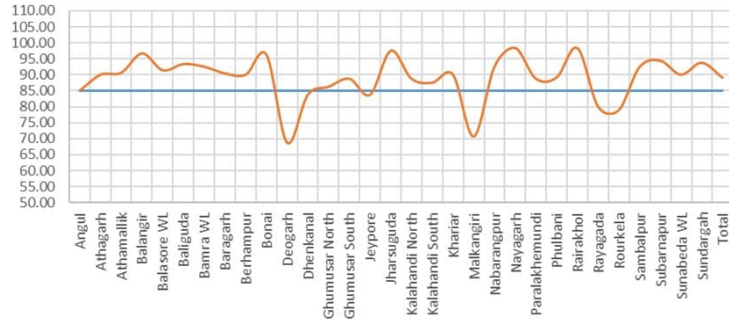
Plant survival rate, irrespective of the year of plantation and type (plantation and maintenance), observed to be 89.1 percent, ranging between a minimum of 65.2 percent to a maximum of 98.4 percent. Looking at the year of plantation, it is evident that survival rate of plantation done in 2019-20 is about 90.6 percent, 86.5 percent for the plantations taken up in 2020-21 and 89.4 percent for the plantation of 2021-22.



Bambo Plant Survival Rate by Year



Survival Rate, 2019-20 to 2021-22 Bamboo Plantation (Benchmark 85%)



Survival Rate, 2019-20 to 2021-22 Bamboo Plantation (Benchmark 90%)

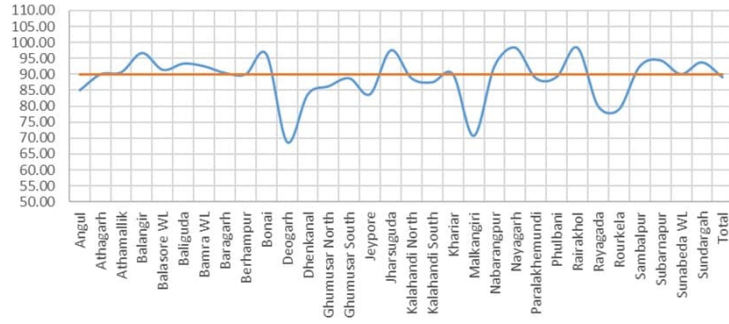
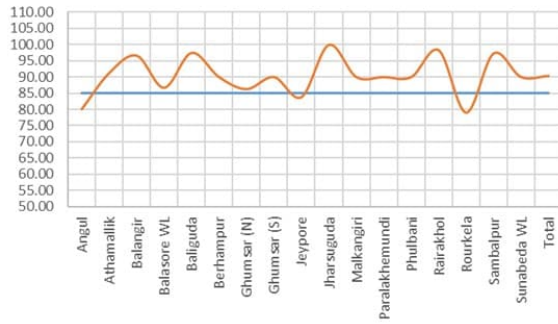
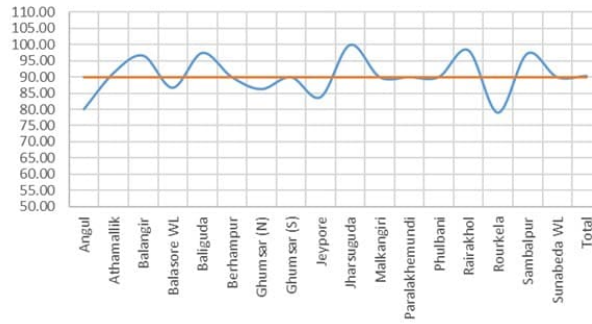


Figure 35: Bamboo Plant Survival by Year and Division

Survival Rate, 2021-22 Bamboo Plantation (Benchmark 85%)



Survival Rate, 2021-22 Bamboo Plantation (Benchmark 90%)



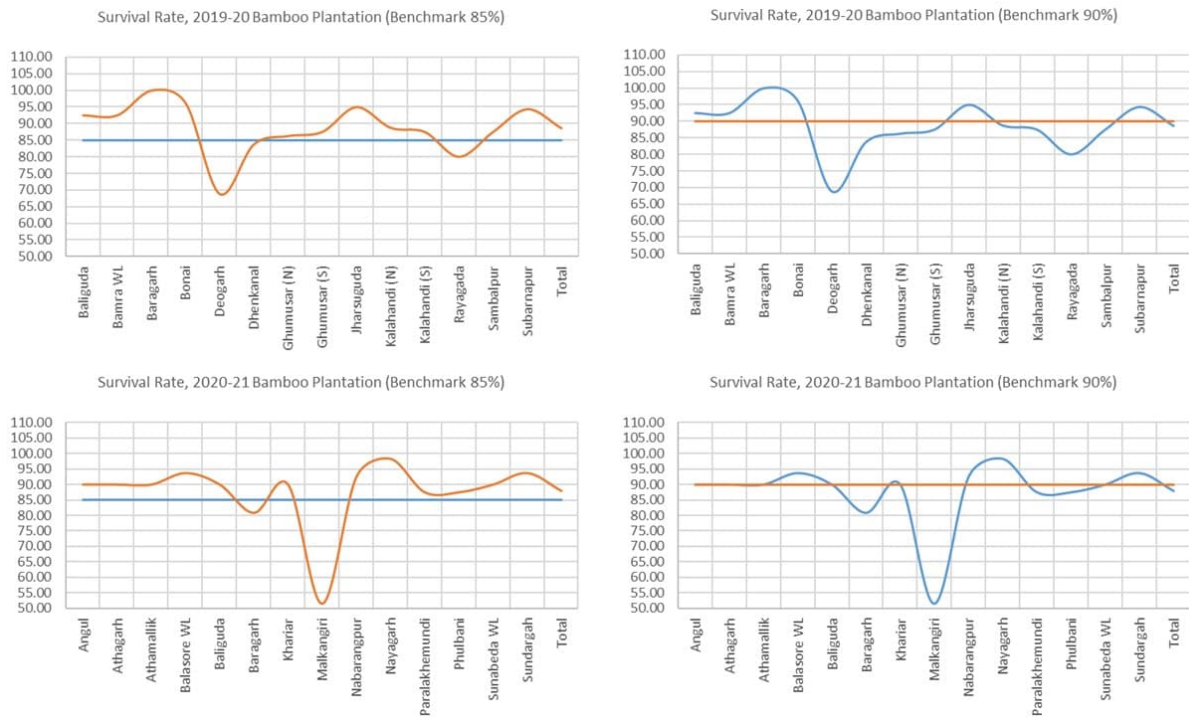


Figure 36: Bamboo Plant Survival by FD

In many sites, biotic interference is observed in plantation sites due to grazing of cattle and/or due to wild animals (elephant and wild boar). Clumps in many sites found to be in a degraded condition due to such interference.

3.21.7 Plant Height:

Mean maximum height of the plants by its category (plantation and maintenance) found to be 4.7 meters and mean minimum height of 2.4 meters. It is evident by year of plantation that the mean maximum height of the plants planted in 2019-20 is marginally less (4.4 meters) than plants planted in 2020-21 (5.2 meters) and higher than 2021-22 (3.5 meters). Similarly, mean minimum height of the plants planted in 2019-20 (2.6 meters) is marginally lesser than the year 2020-21 but higher than plantations taken up in 2021-22.

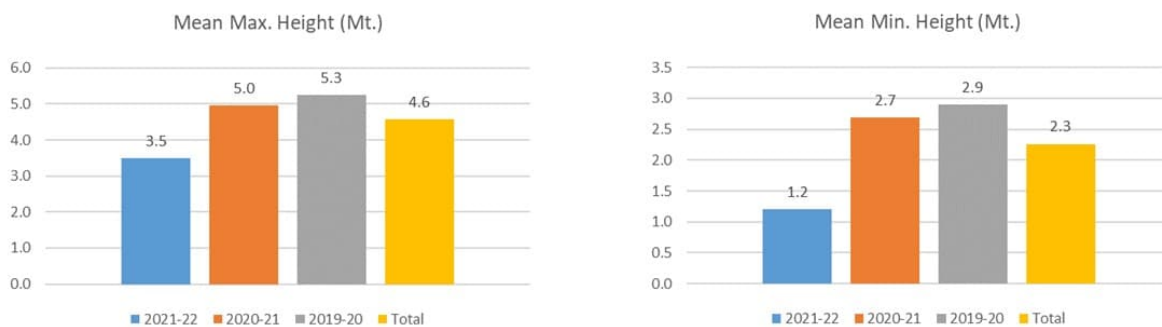


Figure 37: Height of Bamboo Plants by Plantation / Maintenance



Table 37: Mean Max. & Min. Height of Bamboos by FD

Division	Year	Plantation	Mean Max. Height	Mean Min. Height
Angul	2020-21	Bamboo Plantation	4.00	1.00
	2021-22	Bamboo Plantation	1.00	0.20
Athagarh	2020-21	Bamboo Plantation	4.00	1.50
Athamallik	2020-21	Bamboo Plantation (2nd Year Maintenance)	5.60	2.15
	2021-22	Bamboo Plantation	3.30	1.35
Balangir	2021-22	Bamboo Plantation	3.33	1.73
Balasore WL	2020-21	Bamboo Plantation (2nd Year Maintenance)	8.25	4.25
Baliguda	2019-20	Bamboo Plantation	7.00	4.50
	2020-21	Bamboo Plantation	6.00	4.50
Bamra WL	2019-20	Bamboo Plantation (3rd Year Maintenance)	7.50	4.50
Baragarh	2019-20	Bamboo Plantation (3rd Year Maintenance)	6.30	1.85
	2020-21	Bamboo Plantation (2nd Year Maintenance)	3.30	2.00
Bonai	2019-20	Bamboo Plantation (3rd Year Maintenance)	6.63	3.88
Deogarh	2019-20	Bamboo Plantation (3rd Year Maintenance)	0.80	0.50
Dhenkanal	2019-20	Bamboo Plantation (3rd Year Maintenance)	5.50	3.75
Ghumusar (N)	2019-20	Bamboo Plantation	7.25	5.50
Ghumusar (S)	2019-20	Bamboo Plantation	6.50	4.50
Jeypore	2021-22	Bamboo Plantation	2.75	1.00
Jharsuguda	2019-20	Bamboo Plantation (3rd Year Maintenance)	5.40	2.60
	2021-22	Bamboo Plantation	3.50	1.60
Kalahandi (N)	2019-20	Bamboo Plantation	1.75	0.75
Kalahandi (S)	2019-20	Bamboo Plantation	2.67	0.67
Khariar	2020-21	Bamboo Plantation (2nd Year Maintenance)	5.00	2.00
Malkangiri	2020-21	Bamboo Plantation (2nd Year Maintenance)	0.60	0.30
	2021-22	Bamboo Plantation	5.30	1.50
Nabarangpur	2020-21	Bamboo Plantation (2nd Year Maintenance)	4.30	2.00
Nayagarh	2020-21	Bamboo Plantation (2nd Year Maintenance)	9.75	6.00
Paralakhemundi	2020-21	Bamboo Plantation	6.50	4.50
Phulbani	2020-21	Bamboo Plantation	4.00	1.00
	2021-22	Bamboo Plantation	4.33	0.83
Rayagada	2019-20	Bamboo Plantation (3rd Year Maintenance)	5.50	4.50
Rourkela	2021-22	Bamboo Plantation	3.80	0.60
Sambalpur	2019-20	Bamboo Plantation (3rd Year Maintenance)	6.00	1.00
	2021-22	Bamboo Plantation	3.50	1.10
Subarnapur	2019-20	Bamboo Plantation (3rd Year Maintenance)	4.75	2.25
Sunabeda WL	2020-21	Bamboo Plantation	7.00	5.50
Sundargarh	2020-21	Bamboo Plantation (2nd Year Maintenance)	2.60	1.60
Total	2019-20	Bamboo Plantation	4.39	2.61
		Bamboo Plantation (3rd Year Maintenance)	5.64	3.04
	2020-21	Bamboo Plantation	5.25	3.00
		Bamboo Plantation (2nd Year Maintenance)	4.85	2.57
	2021-22	Bamboo Plantation	3.48	1.16
		Total	4.73	2.42

3.21.8 Growth of Bamboo Shoots:

On average, 2 new shoots observed per clump in bamboo planted areas, irrespective of year of plantation and its category (plantation / maintenance). In the second-year maintenance plants, number of shoots found to be higher than bamboo plantation of other categories. Similar, average number of culms per clump found to be higher for second year bamboo plantation maintenance site and on an average 5 culms per clump is observed, irrespective of plantation year and type of plantation (plantation / maintenance). Average number of shoots by year of plantation and number of culms per clump is presented in figure.



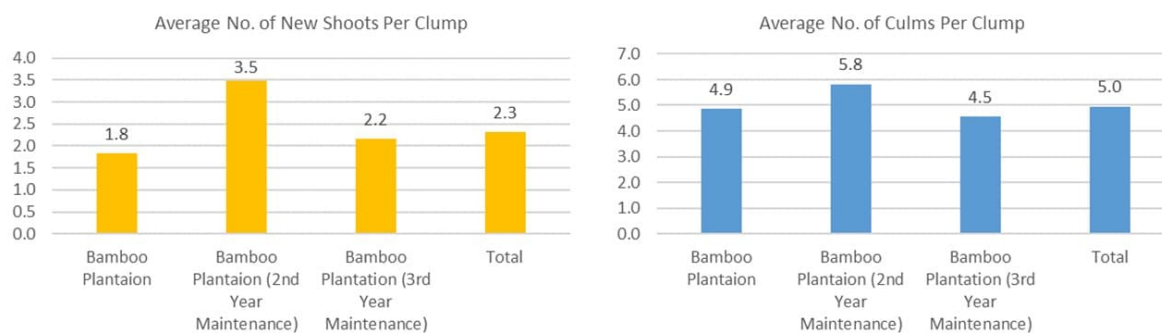


Figure 38: Shoots per Clump by Plantation Type



Figure 39: Shoots per Clump by Plantation Year

Table 38: Growth of Bamboo Shoots

Division	Year	Plantation	Average No. of New Culms (new shoot) Per Clump	Average no. of Culms per Clumps
Angul	2020-21	Bamboo Plantation (2 nd Year Maintenance)	3.0	6.0
	2021-22	Bamboo Plantation	2.0	4.0
Athagarh	2020-21	Bamboo Plantation (2 nd Year Maintenance)	2.0	4.0
Athamallik	2020-21	Bamboo Plantation (2 nd Year Maintenance)	2.5	6.0
	2021-22	Bamboo Plantation	2.5	7.0
Balangir	2021-22	Bamboo Plantation	2.3	7.3
Balasore WL	2020-21	Bamboo Plantation (2 nd Year Maintenance)	3.0	5.8
	2021-22	Bamboo Plantation	2.1	4.5
Baliguda	2019-20	Bamboo Plantation	2.5	4.5
	2020-21	Bamboo Plantation (2 nd Year Maintenance)	2.0	4.0
	2021-22	Bamboo Plantation	2.0	4.5
Bamra WL	2019-20	Bamboo Plantation (3 rd Year Maintenance)	5.0	2.5
Baragarh	2019-20	Bamboo Plantation (3 rd Year Maintenance)	0.0	6.5
	2020-21	Bamboo Plantation (2 nd Year Maintenance)	0.0	10.0
Berhampur	2021-22	Bamboo Plantation	2.0	4.0
Bonai	2019-20	Bamboo Plantation (3 rd Year Maintenance)	2.0	5.3
Deogarh	2019-20	Bamboo Plantation (3 rd Year Maintenance)	0.0	0.0
Dhenkanal	2019-20	Bamboo Plantation (3 rd Year Maintenance)	2.3	4.3
Ghumusar (N)	2019-20	Bamboo Plantation (3 rd Year Maintenance)	2.3	3.8
	2021-22	Bamboo Plantation	2.1	4.0
Ghumusar (S)	2019-20	Bamboo Plantation (3 rd Year Maintenance)	2.2	4.5
	2021-22	Bamboo Plantation	2.0	4.5
Jeypore	2021-22	Bamboo Plantation	2.0	4.5
Jharsuguda	2019-20	Bamboo Plantation (3 rd Year Maintenance)		3.1
	2021-22	Bamboo Plantation	0.0	3.5
Kalahandi (N)	2019-20	Bamboo Plantation (3 rd Year Maintenance)	2.0	6.0
Kalahandi (S)	2019-20	Bamboo Plantation (3 rd Year Maintenance)	2.0	4.7

Division	Year	Plantation	Average No. of New Culms (new shoot) Per Clump	Average no. of Culms per Clumps
Khariar	2020-21	Bamboo Plantation (2nd Year Maintenance)	19.0	4.0
Malkangiri	2020-21	Bamboo Plantation (2nd Year Maintenance)		
	2021-22	Bamboo Plantation		4.0
Nabarangpur	2020-21	Bamboo Plantation (2nd Year Maintenance)		6.0
Nayagarh	2020-21	Bamboo Plantation (2nd Year Maintenance)	2.7	3.5
Paralakhemundi	2020-21	Bamboo Plantation (2 nd Year Maintenance)	2.0	4.0
	2021-22	Bamboo Plantation	2.3	4.3
Phulbani	2020-21	Bamboo Plantation (2 nd Year Maintenance)	2.0	6.0
	2021-22	Bamboo Plantation	2.0	4.7
Rairakhol	2021-22	Bamboo Plantation	0.2	3.4
Rayagada	2019-20	Bamboo Plantation (3rd Year Maintenance)	3.0	8.0
Rourkela	2021-22	Bamboo Plantation	0.3	12.0
Sambalpur	2019-20	Bamboo Plantation (3rd Year Maintenance)	0.2	1.3
	2021-22	Bamboo Plantation	2.0	2.6
Subarnapur	2019-20	Bamboo Plantation (3rd Year Maintenance)	2.3	5.3
Sunabeda WL	2020-21	Bamboo Plantation (2 nd Year Maintenance)	2.5	4.5
	2021-22	Bamboo Plantation	2.5	4.5
Sundargah	2020-21	Bamboo Plantation (2nd Year Maintenance)		
		Total	2.3	5.0



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CHAPTER-IV: PERFORMANCE OF AMA JANGALA YOJANA (AJY) ACTIVITIES

The Joint Forest Management (JFM) Scheme in India aims to involve local communities in the conservation and management of forest resources. Under this scheme, forest-dwelling communities collaborate with forest departments to protect and sustainably utilize forest lands. The guidelines emphasize shared responsibility, equitable benefit-sharing, and capacity-building among stakeholders. By fostering partnerships between communities and governmental agencies, the JFM scheme promotes conservation while addressing socio-economic needs. It serves as a model for community-based natural resource management, facilitating sustainable development and biodiversity conservation. In Odisha, the Joint Forest Management (JFM) program operates through collaboration between forest-dependent communities and the State Forest Department. In order to further strengthen such collaboration, CAMPA funds for APO 2021-22 is also utilized. Local communities are empowered to participate in forest protection, regeneration, and sustainable resource utilization. They form Joint Forest Management Committees (JFMCs) to co-manage forest areas, ensuring equitable sharing of benefits and responsibilities. JFMCs undertake activities such as afforestation, fire prevention, and biodiversity conservation. In this chapter an attempt has been made to evaluate the functioning of JFM Committees popularly called “Vana Surakshya Samiti (VSS)” owing to the support received by VSSs under CAMPA intervention.

4.1 Sample Coverage of CAMPA Supported VSS Activities

CAMPA supported VSS activities were assessed in 20 forest Divisions of Odisha. In order to understand the performance of VSSs due to the support of CAMPA (2021-22), on a sample basis 55 VSSs are covered under the study.

4.1.1 Forest Area Assigned to VSS:

Overall, the average area assigned per VSS stands at 51.5 Ha. The assigned forest area per VSS stands maximum at 70 Ha. In Paralakhemundi Forest Division followed by Rayagada at 63.37 Ha. For rest of the Forest Divisions, forest area assigned per VSS stands about 50 Ha. There is only one plantation site for each VSS.

Table 39: VSS Coverage and Area Allotted to VSS

SN	Forest Divisions	No. of VSSs	No. of Plantation Sites	Sample Proportion	Area Allotted (Ha.)
1	Angul	2	2	3.6	55.00
2	Balangir	3	3	5.5	50.00
3	Balaswar WL	3	3	5.5	50.00
4	Baliguda	6	6	10.9	50.91
5	Bamra WL	2	2	3.6	50.00
6	Bhaadrakha WL	1	1	1.8	50.00
7	Deogarh	2	2	3.6	50.00
8	Jeypore	3	3	5.5	50.00
9	Kalahandi North	3	3	5.5	50.00
10	Kalahandi South	2	2	3.6	50.00
11	Keonjhar	3	3	5.5	51.67
12	Keonjhar WL	2	2	3.6	50.00
13	Khariar	3	3	5.5	50.00
14	Koraput	2	2	3.6	50.00
15	Nabarangpur	4	4	7.3	50.00
16	Paralakhemundi	1	1	1.8	70.00



SN	Forest Divisions	No. of VSSs	No. of Plantation Sites	Sample Proportion	Area Allotted (Ha.)
17	Phulbani	5	5	9.1	50.40
18	Rairakhol	2	2	3.6	50.00
19	Rayagada	3	3	5.5	63.37
20	Rourkela	3	3	5.5	50.00
	Total	55	55	100.0	51.50

4.2 Functioning of VSSs

A VSS is said to be well functioning, if the VSS timely maintains records and registers and conducting periodic meetings. Generally, VSSs conduct Executive Committee (EC) Meeting, and General Body (GB) Meeting in every year.

4.2.1. Maintenance of Records and Registers and conducting VSS Meetings

Maintenance of records and registers is found with all VSSs in sample Forest Divisions. This indicates that CAMPA support has been helpful to strengthen VSSs internal governance in terms of maintaining records and registers properly. It is further observed that all the VSSs are also conducting meetings in every year.

Table 40: Maintenance of Register

SN	Forest Divisions	No. of VSSs Covered	Percent of VSSs Maintaining Records / Registers	Percent of VSSs Conducting Meetings
1	Angul	2	100.0	100.0
2	Balangir	3	100.0	100.0
3	Balaswar WL	3	100.0	100.0
4	Baliguda	6	100.0	100.0
5	Bamra WL	2	100.0	100.0
6	Bhaadrakha WL	1	100.0	100.0
7	Deogarh	2	100.0	100.0
8	Jeypore	3	100.0	100.0
9	Kalahandi North	3	100.0	100.0
10	Kalahandi South	2	100.0	100.0
11	Keonjhar	3	100.0	100.0
12	Keonjhar WL	2	100.0	100.0
13	Khariar	3	100.0	100.0
14	Koraput	2	100.0	100.0
15	Nabarangpur	4	100.0	100.0
16	Paralakhemundi	1	100.0	100.0
17	Phulbani	5	100.0	100.0
18	Rairakhol	2	100.0	100.0
19	Rayagada	3	100.0	100.0
20	Rourkela	3	100.0	100.0
	All Forest Divisions	55	100.0	100.0

4.2.2 VSS Meetings

The Executive Committee meeting of a Joint Forest Management (JFM) Committee convenes periodically to deliberate on forest management strategies and address operational issues. Chaired by elected community representatives and including forest department officials, these meetings review progress, allocate resources,



and plan future activities. They assess the effectiveness of ongoing projects, discuss challenges, and seek solutions collaboratively. Decisions regarding resource allocation, revenue sharing, and sustainable forest use are made collectively, fostering transparency and inclusivity. Executive Committee meetings serve as platforms for stakeholders to exchange knowledge, coordinate efforts, and strengthen the partnership between communities and government agencies in sustainable forest management. From the following table 4.3, it is revealed that VSSs conduct Executive Committee and General Body meetings. On an average each VSS annually conducts 5 EC and 2 GB meetings.

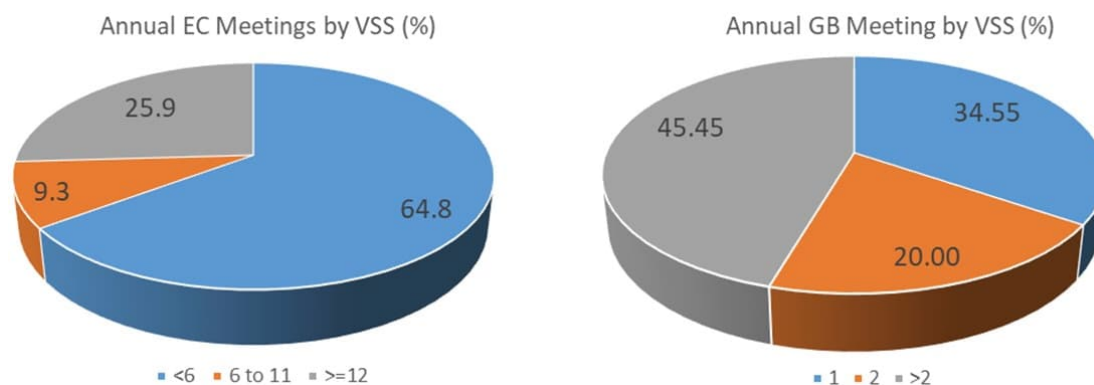


Figure 40: Annual EC and GB Meetings by VSS

4.3 Protection Measures

Protective measures are crucial for ensuring the long-term success of forest restoration initiatives, maintaining biodiversity, and mitigating the adverse effects of deforestation and habitat degradation.

Plantation site protection measures are essential in forest areas to safeguard newly planted trees from various threats such as grazing, browsing by wildlife, theft, and vandalism. Without adequate protection, the survival rate of saplings is significantly reduced, compromising reforestation efforts and ecosystem restoration goals. Implementing measures like fencing, patrolling, community engagement, and awareness campaigns can help prevent damage to plantation sites and promote successful tree growth. Table 4.4 summarizes the protection measures for plantation sites as undertaken by the sampled out CAMPA supported VSSs. Awareness generation among the villagers regarding evil effects of tree cutting and forest fire is significantly promoted by the VSSs to protect forest areas. The VSS members are also found cooperating with Forest Department officials for the protection of forest. Regulating human interference in forest and particularly plantation areas is found as a good strategy adopted by the VSSs for forest protection. *Thenga Pali*, that means each member household of the VSS is required to visit plantation site as per the turn of his family relative to other member households is also noticed as a good protection strategy adopted by the VSS households.

A Mode of Forest Protection by VSS			
1	Watch and Ward	5	Penalty Provision
2	Joint Monitoring with Forest Officials	6	Fencing
3	Awareness / Sensitization	7	Sharing Information with Dept.
4	Thenga Pali	8	Fire Control Measures in Summer



Table 41: Forest and Plant Protection Measures by VSS

SN	Protection Measures	No. of VSSs	Percent of VSSs
1	Awareness of VSS committee members regarding the need of forest protection through check of tree felling in forest areas	13	23.6
2	Fencing	2	3.6
3	Awareness of VSS committee members regarding the need of forest protection through check of forest fire	17	30.9
4	Checking of poaching of wild animals	2	3.6
5	Required cooperation with Forest Officials, Guards and Squads	1	1.8
6	Cooperation among villagers for joint protection of forest	8	14.5
7	Appointing a watcher by making wage payment	1	1.8
8	Frequent visit to Forest area by the VSS members	1	1.8
9	Imposition of penalty	1	1.8
10	Information to Forest department regarding any illicit activity committed by any outsider	22	40.0
11	Joint verification and patrolling with forest staff	19	34.5
12	No specific protection measure taken up	2	3.6
13	Regulating the entry of people in forest areas	23	41.8
14	Thenga Pali	23	41.8
15	Watch & Ward	21	38.2

4.4 Protection Measures and Forest Fire

Forest protection and forest fire prevention are closely correlated. Effective protection measures can significantly reduce the occurrence and severity of forest fires. Conversely, inadequate protection efforts may lead to increased vulnerability to fires, exacerbating the destruction of forest ecosystems, loss of biodiversity, and threats to human lives and livelihoods. Thus, robust forest protection strategies play a pivotal role in mitigating the risk of forest fires, preserving ecosystem health, and maintaining the ecological balance. Investing in forest protection measures is essential for safeguarding forests and minimizing the devastating impacts of wildfires. All the VSSs are of the opinion that due to their protection measure, they never came across forest fire in the forest area assigned to them for management and maintenance.

4.5 CAMPA Supported Activities taken up by VSSs

Due to the support of CAMPA, VSSs have been associated with afforestation activities and availing wage-earning opportunities. Apart from support for plantation activities, other benefits are also received by the VSS members. The details of support of CAMPA to VSSs and additional benefits are also received by the VSSs.

Table 42: Activities of VSS and Benefits Received under CAMPA 2021-22

SN	Divisions	Type of Support Received by VSS under CAMPA Intervention
1	Angul	ANR Activities including up-rooting of invasive weeds, pruning, and fireline maintenance.
2	Balangir	"AJY-ANR With Gap Plantation 2021-22" and SSO operations in one old "AJY ANR Without Gap 2021-22"
3	Baleshwar WL	Fire line creation and maintenance is done.
4	Baliguda	SSO activities like high stump cutting, plantation, silvicultural operations are done.
5	Bamra WL	Creation and maintenance of fire line, SSO activity at Plantation site "AJY ANR Without Gap in 2021-22"
6	Bhadra WL	Support for plantation activity provided under CAMPA; Cash incentive of Rs.20,000.00 received from Govt.
7	Deogarh	Support for plantation activity; Cash incentive of Rs.5,000.00 and Parkriti Mitra award received from Govt.
8	Jeypore	Support for plantation activity provided under CAMPA.
9	Kalahandi North	Support for plantation activity provided under CAMPA.
10	Kalahandi South	Support for plantation activity provided under CAMPA.
11	Keonjhar	ANR activities like uprooting of invasive weeds, pruning, fire line maintenance and plantation supported under CAMPA.



SN	Divisions	Type of Support Received by VSS under CAMPA Intervention
12	Keonjhar WL	ANR activities like uprooting of invasive weeds, pruning, fire line maintenance and plantation supported under CAMPA.
13	Khariar	Three plantation sites namely "AJY ANR With Gap Plantation 2021-22", SSO activity for the plantation "AJY ANR Without Gap 2020-21" and SSO activity for the plantation "AJY ANR Without Gap 2021-22" are supported under CAMPA 2021-22.
14	Koraput	Support for plantation activity provided under CAMPA.
15	Nabarangapur	Protection measures at plantation site and wage opportunity of VSS members through working at plantation sites under CAMPA.
16	Paralakhemundi	Support for construction of VSS building.
17	Phulbani	ANR activities like uprooting of invasive weeds, pruning, fire line maintenance and plantation supported under CAMPA.
18	Rairakhol	SMC activities, i.e., construction of LBCD structures is supported under CAMPA.
19	Rayagada	Three plantation sites namely "AJY ANR With Gap Plantation 2021-22", SSO activity for the plantation "AJY ANR Without Gap 2020-21" and SSO activity for the plantation "AJY ANR Without Gap 2021-22" are supported under CAMPA 2021-22.
20	Rourkela	Support for plantation; Wage earning by VSS members through plantation works.

B	Key Benefits to VSS	C	Expectation of VSS
1	Wage Employment	1	More SMC Works in Assigned Area
2	Plantation in VSS Assigned Area	2	IGA for VSS Members
3	Silvicultural Operation	3	More Wage Employment Scope
4	Fireline Maintenance	4	Smokeless Chula
5	Getting Job as Watcher	5	Awareness (Refreshers)
6	SMC Activities		

4.6 AJY Performance

The overall performance of VSS is calculated taking eight parameters, i.e., [1] maintenance of register by VSS, [2] Conducting EC and GB meetings, [3] fire incidence in assigned VSS area, [4] participation of VSS in CAMPA activities, [5] planning at VSS level for CAMPA activities, [6] change in forest cover due to CAMPA, [7] VSS satisfaction of work, and [8] creation of local engagement under CAMPA. Based on these parameters, all VSS were scored and ranked (ranking in 5 categories where 1-2 is the lowest and 9-10 is the highest). It is observed that about 1.82 percent VSS fall in to rank 3-4, 3.64 percent in rank 5-6, 14.54 percent under rank 7-8 and highest of 80.0 percent in the rank of 9-10.



Scaling Parameters		Scaling of VSS	
1	Register Maintenance by VSS	1-2	0.00 %
2	EC and GB Meetings (No.)	3-4	1.82 %
3	Fire Incidence in Assigned VSS Area	5-6	3.64 %
4	VSS Participation in CAMPA Activities	7-8	14.54 %
5	Planning for CAMPA Activities	9-10	80.00 %
6	Change in Forest Cover due to CAMPA		
7	VSS Satisfaction on Works		
8	Creation of Local Engagement		

4.8 Concluding Remarks

Timely maintenance of records and registers is found with all sampled out VSSs in all Forest Divisions in Odisha. It is further observed that all VSSs also conduct meetings in every year for their general body and executive body. On an average each VSS annually conducts 5 EC and 2 GB meetings. Awareness generation among the villagers regarding evil effects of tree cutting and forest fire is significantly promoted by the VSSs to protect forest areas. The VSS members are also found cooperating with Forest Department officials for the protection of forest. Regulating human interference in forest and particularly plantation areas is found as a good strategy adopted by the VSSs for forest protection. There has been no incidence of forest fire in the forest area assigned to VSSs due to different protection measures.





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Accuracy: 1.5 m



Chapter V: Soil Moisture Conservation (SMC)

Soil moisture conservation measures have been one of the most adopted means to reduce soil erosion and improve soil moisture regime. Under CAMPA, different SMC structures have been constructed to harvest surface runoff, restore ecological balance by augmenting, conserving & harnessing natural resources; minimizing flood hazards in the downstream and farmlands by way of preventing silt deposition; and protecting agricultural land from sand casting by the streams during flood. The assessment covered different measures that were executed for SMC in different forest blocks / ranges of forest divisions to understand its beneficial dimensions and long-term implications.

5.1 Geographical Coverage:

The evaluation covered 30 forest blocks, from 20 forest divisions and 23 forest ranges where CAMPA intervention for SMC was carried out during 2021-22. Distribution of sample coverage by forest division is presented in the matrix.

Table 43: Geographical Coverage under SMC

Division	Range	Assets in Forest Blocks	Division	Range	Assets in Forest Block
Angul	Kaniha	2	Kalhandi North	Kegaon	1
Athamallik	Handapa	1	Keonjhar WL	Brahmanipal	1
Balasore WL	Kuldiha	1	Khariar	Komna	4
Bamra WL	Badrama	1	Khorda	Balugaon	1
Bargarh	Ghess	1		Ranapur	2
Chilika WL	Rambha	1	Koraput	Similiguda	1
Debagarh	Debagarh	1	Malkangiri	Malkangiri	1
Dhenkanal	Hindol	1	Rayagada	Muniguda	3
Ghumusar (S)	Sorada	1	Rourkela	Banki	1
Ghumusar (N)	Central	1		Rajgangpur	1
	Mujagada	1	Sambalpur	Dhama	1
Jeypore	Boriguma	1	Total		30

5.2 SMC Structure Coverage:

The covered SMC structures, 6.7 percent are from Demarcated Protected Forest (DPF), 3.3 percent are from Protected Forest (PF), 23.3 percent from PRF (Proposed Reserved Forest), 16.7 percent from KF, and remaining 50.0 percent are in Reserve Forest (RF). Distribution of sample SMCs by forest division is presented in the figure.

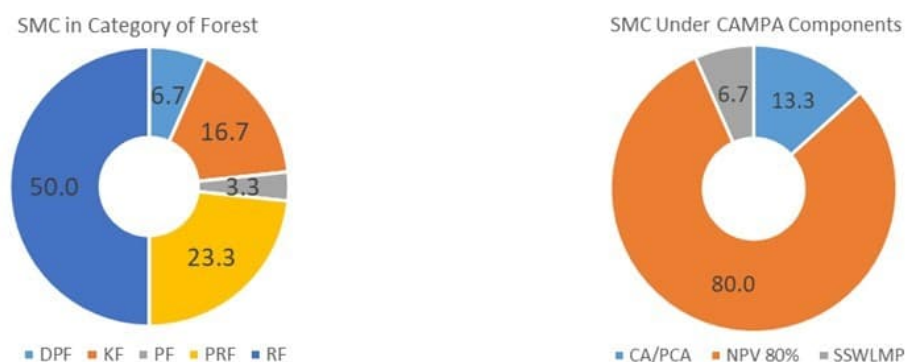


Figure 41: SMC Measures in Forest Categories & CAMPA Components

5.3 SMC under CAMPA Components:

About 80.0 percent SMC structures are constructed under NPV 80%, followed by 13.33 percent under CA / PCA. Remaining 6.7 percent are constructed under SSWLMP.

5.4 Type of SMC Structures:

Different SMC structures have been created under CAMPA in the studied locations. Among all the SMC structures, LBCD is the most prominent (56.7 percent), followed by WHS / water bodies (10.0 percent), and check dam (10.0 percent). Other SMC structures are also observed, i.e., staggered trench (6.67 percent sites), earthen graded guided bund (6.7 percent sites) and continuous contour trenches (3.3 percent sites).

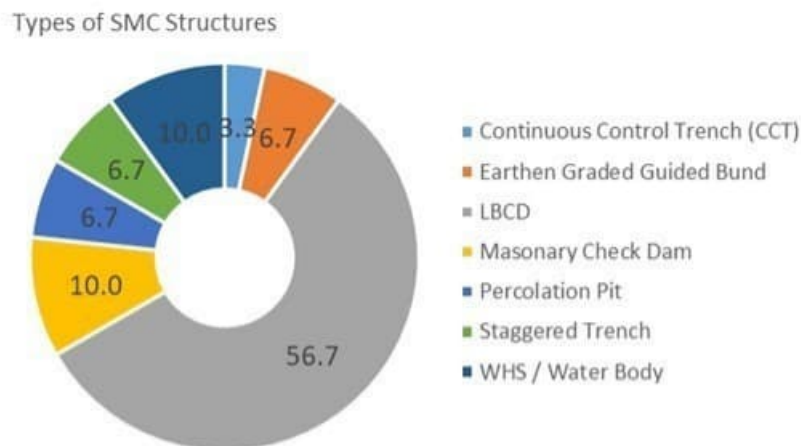


Figure 42: Type of SMC Structures Created, 2021-22



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 Note: AJY Rengtasil VSV Patnagarh

Table 44: Type of SMC Structures Created (% Distribution)

Division	Continuous Control Trench (CCT)	Earthen Graded Guided Bund	LBCD	Masonry Check Dam	Percolation Pit	Staggered Trench	WHS / Water Body
Angul	-	-	50.0	-	50.0	-	-
Athamallik	-	-	100.0	-	-	-	-
Balasore WL	-	-	100.0	-	-	-	-
Bamra WL	-	-	100.0	-	-	-	-
Bargarh	-	-	-	100.0	-	-	-
Chilika wl	-	-	100.0	-	-	-	-
Debagarh	-	-	100.0	-	-	-	-
Dhenkanal	-	-	100.0	-	-	-	-
Ghumusar (S)	-	-	100.0	-	-	-	-
Ghumusar (N)	-	-	50.0	50.0	-	-	-
Jeypore	-	-	100.0	-	-	-	-
Kalahandi (N)	-	-	-	100.0	-	-	-
Keonjhar WL	-	-	100.0	-	-	-	-
Khariar	-	-	25.0	-	25.0	25.0	25.0
Khorda	-	-	33.3	-	-	33.3	33.3
Koraput	-	-	100.0	-	-	-	-
Malkangiri	-	-	100.0	-	-	-	-
Rayagada	33.3	33.3	33.3	-	-	-	-
Rourkela	-	50.0	-	-	-	-	50.0
Sambalpur	-	-	100.0	-	-	-	-
Total	3.3	6.7	56.7	10.0	6.7	6.7	10.0

Table 45: Number of Structures by FD

Division	SMC Structures	Average No. of Structures	Total Structures
Angul	LBCD	54	54
	Percolation Pit	3	3
Athamallik	LBCD	110	110
Balasore WL	LBCD	9	9
Bamra WL	LBCD	150	150
Bargarh	Masonry Check Dam	2	2
Chilika wl	LBCD	6	6
Debagarh	LBCD	8	8
Dhenkanal	LBCD	40	40
Ghumusar South	LBCD	25	25
Ghumusar North	LBCD	21	21
	Masonry Check Dam	2	2
Jeypore	LBCD	27	27
Kalahandi North	Masonry Check Dam	1	1
Keonjhar WL	LBCD	20	20
Khariar	LBCD	86	86
	Percolation Pit	7	7
	Staggered Trench	1350	1350
	WHS / Water Body	1	1
Khorda	LBCD	17	17
	WHS / Water Body	1	1
Koraput	LBCD	12	12
Malkangiri	LBCD	7	7
Rayagada	Continuous Control Trench (CCT)	62	62
	Earthen Graded Guided Bund	1	1



Division	SMC Structures	Average No. of Structures	Total Structures
	LBCD	42	42
Rourkela	Earthen Graded Guided Bund	1	1
	WHS / Water Body	1	1
Sambalpur	LBCD	12	12
Total	Continuous Control Trench (CCT)	62	62
	Earthen Graded Guided Bund	1	2
	LBCD	38	646
	Masonry Check Dam	2	5
	Percolation Pit	5	10
	Staggered Trench	1350	1350
	WHS / Water Body	1	3
	Total	72	2078

5.5 Quality of the SMC Structures:

All the SMC structures assessed are created in the year 2021-22. As all the structures are constructed recently, condition of the created structures found to be “good”.

5.6 Vegetation:

Forest of different categories observed in studied area around the SMC structures, based on plant density. Forest density observed to be high in 30.0 percent SMC sites, in 60.0 percent sites forest density found medium and in 10.0 percent sites, forest density is comparatively low.

Table 46: Forest Density Near SMC Structures

Type of SMC	High	Low	Medium	Total
Continuous Control Trench (CCT)	0.0	0.0	100.0	100.0
Earthen Graded Guided Bund	0.0	50.0	50.0	100.0
LBCD	35.3	5.9	58.8	100.0
Masonry Check Dam	66.7	0.0	33.3	100.0
Percolation Pit	0.0	0.0	100.0	100.0
Staggered Trench	50.0	0.0	50.0	100.0
WHS / Water Body	0.0	33.3	66.7	100.0
Total	30.0	10.0	60.0	100.0

Table 47: Forest Density Near SMC in FDs

Division	SMC Structures	Forest Density		
		High	Low	Medium
Angul	LBCD			
	Percolation Pit			
Athamallik	LBCD			
Balasore WL	LBCD			
Bamra WL	LBCD			
Bargarh	Masonry Check Dam			
Chilika wl	LBCD			
Debagarh	LBCD			
Dhenkanal	LBCD			
Ghumusar South	LBCD			
Ghumusar North	LBCD			
	Masonry Check Dam			
Jeypore	LBCD			
Kalhandi North	Masonry Check Dam			
Keonjhar WL	LBCD			
Khariar	LBCD			
	Percolation Pit			



Division	SMC Structures	Forest Density		
		High	Low	Medium
	Staggered Trench			
	WHS / Water Body			
Khorda	LBCD			
	Staggered Trench			
	WHS / Water Body			
Koraput	LBCD			
Malkangiri	LBCD			
Rayagada	Continuous Control Trench (CCT)			
	Earthen Graded Guided Bund			
	LBCD			
Rourkela	Earthen Graded Guided Bund			
	WHS / Water Body			
Sambalpur	LBCD			
Total	Continuous Control Trench (CCT)			
	Earthen Graded Guided Bund			
	LBCD			
	Masonry Check Dam			
	Percolation Pit			
	Staggered Trench			
	WHS / Water Body			

5.7 Anthropogenic Interference:

Discussion with different stakeholders, including local villagers reveals that anthropogenic interference possibilities are “low” in all the sites (100.0 percent sites) whereas cattle pressure is existing in 38.71 percent sites of varying degree.

5.8 Benefits of SMC Measures:

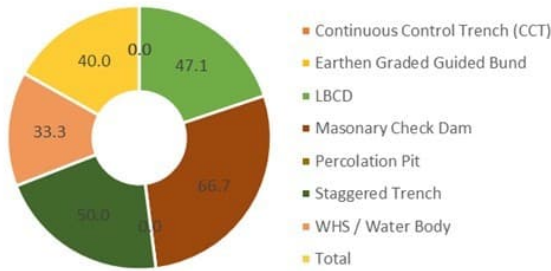
As all the SMC structures are recent, it is expected that the outcome of the investment will be realized in a mid-term (3-5 years) and long-term basis (>5 years). However, the created SMC structures found to be useful for the purpose these structures are created. Check dams have been helpful for water storage and reducing run-off speed. Percolation pits have been supportive in charging local aquifer and maintaining the soil moisture. The constructed LBCD structures found supporting in reducing run-off velocity, improving water retention time, reducing loss of top-soil, and supporting in improving soil moisture condition. Apart from this, in the SMC sites, generation of different plants also observed, due to improved soil moisture condition. Details of some of the divisions having regenerated species is highlighted in the matrix.

Table 48: Vegetation Coverage Near SMC Structures

Type of SMC	Vegetation Coverage Near SMC Structure (Site %)		
	Good	Average	Total
Continuous Control Trench (CCT)	-	100.0	100.0
Earthen Graded Guided Bund	-	100.0	100.0
LBCD	47.1	52.9	100.0
Masonry Check Dam	66.7	33.3	100.0
Percolation Pit	-	100.0	100.0
Staggered Trench	50.0	50.0	100.0
WHS / Water Body	33.3	66.7	100.0
Total	40.0	60.0	100.0



Good Vegetation Corage Near SMC Structures



Average Vegetation Corage Near SMC Structures

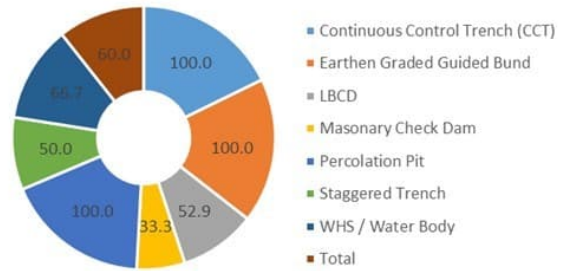


Figure 43: Vegetation Coverage Near SMC Structures

Table 49: Plant Regeneration Near SMC Structures

Divisions	Regenerated Species Near SMC Structures
Bamra WL	Kendu, Sal, Mahula, Chara, Palasa, Kurein, Bela, Gohira, Dhataki etc.
Athamallik	Telkuruma, Kendu, Palasa, Sala, Kurein, Kusuma, Kumbhui, Dhataki etc.
Dhenkanal	Rohini, Chara, Kendu, Dhataki, Kurein, Palasa etc.
Khariar	Kurein, Kendu, Palasa, Khajuri, Chara, Sala, Gohira, Sidha, Dhataki etc.
Rayagada	Kendu, Sal, Mahula, Chara, Palasa, Kurein, Bela, Gohira, Dhataki etc.
Sambalpur	Regenerated Pokasungha, Sal, Sidha, Sunari,
Malkangiri	Indigenous species like Siuna, Sahaj, Gangaseuli, Mundi, Kendu, Kusuma etc.

Note: In different sites of other forest divisions, like Koraput, Jeypore, Angul, Keonjhar WL etc. medium vegetation found near the SMC structures.

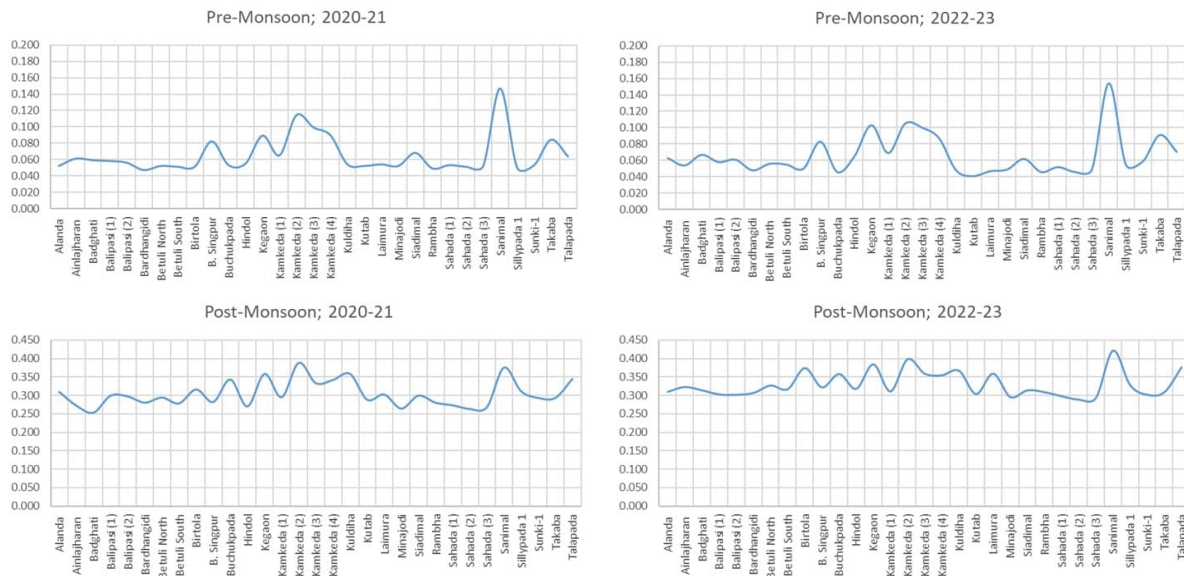


Figure 44: Vegetation Coverage Near SMC Structures





Latitude: 20.317013
Longitude: 84.753736
Elevation: 303.22±10 m
Accuracy: 3.1 m
Time: 14-09-2023 16:42
Note: SSO Baboo Central RF1.2



Latitude: 19.861817
Longitude: 85.031225
Elevation: 748.87±100 m
Accuracy: 7.2 m
Time: 28-08-2023 14:26
Note: SSO Bamboo Barbara P4

Chapter VI: SSO Bamboo

Under the assessment of SSO Bamboo, 29 sites from 27 FDs were covered with one range from each FD. Of the total sites, 75.9 percent sites fall into reserve forest category. The assessment covered silvicultural operations taken up during 2021-22 for the regeneration of degraded bamboo forest. In all sites, SSO activities were taken up under NPV 80%. Gross area under silvicultural operation in the 29 sites is 9,097.3 ha. with an average of 313.7 ha. Net area under silviculture is 8,629 ha. (average of 297.6 ha.) which is 94.85 percent of the gross area. A total of 142 sample plots were covered with a maximum of 5 plots (93.10 percent sites) per site.

6.1 SMC Measures:

In 58.6 percent sites, SMC works observed and wherever SMC works have been taken up, 35.29 percent are full moon trench, 52.94 percent are half-moon trench and 11.76 percent are staggered trench.

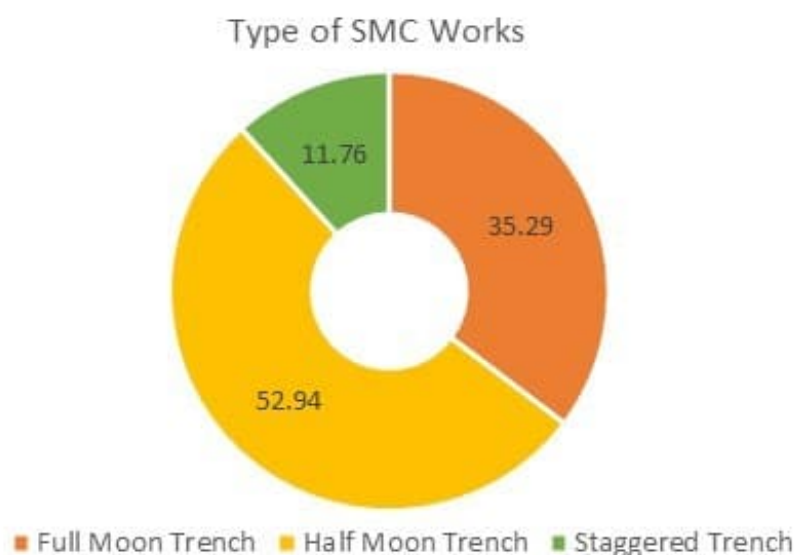


Figure 45: Type of SMC Works

6.2 Register and Signboard:

For all the SSO sites, SSO register is found (100.0) of which 96.6 percent are found updated. Signboard is found in 48.3 percent sites and in 3.4 percent sites (1 site), signboard is not visible.

6.3 Major SSO Operations Taken Up:

Among the SSO operations taken up under CAMPA, removal of congestion in the clumps / thinning of bamboo groves observed in 95.9 percent plots. As per the site-specific requirement, soil filling has been taken up and in 84.1 percent plots, soil filling is observed. In 15.9 percent plots protection measures observed. In about 93.1 percent cases, fire line is created for prevention of forest fire. Site specific additional measures also observed like stone packing (68.3 percent), and soil filling with bamboo twig (2.8 percent).



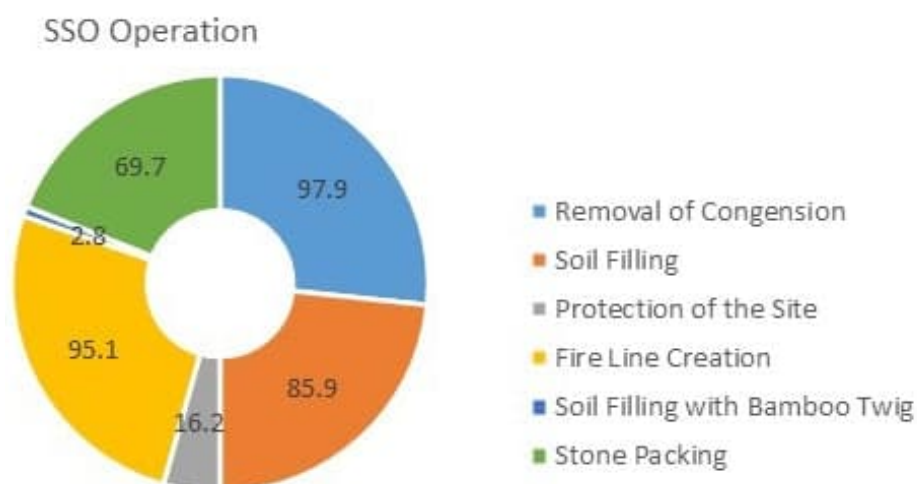


Figure 46: Major SSO Operations Taken Up

Table 50: SSO Operation by FD

Division	Removal of Congestion	Soil Filling	Fire Line Creation	Soil Filling with Bamboo Twig	Stone Packing
Angul	100.0	100.0	100.0	-	75.0
Athagarh	100.0	100.0	100.0	-	80.0
Athamallik	100.0	100.0	100.0	-	80.0
Balangir	100.0	100.0	100.0	80.0	-
Bamra WL	100.0	100.0	100.0	-	80.0
Baragarh	100.0	100.0	80.0	-	100.0
Berhampur	100.0	100.0	100.0	-	100.0
Bonai	100.0	100.0	100.0	-	80.0
Boudh	100.0	100.0	100.0	-	80.0
Debagarh	80.0	20.0	80.0	-	20.0
Dhenkanal	100.0	100.0	100.0	-	80.0
Ghumusar (N)	100.0	100.0	100.0	-	100.0
Ghumusar (S)	100.0	100.0	100.0	-	100.0
Jeypore	100.0	100.0	100.0	-	80.0
Jharsuguda	100.0	100.0	66.7	-	100.0
Kalahandi (N)	100.0	100.0	100.0	-	80.0
Kalahandi (S)	100.0	100.0	100.0	-	80.0
Khariar	100.0	100.0	100.0	-	80.0
Koraput	100.0	100.0	100.0	-	80.0
Malkangiri	100.0	20.0	80.0	-	40.0
Nayagarh	80.0	20.0	80.0	-	-
Paralakhemundi	100.0	100.0	100.0	-	100.0
Rairakhol	100.0	20.0	80.0	-	-
Rayagada	100.0	100.0	100.0	-	80.0
Sambalpur	80.0	20.0	80.0	-	-
Subarnapur	100.0	100.0	100.0	-	80.0
Sundargarh	100.0	100.0	100.0	-	80.0
Total	97.9	85.9	95.1	2.8	69.7

6.4 Regeneration of Clump:

The study covered a total of 1,589 clumps, across the studied sites. In 64.57 percent clumps, new shoots of <1 year observed with a mean number of shoots of 1.76 and 1,807 new shoots in total. In 94.15 percent clumps 4381 numbers of one year old shoots observed with an average of 2.93 per clump. Shoots of 2-year-old observed in 91.44 percent clumps with a total of 6,788 shoots with an average of 4.67 shoots per clump. Shoots of more than 2 year also observed in 90.81 percent clumps with total shoots of 7,734 and an average of 5.36 per clump. Overall, irrespective of age of the shoots, 20,710 shoots witnessed in 1,589 clumps with an average of 13.03 shoots per clump. The maintained record of 2021-22 highlights existence of 14,491 shoots with an average of 11.22 shoots per clump (for 1292 clumps). Current assessment observed that at present, difference in average number of shoots is 1.81 per clump.

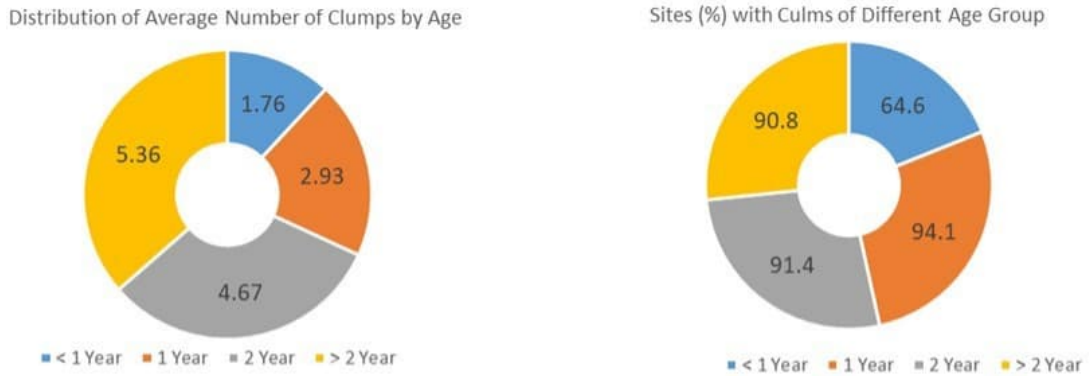


Figure 47: Average Number of Clumps by Age and Site



Latitude: 19.861737
 Longitude: 85.032157
 Altitude: 37.12±64 m
 Accuracy: 16.1 m
 Time: 28-08-2023 14:35

Table 51: Average and Total Shoots by No. of Clumps

Division	0-1 Year New Shoot			1 Year Old			2-Year-Old			> 2-Year-Old			Total			Clumps & Shoots as per record			No. of Damages Culms		
	N	M	T	N	M	T	N	M	T	N	M	T	N	M	T	N	M	T	N	M	T
Angul	35	1.86	65	35	2.11	74	35	4.89	171	35	6.83	239	35	15.69	549	32	14.063	450.0	35	2.09	73
Athagarh	44	1.75	77	44	2.09	92	44	3.86	170	44	5.68	250	44	13.39	589	34	11.441	389.0	43	1.72	74
Athamallik	43	1.72	74	46	2.61	120	33	3.55	117	57	2.56	146	62	7.37	457	62	4.774	296.0	18	3.11	56
Balangir	53	1.92	102	61	1.70	104	63	5.08	320	64	5.41	346	64	13.63	872	64	11.375	728.0	25	2.40	60
Bamra WL	27	1.33	36	33	1.55	51	36	1.75	63	47	1.77	83	47	4.96	233	46	3.196	147.0	8	2.00	16
Baragarh	1	1.00	1	57	2.79	159	54	3.43	185	59	3.92	231	60	9.60	576	54	4.593	248.0	28	1.57	44
Berhampur	30	1.13	34	68	5.57	379	68	6.88	468	68	6.15	418	68	19.10	1299	68	18.647	1268.0	16	1.13	18
Bonai	44	1.45	64	52	1.75	91	65	4.31	280	67	4.94	331	67	11.43	766	67	10.433	699.0	41	2.15	88
Boudh	107	1.48	158	108	1.59	172	106	1.96	208	109	7.81	851	109	12.74	1389	109	11.248	1226.0	96	1.95	187
Debagarh	3	1.33	4	52	4.15	216	49	3.43	168	26	2.58	67	55	8.27	455	1	8.000	8.0	28	2.61	73
Dhenkanal	57	1.61	92	53	1.60	85	55	3.76	207	57	3.67	209	57	10.40	593	57	8.632	492.0	37	2.00	74
Ghumusar (N)	96	1.52	146	129	3.73	481	130	4.32	561	132	5.11	675	132	14.11	1863	132	13.409	1770.0	49	1.73	85
Ghumusar (S)	51	1.24	63	65	2.22	144	66	9.94	656	65	3.94	256	66	16.95	1119	66	16.015	1057.0	37	1.84	68
Jeypore	41	1.63	67	41	1.95	80	41	3.24	133	41	4.68	192	41	11.51	472	41	9.561	392.0	38	1.76	67
Jharsuguda	1	1.00	1	43	4.67	201	40	5.83	233	30	3.60	108	45	12.07	543	32	17.969	575.0	29	4.31	125
Kalahandi (N)	44	2.86	126	44	3.07	135	44	3.84	169	44	4.59	202	44	14.36	632	44	10.523	463.0	44	2.09	92
Kalahandi (S)	43	2.79	120	43	2.91	125	43	3.12	134	43	5.65	243	43	14.47	622	43	11.209	482.0	41	2.61	107
Khariar	54	2.46	133	52	2.71	141	52	6.46	336	54	6.54	353	54	17.83	963	54	13.981	755.0	30	2.40	72
Koraput	51	1.75	89	51	2.10	107	51	2.27	116	51	5.20	265	51	11.31	577	51	9.176	468.0	51	1.71	87
Malkangiri	12	2.17	26	50	3.24	162	52	4.62	240	50	8.08	404	54	15.41	832	21	11.429	240.0	29	2.24	65
Nayagarh	31	2.84	88	47	4.55	214	48	8.33	400	48	13.38	642	48	28.00	1344	5	35.800	179.0	29	2.72	79
Paralakhemundi	50	1.30	65	66	3.21	212	65	3.97	258	66	5.02	331	66	13.12	866	66	12.106	799.0	51	2.24	114
Rairakhol	5	1.60	8	58	3.71	215	59	4.15	245	56	3.46	194	60	11.03	662				25	1.88	47
Rayagada	39	1.67	65	50	1.90	95	52	5.06	263	52	5.79	301	52	13.92	724	52	11.654	606.0	21	1.90	40
Sambalpur	26	1.35	35	62	2.90	180	23	1.78	41				73	3.51	256				18	1.50	27
Subarnapur	27	1.41	38	30	1.67	50	28	4.18	117	35	4.57	160	35	10.43	365	35	8.600	301.0	14	1.57	22
Sundargarh	11	2.73	30	56	5.29	296	51	10.37	529	43	5.51	237	57	19.16	1092	56	8.089	453.0	17	2.06	35
Total	1026	1.76	1807	1496	2.93	4381	1453	4.67	6788	1443	5.36	7734	1589	13.03	20710	1292	11.216	14491.0	898	2.11	1895





Latitude: 20°28'38"
Longitude: 84°51'9"
Elevation: 196.41±100 m
Accuracy: 11.8 m
Time: 08-10-2023 10:57
Note: Water body at Nimandi, MNRF CN-17

Powered by NoteCam



LOCATION:

21°	46'	39.33"
84°	55'	16.29"

BIRD BIRTH STRUCTURE

ବୌଦ୍ଧ୍ୟ- ବଣାଳି ବ୍ୟାଞ୍ଜନ, ବଣାଳି ବନଖଣ୍ଡ

Bonal

Powered by No

CHAPTER- VII: WILDLIFE MANAGEMENT ACTIVITIES

Wildlife management refers to the conservation, preservation, and sustainable utilization of wildlife populations and habitats. Effective wildlife management seeks to ensure the long-term viability of wildlife populations while considering socio-economic factors.⁸ Efforts for wildlife management is viewed to be of crucial importance in view of India's rich biodiversity and ensuring the survival of its unique wildlife species.⁹ In Odisha, during 2022-23, the Compensatory Afforestation Fund Management and Planning Authority (CAMPA) intervened in various wildlife management activities. These included habitat restoration, anti-poaching measures, biodiversity conservation, and community engagement initiatives. CAMPA funded projects aimed to protect endangered species like elephants, tigers, and turtles while enhancing forest cover and connectivity. Furthermore, CAMPA facilitated the creation of wildlife corridors, and the establishment of conservation reserves to safeguard crucial habitats. These efforts were pivotal in mitigating human-wildlife conflict and promoting sustainable wildlife management practices in Odisha¹⁰. Present chapter analyses the performance of CAMPA APO 2021-22 supported wildlife intervention in different forest divisions of Odisha and assets / infrastructures created under general CAMPA and wildlife.

- A. Protection and Anti-depredation Activities: Strengthening of Communication facilities for Protection of Wildlife (Installation of VHF Base station, Procurement of equipment for monitoring of Wild Animals and protection activities, Communication and information technology and data analysis and data managing).
- B. Forest Fire Prevention and Control
- C. Improvement of Wildlife Habitatant
 - C.1 Creation and maintenance of Water Bodies
 - C.2 Plantation of fruit bearing and fodder species around the water bodies
 - C.3 Bamboo seed ball plantations to enrich elephant habitation
 - C.4 Fodder Block Plantation and its maintenance
 - C.5 Rejuvenation of WL corroder
 - C.6 Creation and maintenance of Saltlick
 - C.7 Immunization of Cattle
 - C.8 Invasive weed eradication
 - C.9 Habitat Restoration and Meadow Management in Protection areas
 - C.10 Black Buck Conservation
- D. Establishment, Operation and Maintenance of animal rescue center and veterinary treatment facilities for Wild Animals
- E. Supply of Wood Saving cooking appliances and other forest produce saving devices in forest fringe villages
- F. Management of Biological Diversity and Biological Resources

⁸ Western, David, and Michael C. Runge. "Wildlife management." Encyclopedia of Conservation Biology. Oxford: Oxford University Press, 2007. PP. 1525-1532.

⁹ "Wildlife Management in India." Ministry of Environment, Forest and Climate Change, Government of India.

¹⁰ Odisha Forest and Environment Department, 2022-23 Annual Report.



Odisha is a wildlife rich State and some of its biodiversity rich areas have been declared as protected area. Presently there are 19 Sanctuaries, one National Park, one proposed National Park, two Tiger Reserves, one proposed tiger reserve (Approved by NTCA and in the process of declaration) three elephant reserves and one Biosphere reserve. About 5.36% of geographical area of the state is covered under the Protected Area network. In addition to the PA network there are areas of Global/National importance from conservation point of view. These areas cover nesting grounds for Olive Ridleys (About 50% of mass nesting of the world takes place in Odisha), Black Buck habitats protected by local communities, increasing trend of mugger populations & Irrawaddy Dolphins etc. are the point of importance from WL point of view. Odisha also has the distinction of having melanistic tigers in the wild, all three types of crocodiles, major elephant population of East-central landscape of the country, migratory birds etc. Therefore, wildlife protection and management activities are not only restricted to Protected Areas Network but also covers whole of state including marine areas (which covers one marine sanctuary also). To address a host of challenges the State is facing to protect and conserve the wildlife along-with its habitat, wildlife management is supported under CAMPA APO: 2021-22. Wildlife management is broadly categorized into three as per the APO, i.e., [1] wildlife protection and management, [2] implementation of regional wildlife management plan, and [3] implementation of site-specific wildlife conservation plan.

Activities Under NPV for Wildlife Protection and Management:
Wildlife Protection and Management:

Wildlife protection and management poses many challenges due to increase in human population, developmental needs including infrastructure resulting fragmentation of the habitats, blocking the natural movement paths causing straying of animals etc.

7.1 Protection and Anti-Depredation Activities:

Protection of wild animals and their habitat is of paramount importance. This covers not only protection of wild animals in their natural habitats but also in the cases wherein they stray into human habitations, agricultural field etc. In the process there is considerable damage to Wildlife as well as life and property of human beings. To tackle such situation more manpower is required. Such manpower is drawn from the local areas and consists of local youth who supplement the efforts of forest field functionaries of the department and help in tracking the wild animal movement and protection of wild animals and the life and property of human beings. Forest staff and these squads are equipped with anti-depredation equipment and tracking devices. To gather information on wildlife, crime intelligence network is required for inputs from various sources. To process such information a close co-ordination between headquarters and field units is required for quick exchange of information and action. Besides this, data relating to wildlife crime, elephant movement needs to be monitored and shared between headquarters and field units. For this purpose, wildlife crime cell is functioning at the headquarter level and in all wildlife divisions,

So, activities related to this aspect are also proposed in the interest of protection. At many places physical barriers are required to safeguard wild animals as well as life and properties of villagers. In this regard Government has approved a scheme for taking up Solar Power Fence with Community Participation vide their letter no 9948 dated 26.06.2020. In the said scheme the Community would contribute 10% of the total cost and rest would be borne by the Govt. Therefore, funds have been sought for this purpose also. Despite best efforts at some places there is damage to crops or loss of human life. To compensate the loss, Management Plans of Protected Areas provide scope for payment of compensation. Therefore, an amount of Rs.110 lakhs has been proposed under the same to provide instant help to such affected villagers. In addition to this, for safeguarding our protected areas, it is also proposed to maintain boundary of protected areas where it is required.

Besides above, many a times wild animals under distress need rescue and temporary care in the field before its release into the wild. So, funds have been sought for such rescue operation of wild animals in the field. There is a need for improving the communication facilities like VHF sets installation, maintenance, satellite tracking, equipment for wildlife monitoring, usage of communication technology for data transfers, data analysis, etc. to cover all protection related activities.



Table 52: Protection and Anti-depredation

	Present Condition						Total	
	Average		Good		Poor		Count	% within Type of Assets
	Count	% within Type of Assets	Count	% within Type of Assets	Count	% within Type of Assets		
Elephant proof trench	1	14.3%	6	85.7%			7	100.0%
Excavation of elephant proof trench	1	100.0%					1	100.0%
Guided the unguided well	1	25.0%	3	75.0%			4	100.0%
Maintenance of Boundary area			4	100.0%			4	100.0%
Protection Camp, Khandadhar			1	100.0%			1	100.0%
Purchasing of Drone & its assosarise			1	100.0%			1	100.0%
Solar Fencing	1	11.1%	3	33.3%	5	55.6%	9	100.0%
Solar Light			5	100.0%			5	100.0%
Total	4	12.5%	23	71.9%	5	15.6%	32	100.0%

7.1.1 Strengthening of Communication Facilities for Protection of Wildlife:

For improving the performances of wildlife protecting staff, it is essential to have better communication facilities available with them. For these, different activities were proposed in the APO, like [1] installation of VHF base station, and maintenance thereof including satellite tracking, [2] procurement of equipment for monitoring of wild animals and protection activities, [3] communication and information technology, data analysis and data managing. Abstract of activities under wildlife protection is presented in the matrix.

SN	Key Activities
1	Wildlife Protection cum Anti-depredation Squads - 174 Nos.
2	Engagement of Wildlife Tracker - 90 Nos.
3	Anti-depredation equipment / Tracking devices
4	Compassionate Payment as per management plan provision to protect wild animals
5	Fencing and Erection of barriers, Round Rubble Wall, Solar Fencing, trench etc. including maintenance
6	Mobility for Boats for patrolling/anti-depredation/anti-smuggling activities
7	Rescue & release operation of wild animals
8	Protection of Wildlife, it's habitats and prevention of wildlife crime.
9	Maintenance of Boundary of Protected Areas
10	Enhancing communication facilities, monitoring the movement of wild animals, data analysis, etc.
	i. Installation of VHF base station, and maintenance thereof including satellite tracking
	ii. Equipment for monitoring of wild animals and the protection activities
	iii. Communication and information Technology, data analysis and data managing of protection activities.

7.2 Forest Fire Prevention and Control

Occurrence of forest fire from February to June is a common phenomenon due to various reasons. Fires cause huge loss to habitat by damaging regeneration, causing moisture stress, biomass depletion etc. Many a times wild animals, their young ones or eggs impacted by it.



Table 53: Details of Firefighting squads

SN	Items of Work	Unit	Unit Cost (Rs. In Lakh)	Quantity / Unit in No.	Amount (in Lakh)
1	Fire-fighting Squads	Nos.	6.90	48	331.20
2	Fire-fighting equipment including Blowers	Nos.	0.61	50	30.50
3	Fuel for old fire Blowers purchased from CAMPA	Nos.	0.10	485	48.50
4	Training to fire-fighting squads	Nos.	0.15	12	1.80
5.	Logistics support for the firefighting squads	Nos.	0.85	48	40.80
6	Fireline Creation & Maintenance	Km.	0.0308	6887	212.12
7	Data management and Analysis	LS			25.00
	Total				689.920

Table 54: Fire line and its Present Condition:

Sl. No.	Division	Size of the Structure (in Km)	Present Condition
1	Karanjia	3	Good
2	Karanjia	1	Good
3	Bamra WL	7	Good
4	Subarnapur	6	Good
5	Bonai	15.6	Good
6	Rayagada	2	Average
7	Rayagada	2	Average
8	Athamalik	5	Average
9	Athamalik	2	Average
10	Athamalik	2	Average
11	Khariar	4	Average
12	Similipal North	10	Average
13	Rairangpur	0.7	Average
14	Baripada	9	Average
15	Chandaka WL	6	Average
16	Mahanadi WL	5	Good
17	Khurdha	30	Average
18	Similipal South	5	Average
19	Berhampur	5	Average
20	Ghumusar North	5	Average
21	Ghumusar South	10	Average
22	Sunabeda WL	5	Average
23	Keonjhar	12	Average
24	Keonjhar WL	2	Good
25	Cuttack	5	Good
26	Kalahandi South	14	Average
27	Kalahandi North	10	Good
28	Boudh	10	Good
29	Athagarh	5	Good
30	Angul	5	Good
31	Angul	15	Average
32	Angul	10	Good



Sl. No.	Division	Size of the Structure (in Km)	Present Condition
33	Angul	9	Good
34	Jharsuguda	3	Good
35	City Forest Bhubaneswar	15	Average
36	Deogarh	2	Good
37	Sundargarh	10	Good
38	Rairakhol	12	Good
39	Sambalpur	20	Good
40	Satkosia WL	13.5	Average
41	Bargarh	3	Average
42	Malkangiri	5.5	Average
43	Balasore WL	3	Average
44	Puri WL	5	Good

7.3 Improvement of Wildlife Habitat

Habitat improvement is an important activity in Wildlife Management. Various developmental processes, biotic interferences, and incidences of fire in forest areas are the main cause of degradation of wildlife habitat. Following activities were proposed for improvement of Wildlife habitats.

7.3.1 Creation and Maintenance of Water Bodies:

To check the water scarcity in wildlife habitat, creation and maintenance of water bodies were proposed. It is proposed to create 50 water bodies of size 40mtr x 30mtr x 3mtr during 2021-22 and maintenance of 50 water bodies created during the previous APOs.

7.3.2 Plantation of fruit bearing and fodder species around the water bodies:

To augment the food and fodder requirement of wildlife, it was proposed to plant @ 50 Nos. of fruit and fodder bearing species around each water body. The plants were to be protected by gabions and provision of watering during summer months. During 2021-22, 180 water bodies were planned to be covered for planting the saplings. Further provision was also made for 2nd year & 3rd year maintenance of the old plantations taken up around the water bodies during the previous APOs.

7.3.3 Bamboo Seed ball Plantations to enrich elephant habitation:

To enrich bamboo plantations in natural forests which has been degraded over the years, this provision was created in the current APO.

7.3.4 Fodder block plantation and its maintenance:

Funds under this item was planned to be utilized for third year maintenance of fodder plantation created in wildlife habitats.

7.3.5 Rejuvenation of Wildlife Corridor:

Elephants being long ranging animals use traditional migratory routes for commuting between different forests. These routes / corridors are essential to be safeguarded and rejuvenated through habitat improvement for ensuring minimal human-elephant conflict. Activities under this item were planned to be carried out as per the management plans. Further provision were also made for third year maintenance of plantation taken up in the APO 2019-20.



7.3.6 Creation and Maintenance of Salt licks:

To check wild animal becoming prey to poachers by visiting natural salt licks as well as meeting the salt requirement of herbivores, it was proposed to create new salt licks and maintain salt licks created in previous APOs.

7.3.7 Immunization of Cattle:

The cattle of forest fringe villages and villages located inside the protected area normally graze in forest areas. The infected cattle may cause spreading of contagious diseases to wildlife. To prevent such incidences, it was proposed to immunize cattle with the help of local veterinary officers.

Forest officials are assisting the veterinary department to coordinate the vaccination campaign and facilitate other required logistics. Vana Suraksha Samitis (VSSs) and NGOs associated with the forest department are assisting in creating awareness among the villagers. Through vaccination drive, it was planned to curb any possibility of the bacteria spread.

Table 55: Cattle Immunization program organized in the forest fringe villages for prevention of different diseases to the domestic animals.

Location	No of Village Covered	Remarks
Division: Balangir Range: Muribahal Section: Gudighat Beat: Rengali Village: Antarla	4	Cattle Immunisation programme organised for prevention from Phatua and Benga diseases. Near about 100 Caw and 50 nos. Goat has been vaccinated by this programme
Division: Rayagada Range: Tikiri Section: Tikiri Beat: Kodinga Village: Kodinga	7	Cattle Immunisation programme organised for prevention from Phatua, Sahana and Bajbajia diseases. Total 567 beneficiary benefitted from this Cattle Immunisation camp
Division: Athamalik, Range: Dhandatopa, Section, Beat & Village: Dhandatopa	15	Cattle Immunisation programme organised for prevention from Phatua, Sahana and Bajbajia diseases. Total 597 beneficiary benefitted from this Cattle Immunisation camp
Division: Dhenkanal, Range, Section & Beat: Hindol, Village: Ganjora	15	Cattle Immunisation programme organised for prevention from Phatua, Sahana and Bajbajia diseases. Total 597 beneficiary benefitted from this Cattle Immunisation camp Near about 2000 Large animal and 3000 small animal vaccinated through this programme.
Division: Rairangpur, Range: Badampahar, Section: Suleipat, Beat: Jamjhari, Village: Pathankata	4	Cattle Immunisation programme organised for prevention from Phatua and Benga diseases. Near about 100 Caw and 50 nos. Goat has been vaccinated by this programme



7.3.8 Invasive Weed Eradication:

Unwanted weeds planned to be uprooted and destroyed to boost the growth of palatable grass / shrubs / trees.

7.3.9 Habitat Restoration and Meadow Management in Protected Areas

Development and maintenance of meadows were planned to supplement the food requirement of the herbivores. During the month of May' 2019 there was devastating Cyclonic storm named "Fani" hit the coastal areas of the state. Balukhand-Konark WL Sanctuary of Puri WL Division witnessed severe damage due to the cyclonic storm thereby uprooting large no of trees. The meadows created in the sanctuary to meet the fodder requirement were damaged extensively due to falling of trees and its twigs. The scarcity of fodder for wildlife was eminent after the cyclone. So, it was essential to develop meadows in Balukhand-Konark WL Sanctuary during 2021-22. Therefore, it was proposed to take up meadow in the above sanctuary and other sanctuary.

7.3.10 Black buck Conservation

Black buck is a schedule-1 Species as per the Wildlife Protection Act, 1972. This species is found in few specific areas of the State which require protection and conservation measures. The activities planned were habitat improvement, census operations & strengthening monitoring mechanism.

Table 56: Improvement of Wildlife Habitat

	Present Condition						Total	
	Average		Good		Poor			
	Count	% within Type of Assets	Count	% within Type of Assets	Count	% within Type of Assets	Count	% within Type of Assets
Bamboo Seed ball	1	16.7%	4	66.7%	1	16.7%	6	100.0%
Bear Cave			3	100.0%			3	100.0%
Check dam			1	100.0%			1	100.0%
Construction of Sources, Saltlick, Water pockets and Meadow cultivation for Black buck conservation			1	100.0%			1	100.0%
Construction of under way pass			1	100.0%			1	100.0%
Elephant Approach Concert Base			1	100.0%			1	100.0%
Grass Land	1	50.0%			1	50.0%	2	100.0%
Improvement of Bird habitant	3	50.0%	3	50.0%			6	100.0%
Invasive Weed Eradication	2	25.0%	6	75.0%			8	100.0%
Maintenance of Fruit bearing & Fodder species around Water Body			7	70.0%	3	30.0%	10	100.0%
Maintenance of Water Body	2	28.6%	5	71.4%			7	100.0%
Meadow Development			8	100.0%			8	100.0%
Plantation of Fruit & Fodder species around the Water Body	11	26.2%	30	71.4%	1	2.4%	42	100.0%
Renovation of Water Body	1	9.1%	10	90.9%			11	100.0%
Salt Lick	1	7.1%	13	92.9%			14	100.0%
Water Body	1	2.7%	36	97.3%			37	100.0%
Water Hole			1	100.0%			1	100.0%
WHS			16	100.0%			16	100.0%
Total	23	13.1%	146	83.4%	6	3.4%	175	100.0%



7.4 Establishment, Operation and Maintenance of animal rescue centre and veterinary treatment facilities for Wild animals:

There are eight large / mini and small zoos managed and maintained by Forest Department which are also functioning as Animal Rescue Centres. Improvement and maintenance activities were planned under the APO in these eight rescue centres as per the zoo Master Plan and master layout plan approved by CZA. A provision of Rs.300.00 lakh is proposed for this purpose.

- Establishing veterinary and diagnostic centre with advanced post-mortem and forensic capability in Nandankanan Zoo. In the APO, provision of Rs.50.00 lakh was made for its maintenance.
- Rescue Centres, transit house and treatment centres are a need of the hour to provide lifesaving treatment & medication to rescued wild fauna & for making them fit for release in the wild.
- It is proposed to establish anti-depredation cell equipped with logistics at different locations in the field to support wildlife protection and management activities.

Table 57: Establishment, O& M of animal rescue centre & veterinary treatment facility for Wild Animals

	Present Condition						Total	
	Average		Good		Poor		Count	% within Type of Assets
	Count	% within Type of Assets	Count	% within Type of Assets	Count	% within Type of Assets		
Glass house for Crocodile			1	100.0%			1	100.0%
King Cobra & Python Rescue Center			1	100.0%			1	100.0%
Maintenance of Zoo Hospital			1	100.0%			1	100.0%
Repairing of IB			1	100.0%			1	100.0%
Weigh bridge			1	100.0%			1	100.0%
Zoo Management			4	100.0%			4	100.0%
Total			9	100.0%			9	100.0%

Table 58: Maintenance of Nandankanan and Other Zoo:

SN	Location	Name of the Zoo	Activities	Expenditure	Remarks
1	Division: Balangir, Range & Section: Harisankar, Beat: Nandupala	Deer Park, Harishankar	Activities in Zoo Management: <ul style="list-style-type: none"> • Clean surface; • Construction of overhead tank for watering; • 100 Rmt. ware mess fencing; • Provide salary to 8 nos. of Zoo watchers; • Construction of solar light in the Harisankar Deer Park 	16,25,336.00	Infrastructures are in good condition; The infrastructures are as per the need and fulfilling requirements.
2	Division: Dhenkanal, Range, Section & Beat: Kapilash	Kapilash Zoo	<ul style="list-style-type: none"> • Construction of King Cobra and Python Rescue Centre 	35,00,000.00	King Cobra and Python Rescue Centre consists of 5 rooms with the effects of natura environment. One King Cobra, One Chandan Boada and 5 nos. Python have been kept in this centre.



SN	Location	Name of the Zoo	Activities	Expenditure	Remarks
3	Division: Mahanadi WL, Range, Section & Beat: Banigochha	Kuanria Deer Park	<ul style="list-style-type: none"> Construction of male deer rest shed inside Kuanria Deer Park Construction of Female deer rest shed inside Kuanria Deer Park 	4,90,000.00	All infrastructures of Kuanria deer park are in good condition and used by male and female deer
4	Division: Mahanadi WL, Range, Section & Beat: Banigochha	Kuanria Deer Park	<ul style="list-style-type: none"> Renovation of Cattle Proof Trench around the Kuanria Deer Park Construction of male green fodder store at Kuanria Deer Park, Construction of Boundary Wall of Kuanria Deer Park 	3,10,700.00	Strengthened the protection of Kuanria Deer Park
5	Division: Satkosia WL, Range, Section & Beat: Tikarpada	Gharial Research & Conservation Unit (GRACU)	Maintenance, Upgradation & Development of GRACU, Tikarpada	30,00,000.00	Upgradation of Zoo hospital, Colouring of Boundary wall, Pathway development etc.

7.5 Supply of wood-saving cooking appliances and other forest produce saving devices in forest fringe villages

The villagers around protected areas was made in the APO with a financial outlay of Rs.50.00 lakhs. The use of LPG in forest fringe villages was also planned for encouragement.

Items of Work	Unit	Unit Cost (Rs. In Lakh)	Quantity / Unit (No.)	Proposed Amount (Rs. In Lakh)
Distribution of fuel saving devices like LPG, Solar cookers / lamps etc. to the villagers around protected areas	Nos.	0.05	1,000	50.00
Total				50.00

7.6 Management of Biological Diversity and Biological Resources:

For assessment of success of wildlife management, periodical studies of biodiversity of protected areas, population dynamics of different fauna, carrying capacity of wildlife habitats and such other studies are essential. In the APO 2021-22, provisions of Rs 5.00 lakhs were made for biodiversity assessment of the PAs and other research activities.

7.7 Assets and Infrastructures for WLM:

Under APO 2021-22, several assets / infrastructures were created for effective and efficient WLM. Type of assets created, and its status is presented in "Chapter IX: Infrastructure".





CHAPTER-VIII: Forest Protection, Including Fire Protection

8.1. Forest Protection

Forest protection is a vital aspect of forest management that focuses primarily on prevention & control of destruction of forests due to biotic interference. Inadequate protection measures lead to degradation of the value of forests. The survival and regeneration of flora and fauna come under threat because of illegal exploitation of forest due to biotic and other anthropogenic factors. Illicit felling of trees and smuggling poses serious threat to preservation, protection, and conservation of green cover. Legal provisions made for forest and wildlife offences are not sufficient to address the problems completely due to inadequacy in infrastructure, trained frontline personnel's & ancillary supports. Forest fire is another destructive factor that causes severe stress and imbalance in the ecosystem. Large stretches of forest in the State are of deciduous type which is an important factor for wide spread of forest fire.

Enforcement of Acts and Rules pertaining to forest protection is a vital weapon to restrict illicit removal of timber. To implement such laws sufficient manpower, fund placement & infrastructure is barely necessity. The presence of grassroot level frontline staff was inadequate those who primarily implementing the laws. Existence of infrastructure was also limited to accommodate the frontline staff. To assist the regular frontline staff of forest department there was absolute need of engaging forest protection squads to combat the alarming situation of forest smuggling. Vulnerable smuggling pockets where acute timber smuggling is noticed, were identified in the different forest divisions. In such pockets, protection squad was placed to restrict such activities. Vulnerable pockets were identified basing on certain parameters such as [1] forest density, [2] presence of valuable species, [3] economically valuable plantation, and [4] operation of organized antisocial elements, and [5] proximity of the area to the consumption points.

8.1.1 Forest Protection Squad

Considering the need to safeguard the existing green cover on priority, 227 squads with 10 persons in each squad covering 219 ranges in 37 forest divisions of the State and one protection squad in each circle covering 8 circles, have been deployed for forest protection and to check anti-smuggling activities. In APO 2021-22, focus was to deploy one squad in each circle. All the squad personnel are from local fringe villages who will boost the capacity of ground level field front line staffs to restrict anti-smuggling activities. Every squad camp at strategic locations in constructed barrack/s. The barracks are provided with different facilities for their accommodation, like water, provision of vehicle for immediate action, modern communication equipment to keep in touch with adjoining staffs etc. Details of the engagement of forest protection squads is provided in the matrix.

Table 59: Forest Protection Squads

SN	Division	Hired Vehicle and Fuel				Forest Protection Squad				Total Finance
		Div. P	Circle P	Total P	Financial (F)	Div. P	Circle P	Total P	Financial	
1	Angul	6	1	7	33.70	3	1	4	61.52	95.21
2	Athmallik	5		5	87.78	5		5		87.78
3	Dhenkanal	8		8	37.65	8		8	77.64	115.29
4	Athagarh	5		5	38.48	5		5	45.34	83.82
5	Cuttack	6		6	24.08	6		6	108.69	132.77
6	Khurda	6		6	30.96	6		6	93.16	124.12
7	Nayagarh	7		7	29.91	7		7	121.12	151.04
8	City Forests	4	1	5	25.80	4	1	5	62.11	87.91
9	Phulbani	7		7		7		7		0.00
10	Baliguda	7		7	33.11	7		7	93.13	126.24
11	Boudh	5		5	21.44	5		5	62.11	83.55



SN	Division	Hired Vehicle and Fuel				Forest Protection Squad				Total Finance
		Div. P	Circle P	Total P	Financial (F)	Div. P	Circle P	Total P	Financial	
12	Gh.South	5		5	14.75	5		5	108.69	123.44
13	Gh.North	5		5	14.61	5		5	92.14	106.75
14	Berhampur	4	1	5		4	1	5	143.13	143.13
15	Parlakhemundi	7		7	40.16	7		7	104.65	144.81
16	Jharsuguda	5		5	25.80	5		5	46.58	72.38
17	Sambalpur	5	1	6	103.65	5	1	6	28.43	132.08
18	Rairakhol	6		6	30.96	6		6	93.16	124.12
19	Bargarh	6		6	30.96	6		6	46.58	77.54
20	Sundargarh	6		6	133.90	6		6		133.90
21	Rourkela	6	1	7	134.73	6	1	7		134.73
22	Bonai	7		7	36.12	7		7	124.22	160.34
23	Deogarh	5		5	25.80	5		5	107.72	133.52
24	Keonjhar	7		7	36.12	7		7	139.74	175.86
25	Baripada	7	1	8	41.28	7	1	8	82.94	124.22
26	Karanjia	4		4	14.88	4		4	98.92	113.80
27	Rairangpur	5		5	17.76	5		5	92.77	110.53
28	Kalahandi(N)	5	1	6	135.16	5	1	6	4.04	139.20
29	Kalahandi (S)	7		7	36.12	7		7	108.69	144.81
30	Subarnapur	4		4	20.64	4		4	93.16	113.80
31	Bolangir	11		11	56.76	11		11	105.51	162.27
32	Khariar	5		5	25.61	5		5	93.16	118.77
33	Rayagada	7		7	36.12	7		7	93.16	129.28
34	Koraput	6	1	7	30.96	6	1	7	91.15	122.11
35	Jeypore	6		6	28.40	6		6	108.69	137.09
36	Nabarangpur	6		6	30.96	6		6	88.90	119.86
37	Malkangiri	6		6	30.96	6		6	93.16	124.12
	TOTAL	219	8	227	1496.08	216	8	224	2914.11	4410.19

Note: P: Physical; F: Financial

8.2. Fire Protection

The most common hazard in forests is forest fire. Forest fire poses a threat not only to the forest wealth but also to entire community of fauna and flora, disturbing the biodiversity, ecology, and environment. In the summer season, the deciduous forests of the state become littered with dry senescent leaves and twigs which becomes major threat to forest fire. The deciduous forests of Odisha suffer on account of repeated fire during summer months resulting great loss of regeneration, moisture stress, biomass depletion and hardship to wildlife. It needs to be controlled and managed to safeguard the productivity and eco-system health. Steps have been taken under the APO to augment the availability of manpower in organized groups to tackle forest fire in remote and inaccessible areas.

8.2.1 Fire Fighting Squad

Information is being received from Forest Survey of India about the occurrence of forest fire. This information is collected from the data received through MODIS/SNPP satellite and communicated to the field to the exact forest beat / section / range and division through web-based app and to the individual mobile of concerned field staff through a computer-generated message from Forest Fire Cell at State Headquarters. Such data has been used to locate fire prone areas. However, to combat the menace of forest fire in the field, it was necessary to deploy adequate Fire Fighting Squad who can assist the forest staff in fire control. Due to widespread occurrence of forest fire in the State, it was considered necessary to deploy firefighting squad in all the forest divisions. Each squad comprises 10 persons who are mainly the rural unemployed youth and were provided with firefighting equipment. A vehicle on hiring basis is also provided for instant mobility. The squad is deployed for about 150 days, i.e., from February to June.



8.2.2 Creation and Management of Fire Line:

Creation of fire line for controlling and managing fire incidences is a time-tested methodology evolved since long period. Fire line so created during January in the forest reduce the fire hazard in the forest. Fire line creation and maintenance every year is an important preventive method to control forest fire. It is created along all the compartment lines and the boundary line of the forest block as well as across the forest path and maintained at regular interval during the fire season. New fire lines are also created based on vulnerability and with reference to FSI report / satellite imageries. Details of fire line creation is presented in the matrix.

Table 60: Fire Fighting and Fire Line Management:

SN	Division	Fire Fighting Squad		Fire Vehicle		Fire Line Maintenance		Logistic to the Fire Protection Squad		Total Financial
		P	F	P	F	P	F	P	F	
1	Angul	6	27.72	6	12.60	600	18.48	6	5.10	63.90
2	Athmallik	5	33.60	5	10.50	600	18.48	5	4.25	66.83
3	Dhenkanal	7	53.76	7	14.70	600	18.48	7	6.80	93.74
4	Athagarh	4	29.49	4	8.40	500	15.40	4	4.21	57.50
5	Cuttack	3	20.16	3	6.30	300	9.24	3	2.55	38.25
6	Khurda	5	40.32	5	10.50	300	9.24	5	5.10	65.16
7	Nayagarh	7	47.04	7	14.70	600	18.48	7	5.95	86.17
8	City Forests	1	4.62	1	2.10	100	3.08	1	0.85	10.65
9	Phulbani	7	32.34	7	14.70	800	24.64	7	5.96	77.64
10	Baliguda	8	46.85	8	16.80	900	27.72	8	5.95	97.32
11	Boudh	6	33.60	6	12.60	500	15.40	6	4.25	65.85
12	Gh.South	5	24.89	5	10.50	700	21.56	5	4.25	61.20
13	Gh.North	5	22.95	5	10.43	600	18.48	5	4.25	56.11
14	Berhampur	4	27.12	4	8.40	600	18.48	4	3.40	57.40
15	Parlakhemundi	7	47.04	7	14.70	800	24.64	7	5.95	92.33
16	Jharsuguda	5	33.60	5	10.50	300	9.24	5	4.25	57.59
17	Sambalpur	5	25.90	5	10.50	500	15.40	5	4.25	56.05
18	Rairakhol	6	40.32	6	12.60	600	18.48	6	5.10	76.50
19	Bargarh	6	40.32	6	12.60	500	15.40	6	5.10	73.42
20	Sundargarh	6	36.29	6	12.60	600	18.48	6	5.10	72.47
21	Rourkela	6	40.32	6	12.60	500	15.40	6	5.10	73.42
22	Bonai	7	47.04	7	14.70	600	18.48	7	5.95	86.17
23	Deogarh	5	33.60	5	10.50	400	12.32	5	4.25	60.67
24	Keonjhar	7	47.02	7	14.70	600	17.02	7	5.95	84.69
25	Baripada	7	37.65	7	14.70	500	15.40	7	5.95	73.70
26	Karanjia	6	26.88	6	12.60	500	15.40	6	3.40	58.28
27	Rairangpur	5	33.37	5	10.50	300	9.24	5	4.25	57.36
28	Kalahandi (N)	6	23.19	6	10.50	600	18.48	6	4.16	56.33
29	Kalahandi (S)	7	32.34	7	14.70	600	18.48	7	5.95	71.47
30	Subarnapur	4	18.48	4	8.40	500	15.40	4	3.40	45.68
31	Bolangir	11	73.92	11	23.10	700	21.56	11	9.35	127.93
32	Khariar	5	26.66	5	10.50	400	12.32	5	4.25	53.73
33	Rayagada	8	47.04	8	16.80	700	21.56	8	5.95	91.35
34	Koraput	6	40.32	6	12.60	500	15.40	6	5.10	73.42
35	Jeypore	5	40.32	5	10.50	500	15.40	5	5.10	71.32
36	Nabarangpur	6	40.32	6	12.60	500	15.40	6	5.10	73.42
37	Malkangiri	7	27.72	7	14.70	600	18.48	7	5.10	66.00
	TOTAL	216	1,304.12	216	451.43	20,000	614.54	216	180.92	2,551.01

Note: P: Physical; F: Financial

Implementation Schedule for Forest Protection Activities:

SN	Component	Activities	Time Period
1	Forest Protection	Squad deployed at vulnerable pockets	Whole Year
2	Fire Protection	Squads deployed for extinguishing forest fire	February to June
3	Fire Line	Creation / maintenance of fire line	January to March



8.2.3 Logistics for Fire Protection Squads:

The firefighting is mostly done with fire blowers. In addition, other equipment like fire safety gloves, dress, helmet, jacket etc. are also provided to the squad.

Table 61: Fire Protection Support to Squads:

SN	Activities	Quantity	Remarks
1	Fire Fighting Squad (216 squads in 37 divisions)	216	Including Hiring Vehicle
2	Fireline Maintenance	397.6	Observed (need to be maintained every year)
3	Fire Fighting Equipment & Logistics	All divisions	Fire Fighting Equipment: safety gloves, dress, helmet, jacket, Cap, Bag, Water Bottle and Sunglass

Conclusion:

Incidence of forest fire to a greater extent is anthropogenic in nature due to various reasons. However, measures being taken for forest fire control and management through deployment of squads, equipping squads for forest fire management, creation of fire line, monitoring forest fire and immediate action for controlling it etc. has been effective to manage and control forest fire. Awareness drive for forest fringe villagers and association of VSS in forest and forest fire management has been productive.





CHAPTER-IX: Infrastructure (General & Wildlife)

A. Infrastructure Development

The infrastructural development for wildlife management and creation of general assets for the forest frontline staff inside forest area are important steps in forest management. Construction of forest range offices, residence (range officers, forester, and forest guard), forest road, culvert, causeway, tube wells, mega nurseries, communication facilities, floating jetties etc. were taken up in infrastructural development. Development of habitable accommodations for frontline staff and establishing communication network inside forest were key interventions in the proper management of forest.

9.1 Construction of Range Office

The Range Officer is the key person in the implementation of various programmes of Forest Department. Since the inception of CAMPA, major focus is given on modernization and construction of range offices and range officer residential accommodations. For the APO 2021-22, it was planned for the construction of 15 new range offices in different divisions. Financial outlay of Rs 3.99 Cr at 26.60 lakhs per unit was provisioned in the APO 2021-22.

9.2 Range Officer, Forester & Forest Guard Residence:

Standard plan and estimates were prepared for the residential accommodation of range officer, forester, and forest guards. The estimates were prepared as per the approved cost norm of works department, Govt of Odisha. In the APO 2021-22, 15 forest range officer residence at 19.5710 lakh / each with total financial outlay of Rs 2.93 Cr, 75 forester quarters at Rs 16.1390 lakh / each with total financial outlay of Rs 12.10 Cr & for 200 forest guard at Rs. 12.04 lakh / each having total financial outlay of Rs 24.08 Cr was provisioned.

9.3 Seizure Yard:

The seized items were lying openly for years resulting with deterioration and loss of seized property. To minimise the loss of seized items, seizure yard provision was made in the APO 2021-22, i.e., a total of 10 seizure yard in different divisions at 12.00 lakh each with total financial outlay of 1.20 crore.

9.4 Construction, Up-gradation and Maintenance of Forest Road (KM)

Provision has been made for the construction and maintenance of forest road over 1,000 km in the APO 2021-22 with the financial outlay of Rs 6.90 crore. The cost norm for each Km was estimated to be 0.69000 lakh.

9.5 Culvert

For all weather mobility to forest area, cross drainage work like culvert was necessary over nallahs in forest road. As per requirement of such culverts by different divisions, 70 units of culvert provision was made in APO 2021-22 at Rs 1.53 lakh per unit with a total financial outlay of Rs 1.07 crore.

9.6 Cause Way

Inside forest roads, cause ways are unavoidable to flush the rain waters and keep road portion intact. Hence, as per requirement of different divisions, 100 causeways were planned in the APO to be constructed with unit cost of Rs. 1.06 lakh with total financial outlay of Rs. 1.06 crore.



9.7 Boundary Wall:

Provision was made in the APO for the construction of 20,000 RMT of boundary wall in different divisions. The cost norm for boundary wall estimated to be Rs. 0.05 lakh per RMT and the total financial outlay planned was Rs. 10.00 crore.

9.8 Tube-well:

For drinking water supply to the residences and also for other purposes, it was planned to install 150 tube wells in APO 2021-22 with a unit cost of Rs. 1.00 lakh per tube well. Total financial provision made for the purpose was Rs. 1.50 crore.

B. Infrastructure and Communication Development In Wildlife Areas:

Development of infrastructure and its maintenance is an important component for effective wildlife management. Following infrastructures were planned and taken up in the APO 2021-22.

- Construction of protection barrack at strategic locations with key facilities like communication equipment, drinking water, solar light system etc. It was planned to establish 5 anti-poaching barracks.
- Strengthening 5 Anti-poaching check gates to check illegal activities.
- Construction of 5 seizure yards for safe keeping of vehicles involved in wildlife crime.
- Construction of 1 floating jetty in coastal / inland water body.
- Construction of 5 watch towers at strategic locations to monitor movement of wild animals.
- Maintenance of forest road and inspection path.

Sample Coverage:

The assessment covered about 45 different wildlife management activities, including infrastructures and assets created for wildlife management, in 187 ranges of 52 forest divisions. Of the total assets / infrastructures created, 54.2 percent (316 assets / infrastructure) are general assets / infrastructures and the remaining 45.8 percent (267 assets / infrastructures) are wildlife assets / infrastructure.



Antipoaching Barrack	Bamboo Seed Ball	Barbed Fencing	Bear Cave	Water Bodies / Hole
Salt Lick, Meadow Etc.	Underway Pass	Concrete Base- Elephant Approach	Elephant Proof Trench	Solar Fencing / Lighting
Fire Fighting Blower	Floating Jetty / Speed Boat	Forest Road	Glass House for Crocodile	Trap Camera Installation
Bird Habitation Improvement	VHF Tower Installation	Snake Rescue Centre	Fireline Maintenance	Fruit/Fodder Plantation Around Water Bodies Etc.

Figure 48: Activities Assessed under Wildlife Management

Table 62: Assets / Infrastructures Created Under APO for WLM

Assets / Infra	Sub-Components										
	Wildlife	Construction & Maintenance of Infrastructure for Protection of Wildlife	Establishment, O&M of animal rescue centre & veterinary treatment facility for Wild Animals	Forest Fire Prevention and Control operations	Improvement of Wildlife Habitat	Infrastructure Development	Others	Protection and Anti-Depredation Activities	Protection to Plantation	Publication & Awareness Programme	Strengthening of Communication facilities for Protection of Wildlife
Anti-Poaching Barrack											
Bamboo Seed ball											
Barbed Fencing											
Bear Cave											
Check dam											
Construction of, Saltlick, Water pockets and Meadow for Black buck conservation											
Construction of under way pass											
Elephant Approach Concrete Base											
Elephant proof trench											
Excavation of elephant proof trench											
Fire Fighting Blower											
Floating Jetty with Speed boat											
Forest Road											
Glass house for Crocodile											
Grass Land											
Green Shop											
Guided the unguided well											
Improvement of Bird habitant											
Installation of VHF Tower											
Invasive Weed Eradication											
King Cobra & Python Rescue Centre											
Maintenance of Boundary area											
Maintenance of Fireline											
Maintenance of Fruit bearing & Fodder species around Water Body											
Maintenance of Water Body											
Maintenance of Zoo Hospital											
Meadow Development											



Assets / Infra	Sub-Components									
	Construction & Maintenance of Infrastructure for Protection of Wildlife	Establishment, O&M of animal rescue centre & veterinary treatment facility for Wild Animals	Forest Fire Prevention and Control operations	Improvement of Wildlife Habitat	Infrastructure Development	Others	Protection and Anti-Depredation Activities	Protection to Plantation	Publication & Awareness Programme	Strengthening of Communication facilities for Protection of Wildlife
Park Development										
Picnic Outlet										
Plantation of Fruit & Fodder species arround the Water Body										
Protection Camp, Khandadhar										
Purchasing of Drone & its accessories										
Renovation of Water Body										
Repairing of IB										
Salt Lick										
Signage										
Solar Fencing										
Solar Light										
Trap Camera										
Watch Tower										
Water Body										
Water Hole										
Weigh bridge										
WHS										
Zoo Management										

After plantation and wildlife related activities, a large variety of interventions has been carried out under overall implementation of CAMPA activities. These activities are commonly known as general CAMPA activities. The general CAMPA activities includes CAMPA infrastructural activities and CAMPA assets.

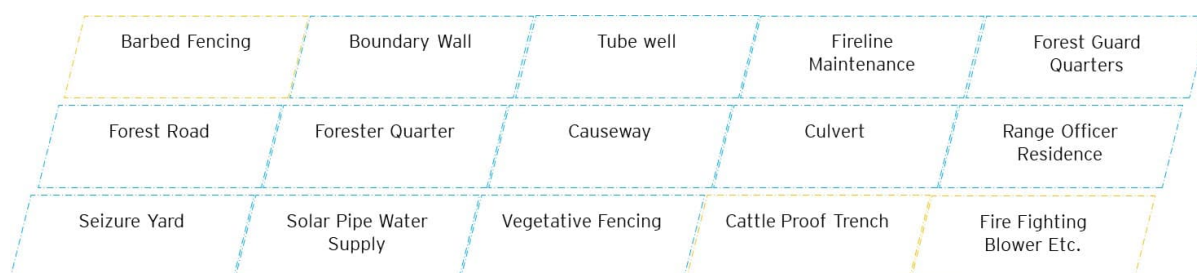


Figure 49: Activities Assessed under General CAMPA (Assets / Infrastructures)

Table 63: Assets / Infrastructures Created under General CAMPA

General Assets / Infrastructures	Sub-Components				
	Construction & Maintenance of Infrastructure for Protection of Wildlife	Forest Fire Prevention and Control Operations	Infrastructure Development	Others	Protection to Plantation
Barbed Fencing					
Boundary Wall					
Cattle Proof Trench					
Causeway					
Community Centre					
Culvert					

General Assets / Infrastructures	Sub-Components				
	Construction & Maintenance of Infrastructure for Protection of Wildlife	Forest Fire Prevention and Control Operations	Infrastructure Development	Others	Protection to Plantation
Fire Fighting Blower					
Forest Guard Quarter					
Forest Road					
Forester Quarter					
Maintenance of Fireline					
Range Office					
Range Officer Residence					
Seizure yard					
Solar pipe water supply					
Tube Well					
Vegetative Fencing					
Watch Tower					

Of the total assets / infrastructures created under wildlife, 18.86 percent were under NPV 20.0 percent, 68.91 percent under NPV 80.0 percent and remaining 20.22 percent assets / infrastructures were created under SSWLMP.

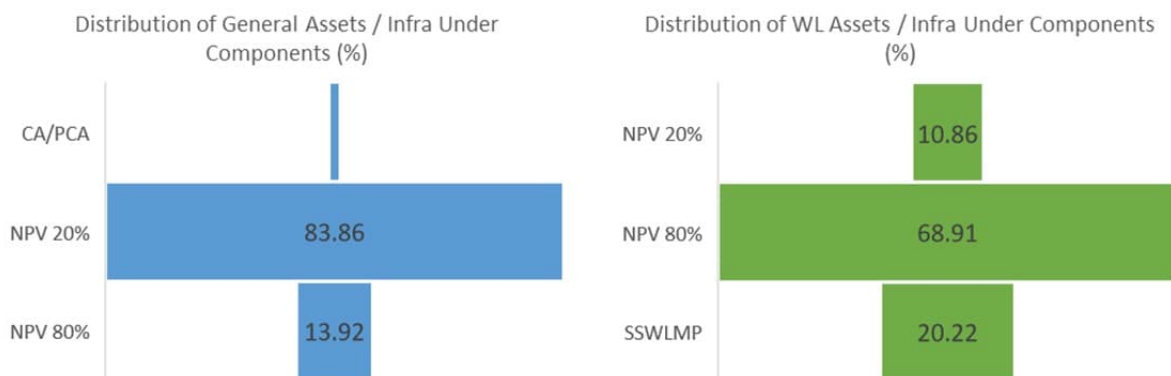


Figure 50: Assets / Infrastructures Created-General & WLM

Similarly, about 83.86 percent general assets / infrastructures are crated under NPV 20.0 percent, 13.92 percent under NPV 80.0 percent and remaining under CA / PCA. Different sub-components under each component are present in the diagram. For example, in CA / PCA, protection of plantation site is taken up whereas under SSWLML, exclusive wildlife management activities are taken up like construction & management if infrastructures for wildlife protection, forest fire prevention and control operation, improvement of wildlife habitat etc.



A CA / PCA		D SSWLMP	
1	Protection to Plantation	1	Construction & Maintenance of Infrastructure for Protection of Wildlife
2	Other	2	Forest Fire Prevention and Control Operations
B NPV 20%		3	Improvement of Wildlife Habitat
1	Construction & Maintenance of Infrastructure for Protection of Wildlife	4	Infrastructure Development
2	Infrastructure Development	5	Protection and Anti-Depredation Activities
3	Protection and Anti-Depredation Activities (WL)	6	Protection to Plantation
4	Publication & Awareness Programme (WL)	7	Publication & Awareness Programs
5	Strengthening of Communication facilities for Protection of Wildlife (WL)	8	Strengthening of Communication Facilities for Protection of Wildlife
C NPV 80%		9	Other (Park, Community Centre, Solar Pipe Water Supply)
1	Est, O&M of Animal Rescue Centre & Veterinary Treatment Facility for Wild Animals (WL)		
2	Forest Fire Prevention and Control Operations		
3	Improvement of Wildlife Habitat (WL)		
4	Protection and Anti-Depredation Activities (WL)		

Key Observations:

SN	Indicator	Observation
A.	CAMPA, Infrastructure	
1.	Usability	<ul style="list-style-type: none"> All most all buildings are accommodated by forest officials like Ranger, Forester & Forest Guard etc. Besides that, Rage office builds are also functioning regularly; In case of forest road maintenance, all most all are used by forest officials and side by side by local people in all seasons. Very specific roads are exclusively used by forest officials; Similarly cause way, culverts which are constructed on the forest road are fulfil the purpose. One cause way and one culvert require rehabilitation whereas remaining are in good condition. These structures have been useful to drain out rainwater without damaging the forest road; The created boundary walls have been protecting and restricting outsider interference, provide safety and restricts outsider entry; Water supply is mostly through installation of deep bore well. The bore well/s supply water to staff quarter as well as used for irrigating nursery. Water quality of some of the bore wells are not so good, as reported. Some bore wells found defunct due to no water pump or existing water pump requiring maintenance; Mostly the seized items are laying in seizure yard building in safe condition.
2.	Utility/Effectiveness	<ul style="list-style-type: none"> Created infrastructures have been supportive to forest officials in discharging their duties; Construction / maintenance of forest road, cause way, and culvert has strengthened patrolling activities and hence imparted on poaching; Installation of tube well / bore well has been effective in not only providing portable drinking water to the constructed residential buildings, but also to provide irrigation to the nearby nursery.; Construction of seizure yard has been helpful to store sized items in safe condition.



SN	Indicator	Observation
3.	Present Condition	<ul style="list-style-type: none"> • Most of the constructed buildings are well furnished with availability of basic amenities like water supply, electric connection, and toilet facility. In few cases after completion of work, electrification and water supply is yet to be provided. • All most all forest roads are having Murom top up and in well condition; • The constructed cause way & culverts are in good condition, baring a few cases where the created structures require repairing; • While most of the tube-wells are in good and used condition, a few tube-wells are not in working condition due to inadequate water availability in summer and / or poor quality of water. • All most all sample seizure yards are in good condition and being used,
4.	Duration of Use	<ul style="list-style-type: none"> • All the infrastructures are used throughout year except structures that are not in usable condition; • All forest roads are used depending upon the movement requirement; • Except a few culvert & cause ways, that are not in usable condition, all are found helpful, mostly in monsoon; • Most of the tube wells are used, except a few that are having poor water quality and/or not having water lifting device.
B.	CAMPA, Assets	
1.	Usability	<ul style="list-style-type: none"> • Created fire line to protecting forest & wildlife in summer season; • Less interference of cattle due to creation of cattle proof trench that also protects planted seedlings; • Community centres, constructed under CA/PCA is used by locals for different purposes; • Watch tower is used to monitor people's movement to prevent poaching activities in forest area • Waterbodies created have been helpful for the drinking purpose of wild animals;
2.	Utility / Effectiveness	<ul style="list-style-type: none"> • Creation & maintenance of fire line has not only reduced fire incidents but also fire affected area; • With the use of fire-fighting equipment & high technology, the incidents and spread of fire has been reduced; • Increased animal sighting near the created water bodies, mostly in summer; • The watch towers have become more useful with the provision created for rest purpose of patrolling staff; • The cattle proof trench has been effective to protection plantations from grazing by local cattle.
3.	Present Condition	<ul style="list-style-type: none"> • Created cattle proof trench are found to be in good condition; • The community centres are presently used by local people for meeting purpose & centres are in good condition; • Most of fire lines are demarcated properly and are maintained on regular basis. In some cases, fire lines are not visible due to density of weeds; • VHF tower is in functional condition and helps to monitoring poaching activities; • The water bodies are in good condition and used by wild animals.
4.	Duration of Use	<ul style="list-style-type: none"> • The community centres are usually used by locals throughout the year; • The crated fire lines are basically more effective in summer season and most of the lines are maintained properly; • The VHF tower has provided required service.
C	Wildlife Management, Infrastructure	
1	Usability	<ul style="list-style-type: none"> • Mostly the antipoaching bark used by para staff, Anti Depredation Sequard (ADS), Trakker during performing their duty when required; • Forest road maintenance / creation has been undertaken under wildlife management for commutation during different requirements, including forest & fire protection activities; • It has more useful for the movement of patrolling vehicle.
2.	Utility/Effectiveness	<ul style="list-style-type: none"> • It has been controlling poaching activities due to presence of squad in core area of the forest;

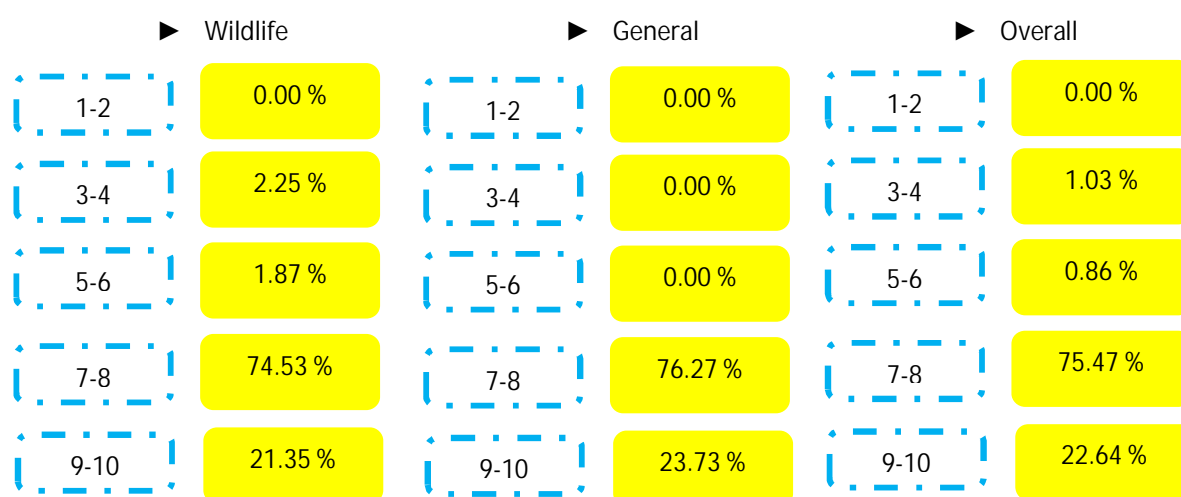


SN	Indicator	Observation
		<ul style="list-style-type: none"> It has become easy to approach the fire sport through the constructed / maintained forest roads.
3.	Present Condition	<ul style="list-style-type: none"> All the antipoaching barracks accommodated by squad, except one which is completed yet to be staying. All most all forest roads are motorable and can be used in all seasons.
4.	Duration of use	<ul style="list-style-type: none"> Out of 9 barracks, one barrack is newly constructed and yet to be used whereas rest barracks are utilised; Forest roads are used on regular basis by the forest officials for different purposes.
D	Wildlife Assets	
1	Usability	<ul style="list-style-type: none"> 6 nos. of Bamboo Seed ball sites were visited. Proper germination of seed balls observed in most of the sites and created bamboo clumps; Habitat improvement is the major activity for which different assets have been created, like creation or maintenance of water body, creation of grass land, plantation of fruit and fodder species around water body, meadow development etc. are created in most of all Divisions. Most of the assets have been useful and meant the purpose of habitant improvement. Plantation of fruit and fodder species around water bodies require additional attention for its proper maintenance; Construction bear caves observed in Malkangiri & Nawarangpur division which are helpful; The constructed elephant proof trench and excavation of trenches in different divisions have been useful to protect people from elephant movement; Under "guided to unguided well", protection measures have been taken to avoid the chances of falling of wild animals. In some wells, fencing by barbed wear is yet to be completed; Different type of activities has been undertaken in bird habitation sites under "Improvement of Bird habitant" like fixation of bird nest in forest area, plantation of tree species near to water body, construction of water tank for bird bath etc.; Installed VHF towers are in working condition and covering an area of 20 to 25 km. radius in forest area; Weed eradication has been helpful for free movement of wild animals like; Meadow development is taken up to meet the fodder requirement of wild animals; Drone & trap camera are useful assets and working properly to track wild animal movement and pouching activities. All are in working condition and frequently used for this purpose; Of the visited 14 saltlicks in 14 divisions, very few sites are not so used by animals; Of the 9 visited solar fencing sites in different divisions, all most all are not in working condition. Even in 2 sites, it is found not existing and according to local people, it is stolen; Solar light and solar pipe water supply have been useful in forest fringing villages and all the assets are in a functional stage; All the 9 watch towers are completed and used by visitors as well as forest officials; Construction of pathway, colouring of boundary wall, improvement of zoo hospital has been done under zoo management and all the activities are completed.
2	Utility/Effectiveness	<ul style="list-style-type: none"> Increase in frequency of sighting of animals in bamboo seedball intervention area; The population of wild animals like Spotted Deer, Barking Deer, Wild Boar, Rabbit etc. have increased in the visited sites with the creation of water bodies, meadow, and grass land near the water bodies; According to locals, movement of bear has increase in visited areas of Malkangiri & Nawarangpur Divisions; Crowding of birds in the evening in improved bird habitant; Improved communication facility with the installation of VHF towers; Freely movement of wild animals due to weed eradication measure;



SN	Indicator	Observation
		<ul style="list-style-type: none"> • Visit of wild animals like Spotted Deer, Rabbit, Barking Deer on regular basis to meadow field; • It is more helpful to capturing movement of Animal in Sanctuary area and conforming the presence of variety of Animals including pouching activities by fixation of Trap camera. At the result the pouching actives became reduce; • It is reported that more no. of Elephant, Bison, Sambar and other wild animals frequently come to Salt lick sites; • Solar Fencing found to be less effective due interference of local people; • Creation of WHS / water bodies found effective and accessed by wild animals;
3	Present Condition	<ul style="list-style-type: none"> • All most all assets are in usable condition and working properly like VHF tower, Bear cave, Guided to Unguided well, Meadow, Watch Tower, WHS, Assets created under Zoo Management, Solar Street light & Solar Pipe water supply etc. • Fruit & fodder species planted or maintenance around water body and solar fencing require specific attention; • Assets created under habitat improvement like salt lick, improvement of bird habitat, meadow development, creation / maintenance of water body, weed eradication etc. are observed to be in good condition; • Creation of Grass Land for meant the fodder crises of Wild Animal are mostly not physically not presented during the observation because of created in Pvt. Land • Use of bamboo seed ball for growing bamboo observed successful in many cases, baring a few sites due to lack of germination of seeds; • Trenches created / excavated to restrict elephant entry to crop field or habitation have been beneficial. However, some areas of the trench, which are silted heavily, may require cleaning; • Pillars posted to mark forest boundary are in good condition; • Assets / infrastructure like under way pass of rainwater, check dam, floating jetty, blower, protection camp. rescue centre, park development, protection camp etc. are in usable and good condition.

Based on the usability of the assets / infrastructures, present condition of the infrastructures and availability of transparency board (selected cases), assets / infrastructures created under wildlife management and general assets / infrastructures were categorized in to five groups, i.e., 1-2 the lowest and 9-10 the highest. About 95.51 percent assets / infrastructures created under wildlife fall in to 9-10 category and 99.7 percent general assets / infrastructures into the same category.



9.9 Concluding Remarks

Under APO 2021-22, large number of need-based assets / infrastructures were created across the forest divisions, including WL divisions, with the objective of forest protection, wildlife management, strengthening forest monitoring etc. The assets / infrastructures found serving the purpose for which these were created. As these assets are relatively new, most of the assets / infrastructures are in good condition. However, periodic maintenance of the created assets / infrastructures will be helpful to keep its usability intact.





Chapter 10: Other Interventions under CAMPA

10.1. Monitoring and Evaluation

Implementation Monitoring and Supervision:

Several measures are being taken for the monitoring of the interventions taken up under APOs during the project implementation stage. CAMPA has also been taking measures to evaluate the works done to learn about the benefits of the interventions. Monitoring of the projects executed under APO starts at the range office level. The physical and financial monitoring, online IFMS, payments through online mode, uploading the works on the portal, monitoring the foot patrolling data, fire point data etc. are done on day-to-day basis at the ranges. Further, it is regularly monitored by the ACF and DFO of the division and RCCF of the circle. In addition, officers at the Addl PCCF and CCF level at the PCCF & HOFF office are designated to monitor the field works of different circles. Along with this, PCCF & HOFF also conducts periodic review on the progress of the activities.

As per the Code of the Forest Department, the Divisional Forest Officer of the concerned division ensures an internal monitoring mechanism within his / her division for the verification of the project scrupulously. He / she ensures timely completion of the projects and strict fiscal discipline. As per Odisha Forest Departmental Code, the works are inspected by the field officers at regular intervals. They do the inspections, study, and analyze the field position and give the directions to the field staff for further improvisation. While executing the projects, there is the responsibility of all the officers to ensure the field activities are done properly. Even muster rolls are checked by range officer (50%), ACF (25%), DFO (10%), RCCF (5%) in each and every activity.

Use of Technology in Monitoring:

Technology is being used in a big way for monitoring activities. Official establishments are equipped with GIS labs for mapping and tracking. Different apps are developed by the Forest Information Technology & Geomatic Centre (FITGC) located in the PCCF & HOFF office. Apart from monitoring of activities implemented under APO, focus has also been on foot patrolling, especially in the night times. There are dedicated groups to monitor the foot patrolling, it is observed that on an average 1,00,000 KMs of foot patrolling is being done by the frontline staff per month using GPS-PDA and android based mobile loaded with appropriate apps which is being monitored through online. The forest fire monitoring is being done on MODIS and SNPP satellite platform in the above center. There are 23 different apps for implementation / monitoring of different activities aimed towards better forest management and protection. To control/monitor all the above activities, a Geomatic and other CIT Infrastructure has been installed in FITGC. Customized GAGAN enabled GPS-PDA devices has been provided to all the frontline field functionaries in the field and is being utilized for operating different forestry applications which is being used for forest and wildlife management and protection. Mobile sets are being also utilized by the field functionaries for using the above forestry applications. The human-elephant conflict is addressed in many a instance through the above said apps and at various places. At division and circle level of forest Department control rooms are installed to assess the monitoring of elephant depredation. Co-ordination meeting with different organizations is regularly done to combat alarming situation of man-animal conflict. The above system is very handy and easily applicable by the frontline staff and can address situations.

Fiscal Monitoring:

- (i) The fiscal discipline is ensured through transaction in the IFMS portal, submission of online accounts to Accountant General, making direct benefit transfer using either IFMS platform or other existing mechanisms and ensure the payments are sent directly to the bank accounts of the beneficiaries.
- (ii) The efforts are being taken to minimize the pilferage and to increase the transparency in the financial transactions. Detailed guidelines are issued to follow the Integrated Financial Management System, where there is no handling of cash and all the payments to the people working in various



forestry operations are done online. The CAMPA funds are released in three installments and after first and subsequent installments money is released on submission of Utilization Certificate (UC). The maintenance funds are released after getting a report on the survival percentage of plantation sites from the DFO. These steps help in improving financial discipline and minimize the chances of corruptive practices.

- (iii) Internal auditor/s is appointed to monitor the procurement procedures, submission of accounts, and examining expenditure of CAMPA funds. The auditors give a half yearly report, which helps in improving the efficiency of financial transactions.

Third Party Monitoring:

Apart from internal monitoring, CAMPA has also been engaging external monitoring and evaluation agency to look at activities executed and the intervention outputs. CAMPA intervention for the APO from 2009-10 to 2016-17 was evaluated by M/s CTRAN Consultancy Limited and for later years by PWC and AFC for the APO 2017-18, 19-20 and 2020-21. The external agencies have been submitting their observations to CAMPA authority and appraise the overall progress made under APOs.



10.2. Research, Training, Awareness and Capacity Building

Since many of the tree species are propagated through seeds, the desirable characters are sometimes reduced. The need of Plus Trees, Clonal Multiplication Gardens, Clonal Seed Orchards, Germ Plasm Banks, Progeny trials etc. are solutions for preserving / conserving and propagation of genetic characters of forest tree species. Thus, it is required to change the research strategy for biodiversity conservation and augmentation of natural regeneration. Use of Quality Planting Material (QPM) in afforestation is prioritized with seeds from plus tree, Clonal Seed orchard and Seedling Seed Orchard etc. To carry out this, Silvicultural Research play a big role. Infrastructural facility is created in Bhubaneswar and Rayagada for silvicultural research. The details of facilities available in these research centers are presented in the matrix.

SN	Item	Bhubaneswar		Rayagada		Total	
		Nos.	Area (Ha)	Nos.	Area (Ha)	Nos.	Area (Ha)
1	Research Garden	10	393.6	9	409.90	19	803.5
2	Preservation Plot	14	551.8	3	140.00	17	691.80
3	Sample Plots	18	4.63	14	10.99	32	15.61
4	High-Tech Nursery	3	383.0	1	142.50	4	5.26
5	Seed Orchard	43	44.03	9	33.50	52	77.53
6	Seed Production area	11	177.06	12	243.69	23	243.69
7	Plus Tree	148		106		254	

RESEARCH PROGRAMME: 2021-22

A. Silvicultural Research:

- It is a permanent research activity to study different species in trial plots being raised at different research gardens situated in different agro climatic zones of the state. The data collected from different species raised at different research gardens are being computed. Steps are also taken to increase the species for augmenting the data base to study on the growth of different indigenous species raised in different agro climatic zones of the state.
- The urban tree plantation programme taken up by different divisions in different urban local bodies were assessed and data were analysed with respect to edaphic and climatic factors to conclude the species favourable to different divisions for raising tree outside forests.

B. Tree Improvement Programme:

- The exotic species like Teak, Acacia and Eucalyptus etc. are less considered in artificial regeneration programme, rather priority is given to the indigenous species. Large number of mother trees are selected for different species in different forest divisions.
- The priority for use of root trainer seedlings is taken up in the state. In this regard, a project is implemented to raise about fifty species in Hi-Tech nursery through root trainers and will be planted in trial plots inside the research gardens.
- Besides above, the research wing took up raising quality planting material of different indigenous species for its use as stump in different divisions.

C. Adaptive Research:

- A trial of NTFP species like Siali, Hill broom, myrobalan, lodha, medha, rawolfia etc. were taken up in research gardens and VSS area to see the growth in gardens and open forests for future recommendation.
- Species of Ficus of about 100 species are created for conservation and step is taken for raising a cane conservation garden.
- Species of Bamboo and Agave were taken up in hedges to study the suitability in different forest areas for taking up the plantation.



Details of Research Activities in Two Silvicultural Divisions

Table 64: Research Activities in Silviculture Divisions

SN	Name of the Item	Silviculture in BBSR (Rs. In Lakh)	Silviculture in Rayagada (Rs. In Lakhs)	Total Expenditure (Rs. In Lakhs)
1	Creation of Research Plots on RET/ Medicinal / Indigenous Species / NTFP Species	20.00	20.00	40.00
2	Silvicultural Research	40.00	40.00	80.00
3	Production of QPM of Non-Teak Indigenous Species	30.00	30.00	60.00
4.	Maintenance of Plus Trees, Collection of quality seeds	5.00	5.00	10.00
5.	Research data compilation, Analysis, Evaluation	5.00	5.00	10.00
	Total	100.00	100.00	200.00

Research Activities in Wildlife Areas:

Research activities were also taken up in different PAs promoting preservation / conservation of wildlife species. Habitat parameters and other studies were also carried out, like research activities to promote conservation, sustainable use and documentation of Biological Resources.

Training and Capacity Building:

Under APO 2021-22, several training / capacity building measures were taken up for the forest officials operating at different levels. Training modules on different thematic areas / subjects were developed / refined with the feedback received from the participants. Different training modules developed and executed during 2021-22 are as follows.

Forest Rangers / Deputy Rangers	For Foresters & Forest Guards	For ACF and Above Officers
<ul style="list-style-type: none"> Odisha Forest Act 1972 & its implication Wildlife Protection Act 1972 & its implication. Other relevant Acts & implication. Forest Fire & Disaster Preparedness. Soil Moisture conservation & Peoples participation in JFM. Refresher Course on recent Forestry developments. 	<ul style="list-style-type: none"> Plant Identification & Nursery Tech. for Quality planting materials GPS, GIS application in Forest Survey & Mapping. Forest Fire & Disaster- Prevention & Protection measures. Detection & Enquiry of Forest offences for preparation of prosecution report. Detection & Enquiry of WL cases for submission of complaints. Refreshers Course on Survey & Mapping, SMC, Offences, Forest Fire & disaster Preparedness 	<ul style="list-style-type: none"> Changes in the Financial Management System Innovative Extension Practices for inclusive management Modernization of Monitoring and Evaluation in forestry Activities Effective Watershed Management Changes in Forest conservation Act and Empathy for Development

The State is having three training centers (situated at Bhubaneswar, G.Udayagiri and Champua) besides the one at Angul for forest rangers. The capacity of each institute is to train about 45 trainees in a batch for regular course of forest guard / forester / forest rangers. A CAMPA Capacity Building Centre is also coming up and it is expected to get fully operationalized soon.

Publicity & Awareness Programs:

Under CAMPA APO intervention, awareness and sensitization activities were taken up along with publicity of different interventions. The themes covered under publicity and awareness include wildlife protection, anti-depredation activities, rescue and rehabilitation operations, forest protection, fire protection, etc.



10.3. Nursery Development:

The assessment covered 54 nurseries in 39 forest divisions and 53 ranges. Different types of nurseries were covered under the assessment, i.e., 27.8 percent (15 nos.) temporary nurseries, 40.7 percent (22 nos.) permanent nurseries, 24.1 percent (13 nos.) central nurseries, 5.6 percent (3 nos.) mega nurseries, and 1.9 percent (1 no.) casuarina nurseries.

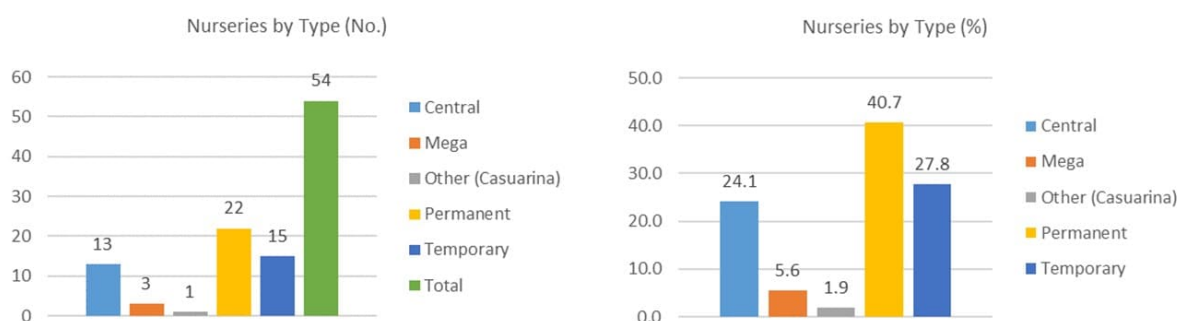


Figure 51: Type of Nurseries

Table 65: Assessed Nurseries by FD

SN	Division	Central	Mega	Other (Casuarina)	Permanent	Temporary	Total
1	Angul		1		1		2
2	Athagarh	1					1
3	Athamallik				1	1	2
4	Balangir					1	1
5	Bamra WL Division				1	1	2
6	Baragarh				1		1
7	Baripada					1	1
8	Berhampur			1	1		2
9	Bhadrakh WL					1	1
10	Bonai				1		1
11	Boudh				1	1	2
12	Chandaka WL				2		2
13	Chilika WL					1	1
14	CT Division	1					1
15	Cuttack				1		1
16	Deogarh				2		2
17	Dhenkanal	1					1
18	Jeypore	1					1
19	Jharsuguda				2		2
20	Kalahandi (N)	1					1
21	Kalahandi (S)	1					1
22	Karanjia				1		1
23	Keonjhar		1			1	2
24	Keonjhar WL					2	2
25	Khariar	1					1
26	Khorda				2		2
27	Koraput	2				1	3
28	Mahanadi WL					1	1
29	Nayagarh				1		1
30	Paralakhemundi				1	1	2
31	Phulbani	1	1				2
32	Rairakhol				1		1
33	Rairangpur	1					1

SN	Division	Central	Mega	Other (Casuarina)	Permanent	Temporary	Total
34	Rajnagar WL					1	1
35	Rayagada				1		1
36	Rourkela					1	1
37	Sambalpur				1		1
38	Subarnapur	1					1
39	Sundargarh	1					1
	Total	13	3	1	22	15	54
	Percent	24.1	5.6	1.9	40.7	27.8	100.0

Nursery Development Activities:

In the way of nursery preparation and its development, different activities were taken up like, site preparation, fencing work, preparation of nursery bed, germination bed preparation, polyethene bag filling and setting, Transplanting, watering work etc. All the nurseries are developed under NPV 80.0%. In all the nurseries, journal is existing and 53.70 percent journals are found maintained / updated. Average area of nursery is about 2.03 ha. with total area of 109.49 ha. of the total nurseries, 18.52 percent are developed in 2020-21 and 81.48 percent are developed in 2021-22.

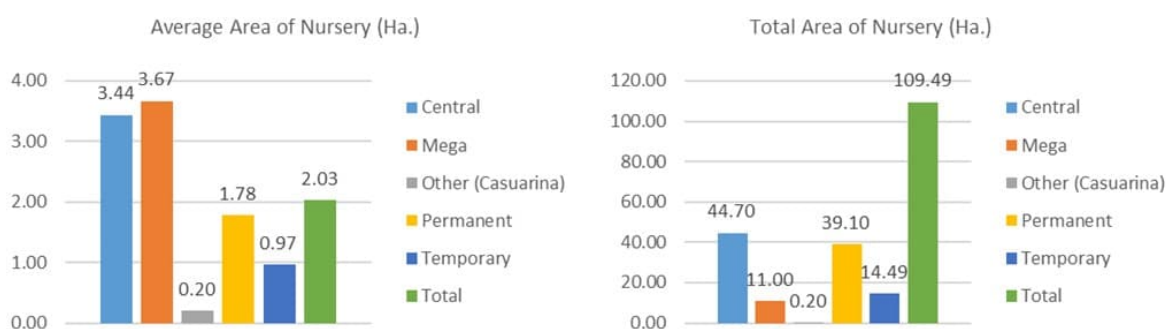


Figure 52: Area of Nursery

Table 66: Area by Nursery Type

SN	Area of Nursery (Ha.)	Central	Mega	Other (Casuarina)	Permanent	Temporary	Total	Percent
1	0.10					1	1	1.85
2	0.20			1	3	3	7	12.96
3	0.40				3	2	5	9.26
4	1.00	1	1		2	6	10	18.52
5	1.30	1			1		2	3.70
6	1.99					1	1	1.85
7	2.00	3			8	1	12	22.22
8	2.50	1					1	1.85
9	3.00	2			3	1	6	11.11
10	3.90	1					1	1.85
11	4.00	1			1		2	3.70
12	5.00	2	2		1		5	9.26
13	10.00	1					1	1.85
	Total	13	3	1	22	15	54	100.00



Seedling Production Capacity:

Average seedling production capacity of the nurseries, irrespective of its type, found to be 2,30,185, with maximum production capacity of mega nurseries (average of 4,00,000) followed by Central nurseries (average of 3,26,923) and minimum in Casuarina nursery (1,00,000) followed by temporary nurseries (average of 1,11,000).

Table 67: Seedling Production Capacity of Nurseries

Nursery Type	No.	Percent	Mean	Sum
Central	13	24.1	3,26,923	42,50,000
Mega	3	5.6	4,00,000	12,00,000
Other (Casuarina)	1	1.9	1,00,000	1,00,000
Permanent	22	40.7	2,37,045	52,15,000
Temporary	15	27.8	1,11,000	16,65,000
Total	54	100.0	2,30,185	1,24,30,000

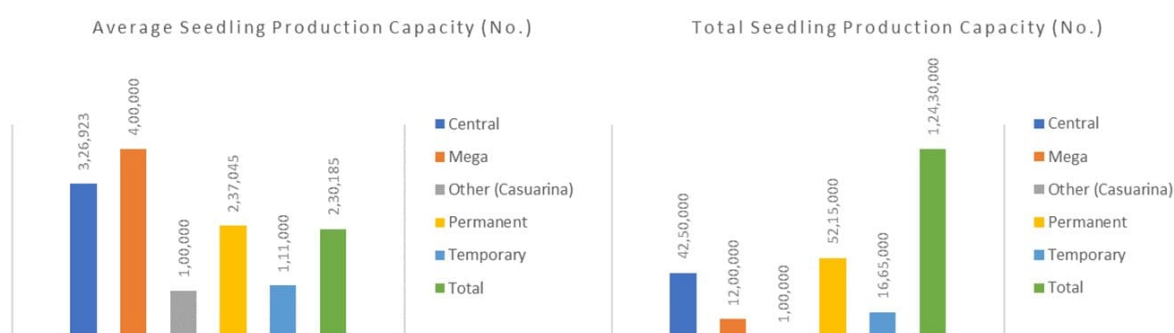


Figure 53: Seedling Production

Seedlings Raised:

On an average, 80,288 seedlings raised per nursery, irrespective of nursery type. Higher number of seedlings are raised in mega nurseries (average of 2,00,833) followed by permanent nurseries (average of 91,848). Of the total seedlings produced, 98.69 percent seedlings are utilised for plantation. Remaining seedlings were planned to be utilised as per the requirement.

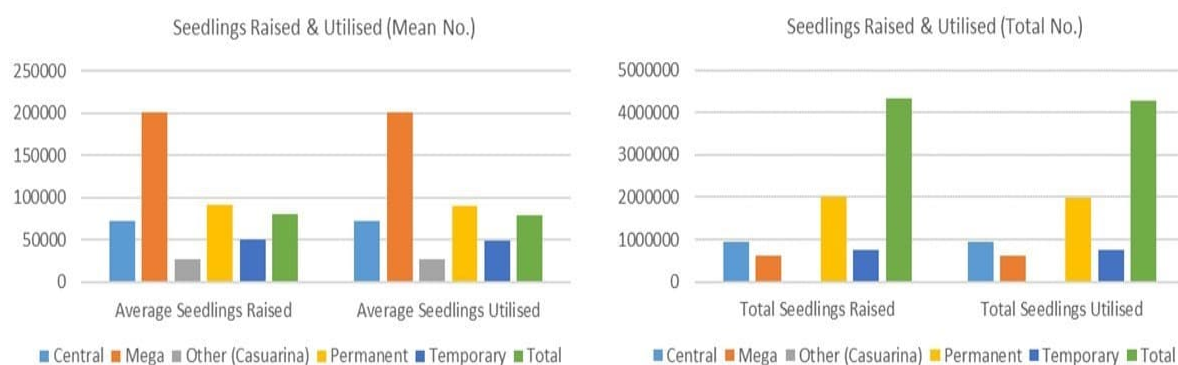


Figure 54: Seedling Raised and Utilised



Table 68: Seedlings Raised and Utilised in Plantation

Nursery Type	No of Seedlings Raised			No of Seedlings Utilized in Plantation		
	No.	Mean	Total	No.	Mean	Total
Central	13	71,769	9,33,000	13	71,769	9,33,000
Mega	3	2,00,833	6,02,500	3	2,00,833	6,02,500
Other (Casuarina)	1	27,500	27,500	1	27,500	27,500
Permanent	22	91,848	20,20,665	22	89,803	19,75,665
Temporary	15	50,127	7,51,900	15	49,327	7,39,900
Total	54	80,288	43,35,565	54	79,233	42,78,565

Seedling of Species Raised:

In nurseries, seedlings of different forest species are grown (excluding nurseries where casuarina species is only grown; Chilika WL) to meet the plantation requirements. Seedlings found grown covers plant species like Amla, Bali Sisoo, Karanja, Panasa, Neem, Arjuna, Tentuli, Jamu, Fasi, Pipal, Kaju, Bamboo, Asana, Bandhan, Sirisha, Kusuma, Dhala Sirisa, Neem, Baula, Maha Neem, Jamu, Sal, Mango, Mahul, Bela, Kaju, Bahada, Barakoli, Kaitha, Karanja, Kumhui, Panasa, Pahadi Sisoo etc. Average height of the seedlings, irrespective of species, found to be 127 cm. ranging between 93 cm to 145 cm.

Irrigation Sources:

The nurseries are equipped with different irrigation sources like borewell, open well, lifting water from the nearby nala / river / tank etc. Overhead tanks are also constructed for water storage and irrigating seedlings as per the requirement.

Table 69: Irrigation Sources in Nurseries

SN	Water Source	Central	Mega	Other (Casuarina)	Permanent	Temporary	Total
1	Borewell	24.4	7.3	2.4	41.5	24.4	100.0
2	Borewell & Open	100.0	-	-	-	-	100.0
3	Canal	-	-	-	100.0	-	100.0
4	Nala	25.0	-	-	50.0	25.0	100.0
5	Open Well	-	-	-	-	100.0	100.0
6	Pipe Water	-	-	-	-	100.0	100.0
7	River	100.0	-	-	-	-	100.0
8	Tank	-	-	-	-	100.0	100.0
9	Tube Well	-	-	-	50.0	50.0	100.0
	Total	24.1	5.6	1.9	40.7	27.8	100.0

Water supply found to be deficient in four nurseries, i.e., [1] Siridi Permanent Nursery of Bamra WL, [2] Dhandatopa Permanent Nursery of Athamallik, [3] Badimal Permanent Nursery of Jharsuguda, and [4] Jambu Temporary Nursery of Rajnagar WL. Apart from this, certain nurseries also require additional support as highlighted below.

Table 70: Identified Needs of Nurseries

Division	Nursery Type	Additional Requirements
Bamra WL	Permanent Nursery, Siridi	Tube well for watering seedlings
Bamra WL	Temporary Nursery, Gantab	Required more space and other facilities i.e. Nursery Shed, Overhead Tank, Labour shed, Pipe line for watering
Athamallik	Permanent Nursery, Dhandatopa	Tube well for watering plants, storeroom and Shed/s
Rairangpur	Central Nursery, Badampahar	Nursery shed
Khariar	Central Nursery, Sardhapur	All weather road to the nursery site for smooth transportation
Chandaka WL	Karadapalli, Permanent Nursery	Overhead tank and borewell
Khorda	Ketakijhara Permanent Nursery	Infrastructure support like water facility and boundary wall
Rajnagar WL	Temporary Nursery, Jambu	Water is accessed from nearby tank for watering seedlings. Captive water would be useful
Berhampur	Permanent Nursery, Amunia	Borewell for watering plants

Note: Additional infrastructural support needed may require detail assessment for all the nurseries.



10.4. State Authority CAMPA & State Forest Academy

10.4.1 State Authority CAMPA

In APO 2021-22 Rs.1.95 Cr. Has been utilised by State Authority for

- Remuneration of contractual Manpower deployed in State Authority.
- Hire charges, POL of Vehicle Deployed in State Authority
- Renovation of Monitoring Cell,
- Sanitization and Security arrangement
- Contingent Office expenses, Stationaries, Computer peripherals etc.

The works have been executed by 3 I.Os in Dy. CF Hqrs., DFO City Forest Division and DFO Chandaka WL Division.

10.4.2 Construction of State Forest Academy

Vision

The vision of the Odisha State Forest Academy is to be an institution of excellence to provide education, training and extension services in forestry, environment, natural resource management and sustainable development with collaborative efforts of various stakeholders at regional, national and International level. The organisational value will be enhanced by partnering with national and international stakeholders and institutions and collaboratively making an effort in building the capacity of the forest department to protect the environmental resources for community development with the deployment of technology and advanced knowledge. The Academy will also serve as a National level centre of excellence for training the personnel of State Governments, Judiciary, public representatives and the representatives of NGOs and Vana Samrakshyana Samiti (VSS) on different aspects of natural resource management and sustainable development.

Objective

Objectives of the Academy are to

1. Provide orientation and service training to Indian Forest Service and State Forest Service Group A and Group B officers and prepare for their effective service in the field of Natural Resource Management and especially in the field of scientific and wildlife management.
2. Offer training to officials from various Government Departments and Public Sector Undertakings including Public Works Department, Revenue, State Police, and Administrative Units of other organisation on biodiversity, forest conservation, environment and wildlife.
3. Organize awareness and training sessions for people's representatives including MLAs, MPs, three tier Panchayat members, members of Judicial Bodies, School and college level teachers, lawyers, Journalists, NGOs and other environmental organisations on aspects of on biodiversity, forest conservation, environment and wildlife and their relevance to the society.
4. Undertake diploma and degree courses and collaborate with other institutions to create skilled manpower for Natural Resource Management and Conservation.
5. Study the impact of developmental activities on the environment
6. Conduct research and development activities in the fields of forestry and biodiversity and their interrelationship with the society.
7. Develop forestry extension programmes and propagate the same through mass media, audio-visual aids and extension machinery.
8. Provide consultancy services in the fields of forestry development, education and training in forestry and allied sciences.
9. Develop and maintain a National Regional Library and Information Centre for forestry and allied sciences.



Infrastructure Available

- Forest Academy at Bhubaneswar has been established over an area of 7.44 Acres at Mouza Shyamsunderpur, Chandaka. The land was taken advance possession by Forest Department on 04.06.2018 to initiate the construction works.
- Forest Department accorded administrative approval dated 18.06.2019 for Rs. 40,32,05,648/- (40.32 Crores) for the construction works has been entrusted to M/s RITES Ltd. and under progress nearing completion.

Presently, the infrastructure under development includes the Academic Block, Activity Block, Amenity Block, Executive Hostel Block and the Nonexecutive Hostel Block. The residential blocks for staff of the academy will be built as per plan submitted by RITES Ltd.

Academic Block has two lecture rooms of capacity of 50 people in each floor, Conference Hall of 60 capacity, Library Hall, Video-conferencing room of 21 capacity. This is apart from the Director's Office, Faculty rooms, Reception and Executive banquet hall.

Activity block has the Ground floor-multipurpose court of capacity 192 nos., indoor auditorium of 176 capacity, Reception lobby on each for the multipurpose court and auditorium, Cafeteria with Kitchen, Storeroom and rest room. Besides, there are Gymnasium, Billards and Card room and Table Tennis room along with the VIP Lounge and VIP viewing gallery.

In APO 2021-22 Rs. 5.0 Cr. has been utilized for above works.



10.5. Forest IT & Geomatics

Forest Information Technology & Geomatics Centre (FITGC) has been developed in the State Forest Head Quarter which plays a key role in Forests & Wildlife management, conservation and its protection. In the said centre, monitoring of different activities like forest and wildlife protection, forest fire, activities undertaken under CAMPA funding through Odisha Forest Management System, Forest Cover Change detection, Afforestation monitoring etc. are being taken up. There are 23 modules for survey/ implementation/ monitoring of different activities aimed towards better forest management and protection. To control/monitor all the above activities, Geomatics and other IT Infrastructure has been installed and configured in the State Forest Head Quarter's FITGC cell which is being utilized for the purpose and about 12TB data is being managed in the FITGC server stack. Till now, 13363 Android Mobiles of field staffs are registered in our OFMS website, which are used for digital forest activity monitoring and data collection. This made the field staffs more comfortable with IT applications. Under forest protection, more focus is being given on foot patrolling by frontline field staffs which is also been monitored in the above centre through web application. On an average 100000 kilometer foot patrolling is done per month by all the forest circles in Odisha using GPS PDA & Android mobiles loaded with appropriate apps which is being monitored online through the web <https://odishaforestgis.in>. The forest fire monitoring is being done using MODIS & SNPP satellite platform in the above centre.

Two numbers of mobile applications i.e., "KYFL @ Odisha" and "Mo Jungle: My Odisha Forest" in iOS and Android has been developed and made available in Google Play Store & App Store to bring transparency. Using "KYFL @ Odisha" (Know Your Forest Location in Odisha) app, the user can get the geo-location of Point of Interest (POI), name & Approximate Distance from the nearest Notified Forest Block and details of Forest Administrative Jurisdiction. The application also provide additional land revenue Information like Name of the District, Tahasil, CD Block, GP, Village, Khata No., Plot No., Owner's Name, Land Type & area in Ha with respect to POI. The mobile application "Mo Jungle: My Odisha Forest" is used to bring public access regarding afforestation activities which are being uploaded by the frontline field staffs instantly.

Geo-referencing of 60991.33 Sq. KM of forest land will be covered in 4 years using DGPS Survey. CMV & MMV data layers generated through compilation of data collected from Division, FITGC & ORSAC. Development of DGPS Survey web portal "<https://odishaforestlandsurvey.co.in/>" has been completed and published in the FITGC server stack. Base Stations has been established in 8 Forest Circles. In Phase-I 12 Forest Divisions have been taken up and the progress is as follows:

Forest-Revenue Joint Verification has been completed in 1376 forest blocks (7975.32 sq. km) and FRJVC clearance has been obtained for 931 forest blocks (5074.26 sq. km). Of these FRJVC cleared forest blocks DGPS survey has been completed for 315 forest blocks (1780.20 sq. km) and quality check has been completed for 155 forest blocks (901.26 sq. km) by ORSAC. To take up the above activities the financial outlay in the present plan is fixed at Rs. 20 Crores.

Physical achievements against the funds released under CAMPA 2021-22

GRFL Work Achievements details

Table 71: (A) Certification of CMV MMV of Forest Blocks in the following Divisions:

Sl. No.	Division Name	No. of Forest Blocks	CMV Area in Sq. Km.	MMV Area in Sq. Km.	Expenditure under CAMPA APO 2021-22 (in Rs.)
1	Athagarh	54	484.027	469.593	1104741.02
2	Balliguda	115	2338.004	2519.808	4511590.76
3	Boudh	48	967.031	955.074	2218054.26
4	Chandaka WL	18	188.285	188.872	451731.848
5	City Forest	3	4.066	3.252	9389.732



Sl. No.	Division Name	No. of Forest Blocks	CMV Area in Sq. Km.	MMV Area in Sq. Km.	Expenditure under CAMPA APO 2021-22 (in Rs.)
6	Cuttack	50	340.15	381.509	834233.568
7	Kalahandi South	149	831.29	666.715	2372444.988
8	Keonjhar	194	1537.709	1521.035	3385424.248
9	Puri WL	23	175.514	172.201	190428.754
10	Rairangpur	64	3.642	4.335	1557832.814
11	Rajnagar WL	72	273.442	291.592	705324.468
12	Rayagada	274	2290.234	2236.994	4631401.057
13	Redhakhoh	45	949.114	1023.41	3307173.728
14	Similipal South WL	1	1221.89	1229.6	1687992.24
15	Similipal North WL	1	986.73	1044.35	
16	Subarnapur	38	383.217	388.03	716237.108
	Total	1149	12974.35	13096.37	27684000.59

Table 72: (B) Certification of FRJVC report by Forest & Revenue Officials in the following Divisions:

Sl. No.	Division Name	No. of Forest Blocks	Area in Sq. Km.	Expenditure details
1	Angul	67	319.07	1383647.06
2	Jaypure	43	244.26	918002.36
3	Karanjia & Similipal North WL	88	896.47	3480275.83
4	Khordha	28	396.92	1754029.17
5	Koraput	125	466.25	1752307.38
6	Phulbani	67	901.35	3387543.71
7	Rairangpur	28	101.57	394315.05
8	Rourkela	11	149.92	563444.34
9	Sambalpur	5	11.43	49566.2
10	Sundargarh	68	476.866	1792205.49
	Total	530	3964.106	15475336.59

Table 73: (C) Digitization of DLC/ RoR

S N.	Work Details	Expenditure details
1	Preparation of draft geo-referencing of Revenue/ DLC Forest land in Athagarh, Balliguda, Boudh, Chandaka WL, City Forest, Cuttack, Kalahandi South, Keonjhar, Similipal North WL, Puri WL, Rajnagar WL, Rayagada, Redhakhoh, Subarnapur Forest Divisions (14 nos.) with area 4721.67 Sq. Km.	4019855.98
2	Certification of final geo-referencing of Revenue/ DLC Forest land in Angul, Athamallick, Jharsuguda, Jeypore, Kalahandi North, Karanjia, Khordha, Koraput, Similipal North WL, Phulbani, Rourkela, Sambalpur, Sundargarh Forest Divisions (13 nos.) with area 4251.49 Sq. Km.	3634466.19
3	Quality Checking & approval of geo-referencing by ORSAC/ FITGC for ROR/DLC in Angul, Athamallick, Jharsuguda, Jeypore, Kalahandi North, Karanjia, Khordha, Koraput, Similipal North WL, Phulbani, Rourkela, Rairangpur, Sambalpur & Sundargarh Forest Divisions (14 nos.) with area 4456.669 Sq. Km.	3074628.19
	Total	10728950.36



Table 74: (D) QA & QC Verification of Forest Blocks in the following Divisions:

Sl. No.	Division Name	No. of Forest Blocks	Area in Sq. Km.	Expenditure details
1	Angul	127	701.71	3042965.415
2	Jeypore	101	421.02	1582319.47
3	Jharsuguda	22	105.6	457934.4
4	Kalahandi North	80	1057.77	4587019.61
5	Karanjia & Similipal North WL	221	832.81	3233134.98
6	Khordha	58	579.66	2561575.51
7	Koraput	246	889.78	3344060.17
8	Phulbani	96	1452.31	5458216.67
9	Rourkela	87	514.43	1933382.27
10	Sambalpur	65	483.23	2095526.9
11	Sundargarh	178	934.55	3512319.27
	Total	1281	7972.87	31808454.67

E.	QA & QC verification by ORSAC and Preparation of Draft maps of Notified Forest Block with final boundary coordinates for completion of DGPS survey over 644 Forest Blocks of area 4646.68 Sq. Km.	65350000
F.	Fixation of 2484 proposed boundary pillars around 56 Forest Blocks in Rairangpur Division	869400
G	Orientation Training in State level, Circle Level, Division level, Range level by SLTP. Completed in 16 Forest Divisions. i.e., Cuttack, Subarnapur, Kalahandi South, Boudh, Athagarh, Rairakhol, Rairangpur, Baliguda, Rayagada, City Forest, Puri WL, Chandaka WL, Rajnagar WL, Keonjhar, STR Baripada, Athamallik Forest Division	5021876
H	Completion of Quality checking and validation of Revenue & Deemed Forest Land Geo-database and certification of DGPS surveyed boundaries based on NLRMP cadastral & HRSI data by FITGC & ORSAC in 13 Forest Divisions (Angul, Athamallick, Karanjia, Similipal North WL, Phulbani, kalahandi North, Khordha, Jeypore, Koraput, Rourkela, Sundargarh, Jharsuguda, Sambalpur Forest Division) of Phase-1 GRFL project in 867 NFBs with area 11239.56 Sq. Km.	10358625
Total Expenditure for GRFL project under CAMPA APO 2021-22		16,72,96,644

Table 75: IT & GIS activities & achievements details

Sl. No.	IT & GIS activities & achievements details	Expenditure Details under CAMPA APO 2021-22 in Rs.
1	Procurement of IT equipment, maintenance of Server Infrastructure & its enhancement, Maintenance of GPS PDA devices, deployment of a Social Media Manager at the O/o ACS, FE & CC Dept.	15680164
2	Strengthening, managing & monitoring of the Odisha Forest Monitoring System (OFMS) portal	9128500
3	Preparation of working plan inputs using Remote Sensing & GIS	5534390
4	Procurement of Forest Cover Data ISFR-2021 of Odisha State pertaining to (1° x 1°) (in Geo-tiff & IMG Format) & Geo-referenced digital data of Forest Type Map-2020 from Forest Survey of India, Ministry of Environment, Forest & Climate Change, Govt. of India	120200
Total Expenditure for IT & GIS activities & achievements details		30463254
Grand total amount released under CAMPA APO 2021-22		197759898

10.6. Carbon Sequestration:

Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide. It is one method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing global climate change.

The details of formula (set of equations) used for estimating carbon sequestration is shown in the box given alongside.

Carbon sequestration is analysed by considering type of plantation activities being carried out under CAMPA APO 2021-22. Broadly, plantation activities are directly afforestation programmes and maintenance of plantation activities which were carried out in previous years. However, there are variations in carbon sequestration based on type of plantation. Carbon sequestration is found higher for the previous year plantations maintained under CAMPA APO 2021-22. The overall carbon sequestered under CAMPA APO 2021-22 is estimated in table 1. It is found that due to afforestation programme under CAMPA APO 2021-, 132.475 thousand tons of carbon is sequestered.

As per table-2, carbon sequestration for the plantation activities carried out during the period 2015-16 to 2020-21 is calculated at 49.856 Kg. per tree planted. Amount of carbon sequestered per tree planted during the period 2015-16 to 2020-21 is calculated at 3.251 kg. which is about six times higher than the tree planted in the year 2021-22.

- $AGB = 0.25 \times D^2 \times H$
Where: AGB: Above-Ground Biomass (pounds), D: tree diameter measured at 1.37 meters from the ground (inches). This measurement is globally used as a standard to get a better result, H: tree height (feet).
- $BGB = 0.2 \times AGB$
- $Total\ Biomass\ (TB) = AGB + BGB = AGB + 0.2 \times AGB = 1.2 \times AGB$
On average, a tree consists of 72.5% dry matter and 27.5% moisture content. To calculate the tree's dry weight, we could multiply the total weight of the tree by 72.5%.
- $Total\ Dry\ Weight\ (TDW) = TB \times 0.725$
Carbon occupies 50% of the total dry weight.
- $Total\ Carbon\ (TC) = TDW \times 0.5$
The weight of CO₂ in trees is determined by the ratio of CO₂ to C is 44/12 = 3.67. Therefore, to determine the weight of carbon dioxide sequestered in the tree, the weight of carbon in the tree is multiplied by 3.67.
- $CO_2\ weight = TC \times 3.67$
It is worth noting that the CO₂ weight above represents the CO₂ sequestered in the entire lifetime of the tree.

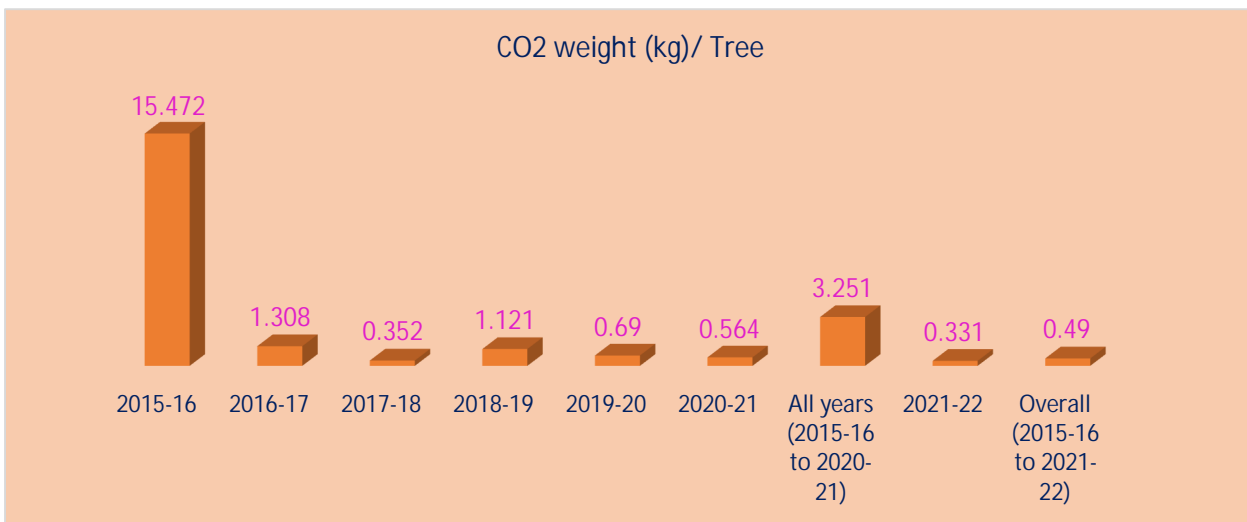
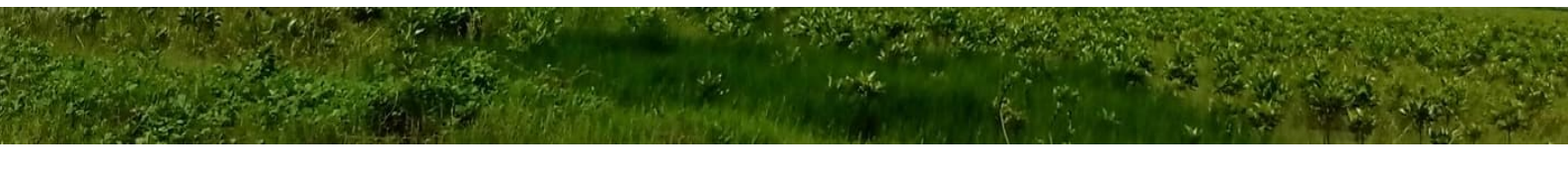
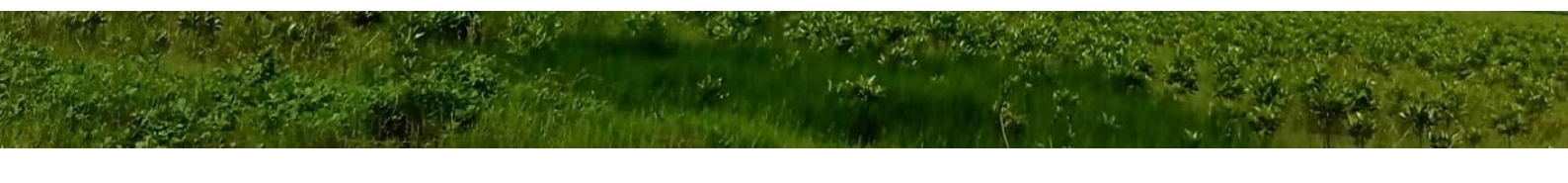


Table 76: Estimated Carbon Sequestration/ Hectare of Plantation Area under CAMPA 2021-22 (Based on 2023-24 Field Data)

Sl.	Type of Plantation	Estimated Carbon sequestration per planted tree					Survival percentage	No. of surviving trees per Hectare of plantation area	Total Area covered in CAMPA 2021-22	Estimated Total Carbon sequestration from all plantation sites (Tonnes)
		Total Biomass (TB) = AGB + BGB	Total Dry Weight (TDW)	Total Carbon (TC)	CO2 weight (Pound)	CO2 weight (Kg.)				
1	AJY ANR @ 200 (2nd Year Maintenance)	4.351	3.155	1.577	5.789	0.31	98.04	196	27000	1641
2	AJY ANR With Gap @ 200 Creation	2.606	1.89	0.945	3.467	0.186	94.1	188	20000	700
3	ANR @ 200 - Tall Tree	0.548	0.397	0.199	0.729	0.039	91.53	183	5	0.036
4	ANR @ 200 (2nd Year Maintenance)	6.416	4.652	2.326	8.536	0.457	91.06	182	42684	3553
5	ANR @ 200 (3rd Year Maintenance)	9.013	6.535	3.267	11.991	0.643	86.65	173	24593	2740
6	ANR @ 200 (4th Year Maintenance)	13.265	9.617	4.809	17.647	0.946	92.77	186	86623	15204
7	ANR @ 200 (6th Year Maintenance)	18.346	13.301	6.651	24.408	1.308	86.96	174	3043	692
8	ANR @ 200 (DWARF)	1.002	0.726	0.363	1.333	0.071	96.25	193	2062	28
9	ANR @ 200 Creation	3.498	2.536	1.268	4.653	0.249	93.71	187	36788	1717
10	ANR @ 400 (2nd Year Maintenance)	13.42	9.73	4.865	17.854	0.957	84.67	339	61	20
11	ANR @ 400 (3rd Year Maintenance)	1.892	1.371	0.686	2.517	0.135	83.46	334	64	3
12	ANR @ 400 (4th Year Maintenance)	58.987	42.766	21.383	78.475	4.206	85.67	343	100	144
13	ANR @ 400 Creation	2.464	1.787	0.893	3.278	0.176	81.18	325	1090	62
14	ANR @ 600 (3rd Year Maintenance)	26.931	19.525	9.763	35.829	1.92	78.1	469	113	102
15	ANR @ 600 Creation	3.081	2.234	1.117	4.099	0.22	87.29	524	368	42
16	ANR @ 800 (2nd year Maintenance)	12.413	8.999	4.5	16.514	0.885	92.36	739	50	33



Sl.	Type of Plantation	Estimated Carbon sequestration per planted tree					Survival percentage	No. of surviving trees per Hectare of plantation area	Total Area covered in CAMPA 2021-22	Estimated Total Carbon sequestration from all plantation sites (Tonnes)
		Total Biomass (TB) = AGB + BGB	Total Dry Weight (TDW)	Total Carbon (TC)	CO2 weight (Pound)	CO2 weight (Kg.)				
17	ANR @ 800 Creation	2.379	1.725	0.862	3.165	0.17	96.88	775	540	71
18	ANR @200 -RET (2nd Year Maintenance)	5.785	4.194	2.097	7.696	0.412	84.81	170	85	6
19	AR (2nd Year Maintenance)	18.332	13.291	6.646	24.389	1.307	92.28	1476	87	169
20	AR (3rd Year Maintenance)	8.192	5.939	2.97	10.899	0.584	88.53	1416	2269	1877
21	AR (4th year Maintenance)	13.309	9.649	4.825	17.706	0.949	91.56	1465	13394	18621
22	AR (5th Year Maintenance)	4.931	3.575	1.787	6.56	0.352	93.75	1500	76	40
23	AR (7th Year Maintenance)	217	157.325	78.663	288.69	15.472	99.06	1585	180	4407
24	AR Plantation	4.951	3.59	1.795	6.587	0.353	94.38	1510	3502	1867
25	AR Plantation (DWARF)	0.605	0.439	0.219	0.805	0.043	95.95	1535	3607	238
26	Avenue Plantation	8.874	6.434	3.217	11.806	0.633	74.26	186	10	1
27	Avenue Plantation (2nd Year Maintenance)	5.298	3.841	1.92	7.048	0.378	100	250	76	7
28	Avenue Plantation (4th year maintenance)	12.032	8.723	4.362	16.007	0.858	76.92	192	28	5
29	Bald Hill Plantation	6.218	4.508	2.254	8.273	0.443	96.8	1549	1847	1267
30	Bald Hill Plantation (2nd year Maintenance)	6.787	4.92	2.46	9.029	0.484	93.37	1494	1688	1220
31	Bald Hill Plantation (3rd year Maintenance)	11.13	8.069	4.034	14.807	0.794	91.25	1460	383	444
32	Bald Hill Plantation (4th year Maintenance)	22.603	16.387	8.193	30.07	1.612	93.98	1504	1000	2424
33	Cannel Bank Avenue	33.935	24.603	12.301	45.146	2.419	64	1024	31	77



Sl.	Type of Plantation	Estimated Carbon sequestration per planted tree					Survival percentage	No. of surviving trees per Hectare of plantation area	Total Area covered in CAMPA 2021-22	Estimated Total Carbon sequestration from all plantation sites (Tonnes)
		Total Biomass (TB) = AGB + BGB	Total Dry Weight (TDW)	Total Carbon (TC)	CO2 weight (Pound)	CO2 weight (Kg.)				
	Plantation (3rd Year Maintenance)									
34	Food & Fodder Plantation (2nd Year Maintenance)	1.039	0.754	0.377	1.383	0.074	93.55	1497	244	27
35	Food & Fodder Plantation (4th Year Maintenance)	46.363	33.614	16.807	61.681	3.306	94.74	1516	5	25
36	Food and fodder Plantation	2.427	1.759	0.88	3.229	0.173	93.33	1493	555	143
37	Food and fodder Plantation (3rd Year Maintenance)	15.101	10.948	5.474	20.09	1.077	87.97	1408	29	44
38	Miyawaki Plantation	29.2	21.17	10.585	38.847	2.082	97.59	7807	13	211
39	Miyawaki Plantation (2nd Year Maintenance)	18.09	13.115	6.558	24.066	1.29	93.77	7502	4	39
40	Miyawaki Plantation (3rd year maintenance)	27.388	19.857	9.928	36.437	1.953	100	8000	5	78
41	Urban Plantation	0.594	0.431	0.215	0.791	0.042	95.58	1529	8	1
42	Urban Plantation (2nd Year Maintenance)	0.555	0.402	0.201	0.738	0.04	95.63	1530	4	0
43	Urban Plantation (3rd Year Maintenance)	19.136	13.873	6.937	25.457	1.364	95.63	1530	2	5
	All types of Plantations	6.877	4.986	2.493	9.148	0.49	90.68	1340	274317	180167

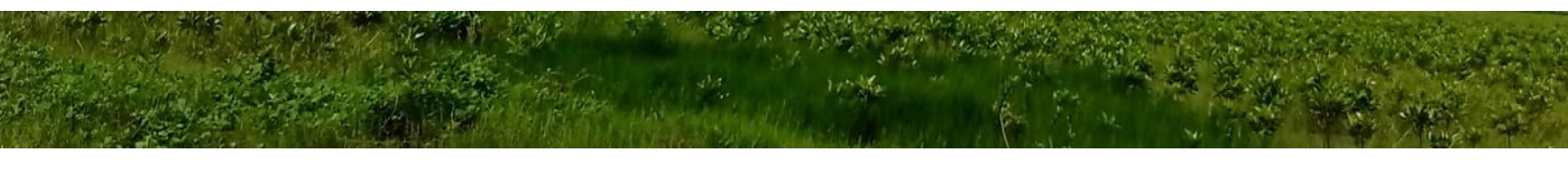


Table 77: Estimated Carbon Sequestration per Hectare of Forest Area by year of Plantation

Year of Plantation	Estimated Carbon sequestration per planted specie				
	Average of Total Biomass	Average of Total Carbon	Average of Total Dry Weight	Average of CO2 weight (in Pound)	CO2 weight (kg)/ Tree
2015-16	217.0	78.663	157.325	288.692	15.472
2016-17	18.346	6.651	13.301	24.408	1.308
2017-18	4.931	1.787	3.575	6.56	0.352
2018-19	15.726	5.701	11.402	20.922	1.121
2019-20	9.683	3.51	7.02	12.883	0.69
2020-21	7.905	2.865	5.731	10.516	0.564
All years (2015-16 to 2020-21)	45.599	16.530	33.059	60.664	3.251
2021-22	4.64	1.682	3.364	6.173	0.331
Overall (2015-16 to 2021-22)	6.877	2.493	4.986	9.148	0.490



10.7 Overall Outcome

Apart from improving green cover, CAMPA support has substantially contributed to improve ecosystem services for the people living in forest fringe villages. CAMPA activities have generated employment in the locality for the VSS members and others. The soil moisture conservation activities have been effective in reducing soil erosion and improving soil moisture in the treatment area. Wildlife management activities has improved wildlife habitat and created assets and infrastructures has been supportive in dealing with poaching and supporting wild animals with food and fodder. Special focus on forest fire management has been effective in dealing with undesirable situation and attending forest fire on immediate basis. Engagement of forest protection and fire protection squad has been supportive in this regard. Application of technology-based tracking of forest fire has been proved to be beneficial. In spite of these positive outcomes, additional measures are also required under different components / activities like improving maintenance period for plantation activities (discussed in respective sections), reexamining strategy for solar fencing etc.



10.8. Relocation of Village

Funding for voluntary relocation of villages from inside sanctuary and national parks has been given prominence in this APO 2021-22. It is the only way by which human interference in wildlife habitats & retaliatory depredation due to wildlife faced by the people can be minimized. This voluntary relocation seeks to provide an inviolate biome to the wildlife and simultaneously makes an effort to include the villagers of these interior villages in the mainstream & have an access to all the basic infrastructural facilities & benefit out of the Govt. sponsored public welfare programme.

SL. No	Location	Relocation of Villages	No. of families relocated	Resettlement site	Benefits accrued	Key Issues & challenges	Suggestions
1.	Division: Hirakud WL Range: Lakhanpur	Bhutuli, Rengali & Kurmkela	359	Village: Chakramal	<ul style="list-style-type: none"> • Compensation amount for relocation @ 15 lakhs for each family • Temporary Rehabilitation Colony for 359 families • Const. of Permanent Community Hall for all 3 villagers separately • Revenue dept. also provide 10 decimal lands to each family except 80 due to some land dispute. • Govt. also linkage with "Biju Pacca Ghara" Scheme except above 80 families • Compensation amount for relocation @ 20 lakhs for each family • 7 acres of patita land provide for 41 families of Lambipali villagers • All the villagers were engaged for construction of the temporary colony. • All the family has been allotted with one semipermanent shed with basic amenities. • Cost of ration also provided for 3 months to each family. • Peripheral development like strengthening of basic health facilities, solar streetlight, education facilities with Anganwadi etc. 	<ul style="list-style-type: none"> • In comparison to earlier situation in present condition they have loose the livelihood opportunity like agriculture and fishing • No cremation ground in present location which is create problem in present location. • All the welfare schemes are not available du to lack of residential proof. 	<ul style="list-style-type: none"> • Revenue department should have allotted one acre land for creation of burial ground. • All the affected families should have linkage with welfare Schemes. • Sustainable livelihood opportunity need to created
2.	Division: Hirakud WL Range: Lakhanpur	Lambipali	41	Village: Tangarpali			



SL. No	Location	Relocation of Villages	No. of families relocated	Resettlement site	Benefits accrued	Key Issues & challenges	Suggestions
3.	Division: Simillipal South Range: Jenabil	Jamunagarh	13	Village: Nabhara	<ul style="list-style-type: none"> • Compensation amount for relocation @ 15 lakhs for each family • Revenue dept. also provide 10 decimal lands to each family. • Govt. to be linkage with "Biju Pacca Ghara/ PMAY" Schemes. 	<ul style="list-style-type: none"> • All the welfare schemes are not available du to lack of residential proof. • No Pipe water supply provide to new colony. Ration card, Biju Pacca Ghara" facilities not linkage with all families. 	<ul style="list-style-type: none"> • All the affected families should have linkage with welfare Schemes. • Sustainable livelihood opportunity need to created • The Ration card, Salter, and other basic facilities should have linkage with District administration. • All the families should have availed the safe drinking water through pipe water supply.
4.	Division: Satakosia WL Range: Jhilinda	Katrang	22	Village: Dhanajayapur (Lakhsmi Nagar)	<ul style="list-style-type: none"> • Compensation amount for relocation @ 20 lakhs for each family • Now relocated at Regeda and GP of Narsingpur Block, Cuttack District • Provide ration card to each family in new place. • Installation of one Deep bore well and 4 nos. of individual well in new place by the Govt. • Increase the livelihood opportunity. • Available of basic amenities like Education, Health, Electricity and marketing facilities nearby comparatively earlier 	<ul style="list-style-type: none"> • Agriculture forest produce opportunity comparatively less than earlier place • Road condition is not so good. • Comparatively livelihood opportunity less than earlier place. • No Pipe water supply provide to new colony. • Ration card, Biju Pacca Ghara" facilities not linkage with all families. 	<ul style="list-style-type: none"> • The Ration card, Salter, and other basic facilities should have linkage with District administration. • All the families should have availed the safe drinking water through pipe water supply. • It is more essential to improvement the communication facilities to new settlement. • Priority on livelihood opportunity by the department.





Section XI: Selected Case Studies

11.1 Large Scale SMC Work undertaken by Odagaon Forest Range under Nayagarh Forest Division of Odisha

11.1.1 Background

Gochha Reserve Forest in Nayagarh Forest Division is the largest Forest Block of Odagaon Forest Range shares its boundaries with the forest area assigned to Barbara Forest of khurda Division and Rajani Forest of Ghumshar (S) Division. Out of 12213.422 Ha. 4948.67Ha. forest area is Coming under Odagaon Range and rest 7264.752 Ha is coming under Panchirida Range. In Odagaon Range the total Gochha RF is Divided to 9 Compartments i.e C/1 to C/7, C/8 (P), C/18 (P).



11.1.2 Implemented SMC Activities

Large scale Soil Moisture Conservation (SMC) was undertaken in 500 ha under CAMPA 2021-22. The forest type in this area is mainly moist deciduous mixed Sal Forest, the foothills are mainly dry deciduous mixed sal forest. In that forest area, pure succession of Bamboo Forest by dominating the mixed sal forest is observed along the upward slope of the forest. The soil type mainly comprises of black cotton Soil in the foot hill regions and laterite with weathered parent rock is observed on the uphill region. The elephant corridor started from Rajani RF of Buguda Range towards Gochha RF of Odagaon Range. For undertaking this SMC activity, Rs.1.6 crore has been utilized by Odagaon Forest Range. CAMPA supported large scale SMC works undertaken in the said forest site includes LBCD, wire mesh, and REC checkdam. The physical progress of these SMC works on the said site is presented in table 79.

Table 78: SMC Structures undertaken at Gochha Forest Area under Odagaon Forest Range

Sl.	Item of Work	Name of the Site	Physical Achievement
1	LBCD	Karanja Nala	48
		Kenapasi Nala	111
		Badagochha Nala	92
		Jamu Nala	21
		Dimiri Nala	10
2	Wire Mesh Check Dam	Badagocha Nala	1
		Karanja Nala	1
		Kenapasi Nala	1
		Dimiri Nala	1
3	RCC Check Dam	Badagocha Nala	1
		Karanja Nala	1
		Kenapasi Nala	1

11.5.3 Outcomes and Impacts

Upon implementation of large-scale site-specific Soil Moisture Conservation works, there is improved soil and moisture conservation. Increased silt deposit at the earmarked area, reduced soil erosions and increased moisture retention is observed. Further reasonable quantities of water are found in each water body even during peak summer seasons which is a great source of drinking water for wildlife during dry days.



11.2 Human - Wildlife Conflict Management: Insights from BJP Forest Range of Keonjhar Forest Division

11.2.1 Backdrop



Human-wildlife conflicts (HWCs) are rooted in the social ecology of a given geography cohabited by human beings and wild animals. The rise of habitat fragmentation among wildlife has seen a concomitant increase in HWCs across India. These conflicts are borne of interactions between people and wildlife that result in adverse effects on either one or both. It also impacts residents of fringe areas in terms of loss of livelihoods like agriculture and livestock and in cases of direct conflict, in grievous injury and

death. This case study pertains to the incidence of human wild elephant conflict situation and its management through CAMPA Funds (2021-22) by BJP Forest Range in Keonjhar Forest Division.

11.2.2 Occurrence of Elephant Human Conflict

BJP Forest Range in its area of jurisdiction continuously faces human elephant conflict in terms of wild elephant entry into the forest fringe villages. Resultingly there are deaths and injuries of elephants due to human attack. Similarly, there are death and injuries of human beings due to elephant attack. At the same time, damage of crop fields due to elephant movements on their way out from forest in search of food is also long-term issue of this area. The incidence of human elephant conflict is presented in the following table 80.

Table 79: Incidence of human animal conflict at BJB Range during the period (2016-17 to 2021-22)

Sl.	Year	Cases because of elephant and human conflict						
		Human Deaths (No of cases)	Human Injury (No of Cases)	Human injury (No of cases)	Elephant Death (No of cases)	Crop damage (Crop area damaged in Acre)	Farmers affected (No of farmers)	House Damage (No. of Houses)
1	2013-14				1	55.68	218	8
2	2014-15		2	2	2	98.95	237	42
3	2015-16					66.77	230	30
4	2016-17	3				52.29	214	21
5	2017-18	1	1	1		41.28	186	38
6	2018-19	2				174.286	669	8
7	2019-20	3			2	109.36	479	52
8	2020-21	1	2	2	1	38.03	222	6
9	2021-22	1			3	88.985	393	6

Source: Official Records, BJP Range

11.2.3 Human Wild Elephant Conflict Management Strategies

The human wildlife conflict Management strategies and activities undertaken out of CAMPA APA 2021-22 by BJP range is discussed in this section. Out of CAMPA funds BJP forest Range has undertaken slew of activities as highlighted in the following table 9.2. As per discussion with the Ranger and his staff, 14 strategic measures were undertaken in 2021-22 to manage elephant human conflict situation.

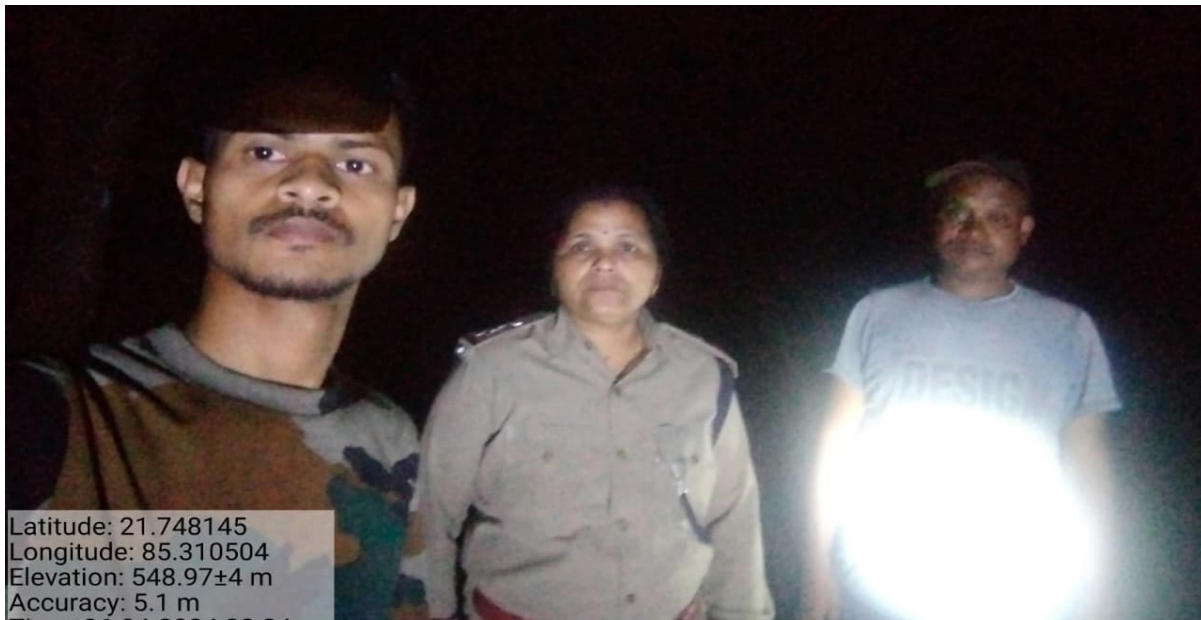


Table 80: Strategic Measures undertaken to manage Human elephant conflict situations.

Sl.	CAMPA (2021-22) funded Human Elephant conflict Management Activities	Unit	No. of Units	Strategic Description
1	Pond inside Forest	No.	1	Wild elephants will drink water inside forest and will not come out of forest for drinking water.
2	Solar lighting in Forest Fringe villages	No.	25	Due to light facility, villagers will remain alert about elephant movement.
3	Torch light/ Search light	No.	700	When people come out of home during nighttime, they will search elephant and other wild animals and accordingly plan their movement.
4	Awareness Meetings	No. of VSS meetings	744	One monthly every month per VSS for 62 VSSs operating in BJP Forest Range area.
5	Salt lick	No.	6	Good availability of salt and mineral soil inside forest area will not encourage elephants to go out of forest for searching salty soils.
6	Food/ Fodder Plantation	Ha.	100	Elephant friendly mixed plantation comprising of Mango, Aswath, bamboo, Kaintha, Jamakoli, Bahada, Amla, Bara etc. undertaken
7	Bamboo Plantation	Ha.	100	Exclusive bamboo plantation is done for the food of elephants.
8	Signage Boards	No. of sites	400	To make public aware about conserving elephants and not to get victimised by elephant movements in public places.

Sl.	CAMPA (2021-22) funded Human Elephant conflict Management Activities	Unit	No. of Units	Strategic Description
9	Elephant Squad	No. of persons employed	39	They act as elephant trackers, informers about elephant movement and send back elephant or elephant herds if found at public places of human interest.
10	Miking	No. of villages covered	100	To make public aware about safety of human beings and elephant and precautions to be considered for it.
11	Gajasathi	No. of persons employed	265	265 Gajasathis are recruited in 53 forest fring villages for elephant tracking, assisting neighbourhood people to remain safe from elephants and informing range office about elephant movement in habitation areas. They track elephant movement in every three hours gap in each day.
12	Installation of Plastic Cones on selected elephant movement sites	-	-	Plastic cones are used as barricades during the time of elephant movement on roads and making elephant movement peaceful.
13	Early Warning System	-	-	Making WhatsApp Group of forest Department people including Gajasathi about information dissemination regarding elephant movement. Radio messaging is also used for this purpose
14	Roster Watching of Elephants	-	-	On roster basis all staff are engaged in 3 person shifts to watch elephant movement and disseminate information for the purpose of avoiding any untoward human animal conflict.
15	Intermittent Drone Survey of Elephants	-	-	Intermittent drone survey of elephant movements is undertaken to assess the pattern of elephant movement, elephant health, status of elephant herd, No. of elephant calves in forest etc.

From the above discussion, it is quite clear that CAMPA has enabled BJP Forest Range to adopt large variety of strategies for managing human wild elephant conflict and ensuring safe habitat for human beings as well as wild animals.



11.3 Relocation and Resettlement of Villages towards Restoration of Wildlife Habitat at Debrigarh Wildlife Sanctuary

11.3.1 Backdrop

Debrigarh Wildlife Sanctuary is in the Bargarh district of Odisha, India. Established in 1985, the sanctuary covers an area of approximately 347 square kilometres. The sanctuary spans across parts of the Barapahad and Paikmal forest ranges. The exact coordinates of the sanctuary are approximately 21.4753° N latitude and 83.1957° E longitude. It was primarily created to protect the wildlife and biodiversity of the region. The sanctuary is known for its diverse flora and fauna. It is home to various species of mammals, birds, reptiles, and amphibians. Some of the notable wildlife species found in Debrigarh Sanctuary include leopards, elephants, spotted deer, barking deer, sambar deer, wild boars, sloth bears, and various species of birds such as peafowl, hornbills, and eagles. The landscape of Debrigarh Sanctuary is characterized by hills, forests, and water bodies. It offers opportunities for wildlife viewing, nature walks, trekking, and birdwatching. The sanctuary also has facilities for visitors such as watchtowers, viewpoints, and interpretation centres to enhance the experience of tourists and educate them about the biodiversity of the region.



11.3.2 Implemented Activities

As per the revised guidelines of Sanctuaries for forest issues, the department of Environment & Climate Change vide letter no. FE-WL-0021-2016/12390 dated 19.7.2021, the Hiraakud Wildlife Division has relocated 3 villages in 2021-22. About 359 families of three villages i.e., Kurumkela, Rengali & Bhutuli are relocated. Additional 41 families of Lambipali village are relocated on a 7-acre patita land under revenue department, at Tangarpali village.

11.3.3 Justification of Relocation

Debrigarh Wildlife sanctuary spreads over 353.81 Sq. Km. area adjoining to Hiraakud Reservoir. The Sanctuary contains some of most celebrated and endangered wildlife like Indian Gaur (Gyal), Elephant, Leopard, Sambar, Chital (spotted deer), Chowsingha, Wild boar, Peacock etc. Debrigarh Sanctuary also proposed Tiger Reserve. Hiraakud Reservoir is also a Ramsar Site and an internationally acclaimed habitat of birds. During construction of Hiraakud Dam in 1950 the indigenous communities of 4 villages i.e., Rengali, Bhutuli, Kurumkel & Lambipali left the reservoir area and resettled at Debrigarh forest area very close to Reservoir. All these villages depend on

fishing and everyday outsiders come to this place to purchase fish by using of forest road. Resultingly, the wild animal movement in this area gets disturbed. On the other hand, during rainy season all these villages are disconnected due to flood adversely affecting their access to health, education, and other basic amenities of life. Such type of overindulgence of people inside the sanctuary area has led to frequent occurrence of human-wildlife conflict.

11.3.4 Relocation and Resettlement

In this background of continuous human animal conflict, Forest department has decided to resettle the above-mentioned villages at of Patita land of 65 acres at Chakramal village. Out of CAMPA APA 2020-21 funds, two permanent colonies consisting of Chakramal Resettlement colony for 359 families and Lambipalli Resettlement Colony of 41 families at 7 acre land are created. District administration has provided 10 decimal patta land with Pucca Ghar by linkage with livelihood support to each family. Local representative like MLA, Samiti Sabhya have also provided legal support in resettlement processes. This site is very close to colony area and now the construction work has started by individuals who have initiated construction of their own building. All the technical and financial support has been provided by DFO, Hirakud WL Division. All the 400 families with more than 1000 population have been relocated within 8 months period.

11.3.5 Outcomes and Impacts

- More than 490 ha. of wildlife habitation has been restored due to relocation of families living inside the sanctuary areas. Presently the frequency of animal sighting in sanctuary has been increased. It is found that, one pair of Elephant has permanently stayed in that place. Besides that, wild Boar, Peacock, Spotted Deer, Samber etc. also freely move on that site which is very close to Reservoir.
- On the other side, all the 400 families were engaged in construction activities during construction of Colony. Each family has been allotted with one semipermanent shed with roads & concrete drainage, facilities like electricity, drinking water, community toiles, 24 hours piped water supply, separate bathing ghats for women & men, Children Park and community halls for each villager separately to observing of social functions, temporary health facility centre, temple, crematorium, Library & art facilities, painting with sports equipment for youth, and cost of ration for 3 months.
- Considering the importance of health and sanitation in a compact resettlement colony inhabited by around 400 families, Hirakud wildlife Division has arranged basic health facilities like PHC, functioning of health Sub Centre, which is functioning in community hall at colony site, organising health camp (twice in a month). Solar streetlight is also installed by the Forest Department using CAMPA funds.
- All the families have access to better marketing, job opportunity, Schooling, Heath, and transporting facilities relative to their earlier settlement.
- District Administration has also provided facilities through linkage of different welfare schemes.
- To monitoring day to day activities of the resettlement colony, Hirakud W/L Division has engaged one Forester for this purpose. It is a tremendous success of Hirakud Wildlife Division which will be noted an example in future.



11.4 DGPS Based Forest Boundary Mapping at BJP Forest Range in Keonjhar Forest Division

During CAMPA APO 2020-21, DGPS based forest boundary survey across forest blocks in all Forest Divisions were carried out by the Forest Department by involving ORSAC. The same was also made by ORSAC team comprising of four members in all forest blocks of BJP Forest Range under Keonjhar Forest Division. The Survey Team of ORSAC carried out the survey in a four-month period in all forest blocks of this Forest Range. During this period, the ORSAC team could be able to complete boundary maps of 19 Forest Blocks under this Forest Range. During the entire period of Survey, the Forest Department officials sufficiently cooperated ORSAC team at field level.



After completion of Survey, DGPS based Boundary Maps have been deposited at the local Tehsildar's Office. The DFO, Keonjhar has applied to the local Tehsildar for handing over the DGPS based Forest Block Boundary Maps to the concerned Forest Range. But BJP Range is yet to receive such maps.

11.5 Management of Forest Fire by Dhama Forest Range of Sambalpur Forest Division

11.5.1 Background

Forest fire leads extensive damage of Flora & Fauna along with creating environmental pollution by creating of harmful smoke from fire incident. In Odisha the peak period occurs from March to June. To prevent forest fire situation, Dhama like any other Forest Range has undertaken different activities to prevent of forest fire events. This case study deals forest fire management activities supported from CAMPA APO 2021-22 funds by Dhama Forest Range of Sambalpur Forest Division.



11.5.2 Implemented Measure to prevent Forest Fire

One of the successful measures for fire prevention has undertaken by Dhama Forest Range under Sambalpur Forest Division. A range of activities for preventing forest fire is implemented by Dhama Forest Range during the APO year 2021-22. One step in this direct is the creation of Fire Fighting Squad by selecting local people from the nearby villages located in forest fringe villages. A 15 Km. length fire line has been made. Fire fighting squad is reported to have undertaken vital role in prevention of forest fire. A special team has been formed to attend fire incident. Awareness meeting regarding the adverse effects of forest fire is conducted by involving the local VSS. During forest fire season particularly during summer months, a Forest Fire register is maintained at the VSS level to keep track of the nature of forest fire and the location of forest fire. A fire map indicating forest fire prone areas across Forest Blocks has been prepared at Division level. Besides, the team engaged for Forest Fire prevention and Management has attended all the incidents based on real time data provided by FSI. Concerned Forester and Forester Guard are the key persons to control or suppressing forest fire.



Post forest fire incident, the damage activity is carried out which takes care of forest loss as loss at the community or habitation level. For the mitigation of forest fire and forest fire management, Dhama Range has received CAMPA aided financial support from Division under Fireline maintenance of 15Km. (Rs. 46200/-), Fire fighting equipment's and logistic support (Rs. 85000/-) and engaging firefighting squad with hired vehicle Rs. 518000.00 during the APO year 2021-22.

11.5.3 Outcome

As per the discussion with forest officials, the trend of forest fire incidents tends to get reduced over time across forest fire prone forest blocks of the Dhama Forest Range. There is good deal of cooperation between VSS and Forest Department about the prevention of forest fire and its management. There is increased participation of local people in preventing Forest Fire. Increased role played by Forest Fire fighting squads has also contributed to the reduced incidence of forest fire.



11.6 Miyawaki Plantation and Climate Change Mitigation: A Case of CAMPA Intervention at Badampahar Range of Rai Rangpur Forest Division

11.6.1 Backdrop

In recent years, global warming is continuously increasing across countries, regions, and sub regions. The long-term increase in Earth's average surface temperature due to human activities, primarily the emission of greenhouse gases such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) has led to global warming and climate change. These gases trap heat in the Earth's atmosphere, leading to the greenhouse effect and resulting in climate change. The consequences of global warming include rising sea levels, extreme weather events, melting glaciers and ice caps, shifts in ecosystems, and threats to biodiversity. Addressing global warming is crucial to mitigate its impacts and preserve a sustainable environment for future generations. In the context of global warming, prioritizing and scaling up plantation and afforestation efforts are crucial strategies for carbon sequestration and climate change mitigation. Miyawaki plantation

is a reforestation technique developed by Japanese botanist Akira Miyawaki, focusing on planting native tree species in densely packed, multi-layered forests to accelerate growth and enhance biodiversity. These forests mature faster and are more resilient to environmental stressors, making them effective in combating deforestation and mitigating climate change impacts (Miyawaki, 2005). This approach has gained popularity globally for its efficiency in restoring degraded ecosystems and sequestering carbon. Owing to the growing relevance of Miyawaki plantation in climate change mitigation process, the Forest, Environment and Climate Change Department, Government of Odisha has accorded priority to such type of plantation activities under CAMPA intervention in APO 2021-22.

Plantation: Miyawaki Plantation
Scheme: CAMPA General
Year of Plantation: 2021-22
Area: 1.3 Ha.
Forest Circle: Baripada
Division: Rairangpur
Range: Badampahar
Section: Badampahar
Beat: Badampahar
Site/Village: Jayadhanposi
C.D. Block: Kusumi
District: Mayurbhanj

- Site Selection
- Survey and demarcation (Line cutting for Pillar Posting)
- Site cleaning & weeds uprooting.
- Segregation the land / area with open space / road in middle point for air circulation
- Pitting alignment and Stacking
- Digging of Continues Trench (2'X2') Sqft.
- Excavation of Earth and remove gravels (Iron)
- Trench levelling with sand and Fertile soil
- Fitting and findings of Boundary Pillar (Sand Filling, Metal concrete etc.)
- Manuring with compost (Straw dust, Vermicompost, Cutting of Cocopeat and mixed with Paddy Husk)
- Levelling of trench with mixed Manuring
- Transportation of Seedlings from Nursery to Planting side
- Planting seedlings (Local species) with species of 1X1 meter
- Watering
- Fencing around the plantation area (Barbed Fencing/ Wire mess with fixing of Angle (M.S.))
- Construction of Tube Well for permanent water sources
- Watch & Ward (2nd Year)
- Provide Micronutrient (February)
- Watering

11.6.2 Implemented Activities and Output

This case study deals with Miyawaki Plantation implemented under CAMPA at Badampahar Range of Rairangpur Forest Division (location details are as shown in the chart given alongside). To create a Miyawaki Forests, Rairangpur Forest Division identified a barren patch of land near Adarsha Bidyalaya Hostel at Jayadhanposi village under Badampahar Forest Range. Geographically, this site is located at 22.09155 Latitude and 86.12183 Longitude. Owing to poor quality of soil on the identified land and to facilitate Miyawaki type of plantation, the site was filled with imported nutrient soil. After land development on the identified patch of land, 27 varieties of indigenous saplings were planted on the site. The various process followed for undertaking Miyawaki Plantation at the selected site is as per the following.

The nature of plantation as stated in the following table reveals that mixed tree plantation consisting of fruit bearing trees, timber species and fodder species was undertaken. Now, there are about 9000 trees grown up at the Miyawaki plantation site of less than 2 Ha. of land area.

Table 81: Species Planted at the site

Sl.	Planted Species	Planted No	Sl No.	Planted Species	Planted No	Sl No.	Planted Species	Planted No
1	Sisu	650	10	Dimiri	250	19	Ambda	100
2	Neem	650	11	Jackfruit	600	20	Ashoka	300
3	Karanja	450	12	Gambhari	650	21	Mango	300
4	Jamu	400	13	Arjuna	450	22	Kanchana	100
5	Harida	400	14	Pahadi Sisoo	100	23	Bara	300
6	Bahada	450	15	Bela	200	24	Aswastha	300
7	Sal	350	16	Mahula	250	25	Kusuma	300
8	Piasal	250	17	Sirisa	350	26	Baula	300
9	Amla	200	18	Bamboo	150	27	Dhauranja	200
							Total	9,000

11.6.3 Outcomes

"Earlier, it was a barren land with Granite and Morrur soil. Now a dense forest has come up there. A watcher is tending the plants," Badampahar Ranger said, "We started the process of generating forest in the month of August 2021. We have planted twenty-seven types of seedlings with Medicinal and indigenous species. We planted different type of Medicinal Plant i.e., Bahada, Harida, Amla, Aswastha, Karanja, Neem, Bela etc. As well as planted fruits and fodder species i.e., Pijuli, Tentuli, Mango, Panasa, Dimiri, Chara, Bara, Bamboo, Jamu and planted some indigenous species. We adopted plantation of the species of different heights of Eighteenth Month seedlings. For a better Miyawaki Plantation we adopted 1 meter distance from row to row along with plant to plant. And for good air ventilator we mentioned / adopted open space / foot patch in the middle place of the plantation." A Bore Well was created at the site for providing water to planted species. Fencing has been constructed around the plantation area by using wire mesh with fixing of angle (M.S.). All the steps of Miyawaki method have been taken for better growth of the plants. Instead of chemical fertilizers, organic manure was used at the time of plantation.

11.6.4 Impacts

- After one year of the said Miyawaki plantation, it can be said that a barren land is converted to a green and dense forest with an average height of trees at 6 to 7 meters.
- Due to increased forest cover more oxygen is realized in the neighborhood of Miyawaki plantation site.
- Some wild animals i.e., Rabbit, Jackle, Mongoose, Snakes etc. are frequently sighted at the site. As well as different type of birds i.e., Alexandrine Parakeet, Coppersmith Barbet, Red printed Bulbul, Indian Robbin, Common Myna, Spotted dick etc. are also frequently found at the Miyawaki site.

11.6.5 Concluding Remarks

It is a good step by the Rairangpur forest division for creating a dense forest within a less time and that too in a small compact area. No doubt, it has beneficial impacts on the community in terms of better environment.





Chapter XII: Conclusion and Way Forward

Interventions under CAMPA APO 2021-22 observed in line with the activities framed. Different activities were found implemented under CAMPA components like plantation, SMC measures, SSO-bamboo, Miyawaki model plantation, implementation of RWLMP, conservation of RET species, wildlife protection and management, AJY, infrastructure development etc. The assessment covered a range of activities implemented under CAMPA APO 2021-22 including all these interventions taken up in different forest circles, divisions, and ranges.

12.1 Plantation:

Under Plantation, different plantation models were executed under AR plantation, ANR with gap plantation, bald hill plantation, food and fodder plantation etc. Apart from this, maintenance activities for earlier plantation were also taken up like 2nd year maintenance, 3rd maintenance and 4th year maintenance of plantations etc. Miyawaki plantation and maintenance of RET species were also taken up under the APO 2021-22. Total area coverage has been 93.63 percent of the demarcated area. In 91.2 percent cases, plantation journals / register was observed. Map of the plantation sites observed in 87.2 percent cases and treatment map in 94.91 percent sites. All AJY sites covered under the assessment found having micro plan. As a measure of transparency, signboards found erected in 81.7 percent sites whereas in some sites, either it is in a broken condition or not visible. The sites are having pillars and 91.0 percent pillars observed to be in good condition.

Under CAMPA, SMC measures have been taken in plantation sites to minimize topsoil erosion and improving soil moisture regime. Among all the SMC measures, staggered trench is more prominent (85.2 percent sites). Based on the site-specific needs, many sites also have more than one SMC measure to achieve the objective. Plant protection measures found prominent in terms of watch and ward, barbed fencing, and bamboo fencing. Some sites also have more than one protection measures for better plant survival. Overall plant survival rate, irrespective of plantation models and years of plantation / maintenance, found to be 92.69 percent and in case of 2021-22 plantation, plant survival rate has been 93.86 percent.

During assessment, existence of natural species (average of 8 nos.) is also witnessed in the measurement plots and visited sites. Natural species observed in most of the sites where ANR activities have been taken up. Apart from natural species, regenerated species was also witnessed in ANR sites with different number of coppices. Average number of regenerated species varies between 2 to 31, with an average of 14 per site. The assessment also witnessed growth of coppices, ranging between 2-4 on an average per species in ANR sites / plots.

In case of plantation and maintenance, 67.52 percent fall in to 09-10 category (highest), 28.54 percent in the category 07-08, 3.02 percent in the 05-06 and remaining 0.93 percent in 03-04 category. In case of 2021-22, 75.12 percent sites fall under category 09-10, 21.66 percent in 07-08, 2.76 percent in 05-06 and remaining 0.46 percent in 03-04 category.

12.2 SMC Measures:

Different SMC structures have been created under CAMPA and among all the SMC structures, LBCD is the most prominent (56.7 percent), followed by WHS / water bodies (10.0 percent), and check dam (10.0 percent). About 80.0 percent SMC structures are constructed under NPV 80%. As all the structures are constructed in recent year (2021-22), condition of the created structures found to be good. Forest density observed to be high in 30.0 percent SMC sites, and in 60.0 percent sites forest density found medium. While human interference has been low, cattle pressure is existing in 38.71 percent sites. The created SMC structures found to be useful in water storage and reducing run-off speed, reducing loss of top-soil, and supporting in improving soil moisture condition. Apart from this, in the SMC sites, generation of different plants also observed, due to improved soil moisture condition.



12.3 Nursery Development:

Under CAMPA, nurseries have been developed to provide seedling support for afforestation / plantation activities. All the nurseries are developed under NPV 80.0%. Average area of nursery is about 2.03 ha. with total area of 109.49 ha. Of the total nurseries, 18.52 percent are developed in 2020-21 and 81.48 percent are developed in 2021-22. Average seedling production capacity of the nurseries, irrespective of its type, found to be 2,30,185, with maximum production capacity of mega nurseries, followed by Central nurseries, and minimum in Casuarina and temporary nurseries. Of the total seedlings produced, 98.69 percent seedlings are utilised for plantation. Remaining seedlings were planned to be utilised as per the requirement. While most of the nurseries are having captive irrigation sources, dependency for water on external resources is also observed in selected nurseries.

12.4 Bamboo Plantation and SSO Measures:

Average area of plantation has been 26.70 ha. and average number of saplings planted per site is about 10,681. About 97.9 percent bamboo plantation / maintenance is done under NPV 80.0 percent. In all the bamboo plantation sites, SMC works have been taken up and among the SMC measures, staggered trench is most prominent. Plant protection measures observed in all the sites and in 72.34 percent sites, more than one protection measure is taken to ensure plant survival. Watch and ward is the most common measure taken in all the sites. Plant survival rate, irrespective of the year of plantation and type (plantation and maintenance), observed to be 89.1 percent, ranging between a minimum of 65.2 percent to a maximum of 98.4 percent.

On an average, 2 new shoots observed per clump in bamboo planted areas, irrespective of year of plantation and its category (plantation / maintenance). In the second-year maintenance plants, number of shoots found to be higher than bamboo plantation of other categories. Similar, average number of culms per clump found to be higher for second year bamboo plantation maintenance site and on an average 5 culms per clump is observed.

In all visited sites, SSO activities were taken up under NPV 80%. Average area under silvicultural operation has been 313.7 ha. Net area under silviculture is 94.85 percent of the gross area. In 58.6 percent SSO sites, SMC measures were also observed. Major SSO operations taken up under CAMPA includes removal of congestion in the clumps / thinning of bamboo groves (95.9 percent). Other measures taken are soil filling, plots protection measures, fire line creation, stone packing etc.

In 64.57 percent clumps, new shoots of <1 year observed with a mean number of 2 shoots. In 94.15 percent clumps, average of 2.93 per clump of one year shoot observed. Shoots of 2-year-old observed in 91.44 percent clumps with an average of 5 shoots per clump. Shoots of more than 2 year also observed in 90.81 percent clumps with an average of 5 per clump. So, SSO measures taken have been found beneficial in terms of generation of new shoots.

In case of bamboo plantation, 42.55 percent sites fall under 09-10 category, 51.06 percent in 07-08 and remaining 6.38 percent in 05-06 category. With regard to 2021-22, 27.78 percent sites fall in to 09-10 category, and remaining 72.22 percent in 07-08 category.

12.5 Wildlife Management:

Under wildlife management, several activities were implemented including plantation of fruit & fodder species around the water body, creation of waterbody, creation of WHS, renovation of waterbody, solar fencing etc. Apart from this, different structures were also crated like anti-poaching barrack, bear cave, forest road construction etc.

Out of 266 infrastructural assets under 49 categories of assets evaluated, it is found that about 10 percent of the antipoaching barracks are yet to be made effective use. Similarly, non-use of some of the other assets were also observed like excavated elephant proof trench, about 50 percent of the grassland, 25 percent of the guided / unguided well, 16.7 percent of the bird habitation centres, 40 percent of the fruit and fodder bearing plantation (maintenance) around waterbodies, 9.5 percent of the fruit and fodder bearing plantation around waterbodies, 9.1 percent of the renovated waterbodies and 66.7 percent of solar fencing is also reported. Rest of the assets are viewed to be more effective owing to its current use practices.

Asset performance of the evaluated wildlife management assets is assessed on the mean score of the assets on a 10-point nominal scale. Overall asset performance between the range of 8-10 is found among 40 Forest Divisions. In 9 Forest Divisions, this is calculated between the range of 6-8. In Bargarh Forest Division, it is found the lowest at 2.4. The overall mean score of assets created under CAMPA in all Forest Divisions is calculated at 8.7 on a 10-point scale. Thus, the quality of the assets created under CAMPA is found of higher quality.

12.6 Infrastructure Development:

Infrastructural activities are performed by forest divisions under three broad components such as CA/PCA, NPV 20% and NPV 80%. However, majority of such assets are created under NPV 80%. Different assets created under infrastructural development include barbed fencing, construction of boundary wall, cattle proof trench, construction of quarters, watch tower, water bodies, vegetative fencing etc. In the construction sites, transparency boards are not observed in majority of sites. Most of the assets are found in used condition like barbed fencing, boundary wall, cattle proof trench, community centre, fire-fighting blower, forest guard quarter etc.

Asset performance of the infrastructure is assessed on a 10-point scale for seven performance indicators. Overall asset performance between the range of 9-10 is found among 32 Forest Divisions. Asset performance between the range of 8-9 is found for 18 Forest Divisions and between the range of 7-8 is found only one Forest Division, i.e., Sambalpur Forest Division. The overall performance of infrastructure assets created under CAMPA across Forest Divisions in Odisha is calculated at 9.1 on a 10-point scale which implies that the assets are productive in terms of useability and effectiveness.

12.7 Ama Jangal Yojana (AJY):

In Odisha, the Joint Forest Management (JFM) program operates through collaboration between forest-dependent communities and the State Forest Department. To further strengthen the collaboration, CAMPA funds under APO 2021-22 is also utilized.

Three types of meetings are generally conducted by the VSSs which are Executive Committee (EC) Meeting, General Body (GB) Meeting and Special meetings. timely maintenance of records and registers is found with 100 percent of sampled out VSSs in all Forest Divisions in Odisha. This suggests that CAMPA support has been made to the VSSs maintaining records and registers properly.

About 33.3 percent of the VSSs in Balangir Forest Division are conducting periodic meetings regularly. In rest of the Forest Divisions, there is irregularity in conducting periodic meetings. Overall, about 12.7 percent of VSSs conduct EC meetings as and when required and about 9.1 percent of the VSSs occasionally conduct periodic meetings. Maximum proportion of VSSs to the extent of about 61.8 percent conduct GB meetings once in a year. About 18.2 percent of VSSs conduct GB meetings as and when required. Very negligible proportion of VSSs, about 1.8 percent conduct GB meetings on half yearly basis. About 18.2 percent of VSSs had not conducted any GB last year.

As high as 89.1 percent of the VSSs are of the opinion that due to their protection measure, they never came across forest fire in the forest area under their jurisdiction. About 7.3 percent of VSSs reported occurrence of forest fire rarely, and in 3.6 percent cases occurrence of forest fire is occasional. This indicate that due to forest protection measures as adopted by the VSS members, there has been good deal of prevention of forest fire in forest areas assigned to the VSSs.

Under the aegis of VSSs, several awareness generation programmes against Podu cultivation have been taken up. Resultingly, there has been impact and in majority of forest fringe villages, such practices are altogether abandoned by the farmers. Due to the support of CAMPA, VSSs have been associated with afforestation activities and wage-earning opportunities.

Except two Forest Divisions, Deogarh and Rourkela, the mean performance of all Forest Divisions implementing AJY activity is calculated at more than 8 points.

Way Forward:

12.8 Wildlife Management

The assessment covered 48 different types of wildlife management assets. Based on field observation, certain measures may add value and may be helpful further to improve asset effectiveness in wildlife management.

SN	Component / Sub-Component / Activity	Way Forward
1	Anti-Poaching Barrack	<ul style="list-style-type: none"> Boundary around the antipoaching barrack may be created to protect it from outsiders. Installation of tube well and solar lighting provision will also be helpful for the officials.
2	Bamboo Seed Ball	<ul style="list-style-type: none"> SMC works at the targeted site may be considered for better germination of bamboo seed balls.
3	Barbed Fencing	<ul style="list-style-type: none"> Transparency board indicating CAMPA activity and APO year is not found in some of the barbed fencing sites. For instance, at Dhamara and Sahada beats of Bhadrak WL Division and Rayagada Division. Installation of board would be helpful not only for providing information, but also to aware people about the importance of the site and its protected nature.
4	Bear Cave	<ul style="list-style-type: none"> Water facility for bathing & drinking, at bear cave site may add value to such assets.
5	Construction of under way pass	<ul style="list-style-type: none"> At Gantab location of Bamara W/L Division, underway pass is evaluated. It is observed that both sides of the constructed sites, there are gaps in soil. It is suggested that there should be soil filling on both sides of construction to complete the construction.
6	Elephant proof trench	<ul style="list-style-type: none"> For long lasting and effective functioning, it requires periodic maintenance, may be in three to four years interval, depending upon the condition of the trench.
7	Fire Fighting Blower	<ul style="list-style-type: none"> Firefighting blowers require periodic maintenance, and preferably before summer season. So, creating provision under CAMPA for the maintenance of blowers and similar other assets would be helpful.
8	Forest Road	<ul style="list-style-type: none"> For easy approaching and uninterrupted patrolling, budgetary provision may be made for periodic maintenance of forest roads created under CAMPA funds.
9	Grass Land	<ul style="list-style-type: none"> Management of invasive weeds on grass lands may be taken up at periodic intervals for regular use of wild animals.
10	Green Shop	<ul style="list-style-type: none"> Construction of green shops can be considered as an innovation under CAMPA to promote rural marketing. In subsequent years of implementation, such type of green shops (based on feasibility) may be accorded more focus for the promotion of rural marketing and rural entrepreneurship.
11	Guided the unguided well	<ul style="list-style-type: none"> As the guided materials for unguided wells being stolen by people, there should be awareness at community level and through JFM in JFM areas regarding the importance of such assets.
12	Improvement of Bird habitat	<ul style="list-style-type: none"> Based on the need, water provisioning adjacent to bird habitats may be planned.
13	Installation of VHF Tower	<ul style="list-style-type: none"> High density vegetation at Debrigarh sanctuary is reported creating obstacles to radio wave and hence impact on transformation of message. Measures may be taken for technical solution of such issues. In the pre-installation feasibility assessment, such parameters may also be considered.
14	Invasive Weed Eradication	<ul style="list-style-type: none"> There should be treatment of the same area with two- three years of interval so that invasive weeds will not stand against the utility of wild animals.
15	Maintenance of Boundary area	<ul style="list-style-type: none"> Notwithstanding the pillars are properly constructed and demarcated, transparency boards are not witnessed in all sites. It is viewed that such transparency boards should be made at all sites.
16	Maintenance of Fruit & Fodder Species around Water Body	<ul style="list-style-type: none"> Proper protection and maintenance up to five years along with plantation of 18-month seedling may be helpful further for enhanced utility of such assets.
17	Maintenance of Waterbody	<ul style="list-style-type: none"> Creation of ramp facility for easier access of wild animals into waterbody may be considered.

SN	Component / Sub-Component / Activity	Way Forward
18	Meadow Development	<ul style="list-style-type: none"> Invasive weed eradication in periodic interval at meadow site may be considered.
19	Plantation of Fruit & Fodder species around Water Body	<ul style="list-style-type: none"> Casualty replacement and protection measures by enhancing the maintenance period may be useful to add value and further promote utility of such assets.
20	Purchasing of Drone & its accessories	<ul style="list-style-type: none"> Drone with thermal sensors is viewed better because such drones can capture hidden animals.
21	Salt Lick	<ul style="list-style-type: none"> Periodic maintenance of salt lick by adding required salt and other minerals.
22	Solar Fencing	<ul style="list-style-type: none"> Community involvement for protection and maintenance may be helpful along with community awareness for protection of solar fences. Battery check-up and if needed, it's on time replacement will help to keep solar fencing operational.
23	Solar Light	<ul style="list-style-type: none"> Provision of maintenance of solar lights under CAMPA or motivating users / villagers to maintain solar light.
24	Solar Pipe Water Supply	<ul style="list-style-type: none"> For operation and maintenance of the asset for long term benefit, formation of Users' Group may be helpful.
25	Water Body	<ul style="list-style-type: none"> Provision of spillway, inlet and outlet should be planned in suitable waterbodies and ramp facility for convenience of wild animals may be considered.

12.9 Infrastructure Creation

About 18 different types of infrastructures were assessed under APO 2021-22. Different infrastructures which can be considered for further value addition, as per the field observation, is presented below.

SN	Type of Assets	Recommendations
1	Boundary Wall	<ul style="list-style-type: none"> Boundary walls, which are not enclosed from all sites, may be considered for completion from all sides.
2	Causeway	<ul style="list-style-type: none"> Construction of side walls of the cause way, where it is not constructed or disrupted, may be taken up to protect the causeway.
3	Culvert	<ul style="list-style-type: none"> Construction of sidewalls of the culverts, where it is not provided, may be considered to strengthen the structure.
4	Forest Guard Quarter / Forester Quarter / Range Officer Residence	<ul style="list-style-type: none"> The quarters which are yet to be connected with basic amenities like water supply, electricity and sanitation facility (including sewerage tank) may be taken up on priority basis. Annual maintenance provision of quarters would be further helpful.
5	Range Office	<ul style="list-style-type: none"> Provision of common place for public waiting may be planned in or adjacent to range office.
6	Seizure yard	<ul style="list-style-type: none"> Periodic cleanliness / weed cleaning of open seizure yards may be considered.

12.10 Plantation

SN	Issue / Challenge	Way Forward
	Plantation	
1	Labour problem at the time of digging pit in hard rock soil.	Addition person days may be planned for digging pit in hard rock soil.
2	Watering provision for limited period of time for new plantations impacts plant growth and causes causality.	Watering provision may be considered at least for a period of 3 years for the new plantation sites.
5	Minimizing animal (Elephant) and human conflict in specific sites.	Additional plantation of fruits and fodder species may be planned, based on feasibility, in elephant prone areas.
6	Retarded growth of plants in some sites due to weeds in 3 rd and 4 th year of plantation.	Weed management provision for 4 th year plantation would be useful along with making special provision for weed treatment as per the requirement.
7	In bald hill plantation, available funds provision is inadequate	In bald hill plantation, existing cost norm may be re-examined and if found feasible, cost norm may be enhanced.

SN	Issue / Challenge	Way Forward
8	In some places, officials are facing problem in creation of plantation site due to unwillingness of local people.	In such a situation, flexibility may be granted to the officials to change place and change plan and focus on other feasible site/s.
9	In some of the places, plantation is taken up as per the availability of seedling in concerned nursery with less focus on existing natural species that are suitable for the site.	Nurseries may grow seedlings, considering plant suitability of a particular area to be covered under seedling supply. It will help in survival and growth of the plant. Site specific type of natural species existing may be considered for the purpose.
10	In some of site the soil condition (Khalia Soil) is not so good for plantation of specific species.	Soil testing and selection of species accordingly would be helpful.
11	No shed provision for watcher in case of AR Plantation.	Shed provision for watcher may be considered in plantation norms.
12	Long distance transportation of seedlings posing risk to plant survival.	Wherever feasible, temporary nursery may be raised in plantation side or minimise transportation distance by developing nurseries within 1-2 Km.
13	Fencing for better survival of plants.	Fencing provision may be considered for plantations taken up under NPV 80%.
14	The watering provision under ANR 200 Casuarina plantation.	Provision may be created for a longer period, may be 3-4 years for better survival.
15	Fire line creation and its maintenance.	Fire line has been created in boundary line of plantation or forest. Fire line may be created in cross section of the forest area to make it more effective to control fire incident.
13	Some plantation / maintenance areas are more weed prone like Chillika, Rairakhol, Baliguda, Debagarh etc. and current provision for clearing and cleaning weed is less adequate.	Enhancement in cost for weed management / maintenance may be considered.
15	In some AR plantations sites, plant survival is affected due to free access of local cattle after the completion of period of protection.	Specific measures may be taken for plantation sites that are in close proximity to villages. The period of protection in such cases may be for an extended period, apart from creating awareness and involving them in protection activities.

12.11 Assets Creation

SN	Issues/Challenges	Suggestion
	Assets	
1	Equipping range office with minimum required facilities.	Range offices may be equipped with sitting arrangement, public toilet, storeroom etc.
2	Accommodation problems in the remote area in Forest Barrack and Watch Tower	The forest barrack and watch towers may be equipped with basic minimum functional facilities like water, electricity, boundary wall etc.
3	Funds for construction of boundary wall	Provisioned funds for the construction of boundary wall seems inadequate in some cases and may be thought of provisioning additional funds as per the revised estimate.
4	To protect the villagers from wild animals	Wherever feasible and found cost effective, boarder of forest area may be fenced with mess or barbed fencing to prevent wild animals entering the habitation area. Creation of cow trench around the site may be taken up where there is gap or required to be constructed.
5	Frequently crop damage by wild Animals as well as properly of villagers	Apart from awareness of villagers, more elephant proof trench may be constructed. Wherever feasible, wire fencing may be done in the boundary, and timely caution to the villagers to protect their crops
6	Additional protection measures for black bug	Steps to be taken like creation of salt lick, drinking water facilities. Meadow, etc for Black bug nourishment, their regular treatment and watch & ward may be strengthened further to protect them
7	To improve drinking water source for wild animals	Additional tanks may be created along with renovation of old tanks; Additional focus may be given to grow fruit bearing plants & fodders around waterbodies to meet the water and food necessity of the wild animals

SN	Issues/Challenges	Suggestion
8	Specific register is not observed for some category of assets like culvert, causeway, boundary wall, tube well, fire line creation, maintenance etc. However, it is reflected in cash book.	Maintenance of register/s for different assets crated under CAMPA in a specific year will provide scope for ready reference and identification of constructed site/s.
9	Limited period of maintenance of Meadow sites.	After 3 years no maintenance fund is available to sustain the meadow. The provision may be considered for an extended period of 2-3 years.
10	Some existing water bodies are not having water or having less water for use of wildlife.	Such water bodies may be planned for renovation / desilting.
11	In certain case of bird habitat improvement, cemented water tank for bird bath requires proper maintenance.	Maintenance of the tanks may be taken up on periodic interval after observing maintenance requirement.
12	In some of places, bamboo seed balls are not properly germinated due to locational unsuitability.	Selection of sites with better moisture content would be helpful for seed ball germination.



Observation Note:

Plantation:

SN	General Observation	Observation
1.	Suitability of the site for plantation	<ul style="list-style-type: none"> Favourable soil condition and depth of soil are very common response for suitability of plantation. Due to the availability of soil moisture, the foothills are also covered under plantation; Coverage of degraded land under plantation; In certain cases, people in forest fringe villages also requested for plantation in the local forest area; VSSs are also involved in plantation in the assigned area; Plantation found supportive in reclaiming encroached land and prevent encroachment; Site is suitable for targeted Plantation like AR, ANR 200 etc. Based on site suitability, RET species found planted; ANR 200 Plantation is taken up in forest area in low plant density. <p><i>Unsuitable site for plantation:</i></p> <ul style="list-style-type: none"> Some plantation sites are close to local habitation, which are impacted by cattle and local people.
2.	Site specific right choice of the species	<ul style="list-style-type: none"> Based on site specific conditions, plantation of mixed species found preferred. It also encouraged in maintaining plant biodiversity; Indigenous species are having better survival rate in comparison to other species; Apart from site suitability, species selection is also dependent upon its availability in nursery; <p><i>Species are not suitable for Plantation:</i></p> <ul style="list-style-type: none"> In few mixed species plantation sites, slow growth species found affected.
3.	Reason for high / low plant survival	<p><i>High Survival:</i></p> <ul style="list-style-type: none"> Soil moisture content in the site; More open area and favourable soil condition. Negative impact of weeds on plant survival and growth of existing natural species; Plantation of 18 months seedling has improved the plant survival rate; Plant survival is impacted in plantation sites having Murom soil; Protection measures taken in plantation sites have enhanced plant survival; <p><i>Low Survival:</i></p> <ul style="list-style-type: none"> Interference of local domesticated livestock in plantation sites; Less growth and impact on plant survival in plantations taken up in high plant density areas.
4.	Impact of the Plantation	<p><i>Positive Aspect:</i></p> <ul style="list-style-type: none"> Conservation of RET Species; Protect to illegal cutting of natural trees; Controlling, minimizing, and reclaiming encroached area; Increasing forest density; Pollution minimization in locality by creation of Miyawaki plantation; Increasing frequency of animal sighting; Creating engagement / wage opportunity for local people; Enhanced fuelwood and food availability; Reduction in soil erosion with SMC measures; Creating opportunity for adequate quantity of fodder for wild animal; Protection of existing natural species; <p><i>Negative Aspect:</i></p> <ul style="list-style-type: none"> Not so impact in limited plantation area due to destroyed by local cattle.

SN	General Observation	Observation
		<ul style="list-style-type: none"> Protection measures are not so effective for plantation sites that are close to human habitation; Less soil depth in stoney area and unfavourable soil condition has restricted plant growth and its survival in some of the plantation sites. However, plantation in such areas is also essential to improve porosity and soil condition in a long run with green cover.
5.	Fire incident in the plantation site (2017-18 to 2023-24)	<ul style="list-style-type: none"> Due to creation of fire line in plantation site/s and its maintenance on regular basis no or very few fire incident reported in sample plantation sites; People, more particularly VSS members are aware, conscious and take measures to prevent fire in plantation area.
6.	Recommendations	<ul style="list-style-type: none"> In case of AR plantation, where area of plantation is less than 10 ha., the allocated person days for watch and ward may be revisited and suitably increased. In some of sites, uprooting the weeds seems essential, looking at its current spread, to boost growth of the plants; Special budget provision may be thought of in plantation norms for weed management; Where plantation is taken up in moderate hill slopes, SMC measures in shape of half-moon trench may be taken up as per site suitability in the uphill site of plantation; In case of AR plantation, one protection shed provision may be incorporated in plantation norms which will be helpful for the watcher. In some plantation sites forest density is very high and seems less suitable for ANR 200 plantation. Required protection measures may be taken in such areas which would be effective; Discussion with stakeholders reveals that transportation of seedlings from a distance place disturbs plant roots and hence impact on growth and survival. Hence, measures can be taken for creating temporary nurseries in 2-3 Km distance, from the plantation area and in a feasible place to minimise transportation duration and the cost involved in it. In case of ANR 200, ANR 400, and ANR 600, barbed fencing may be considered for plant protection; The VSSs, those are directly involved in encroachment clearing and fore land reclamation process; may be incentivised to encourage them and reclaim forest land.

Bamboo plantation:

SN	Indicator	Observation
1.	Site Suitability	<p><i>Suitability for Bamboo Plantation:</i></p> <ul style="list-style-type: none"> More overly Bamboo plantation is planted in 31 Forest Divisions which are favourable soil condition for plantation; Most of sites are having favourable soil condition; Bamboo plantation is also taken up in existing elephant prone area; Low density of forest can be more favourable; Sal plantation is suitable for plantation; Well drainage sandy-loam soil & clay-loam soil found in various divisions that are suitable for <i>Salia</i> bamboo plantation. <p><i>Not so suitable for Bamboo Plantation:</i></p> <ul style="list-style-type: none"> Few sites having unfavourable soil condition Very few sites having livestock (cattle) impact on bamboo plantation as plantation site is nearby to the local habitation.
3.	Reason for high/low survival percentage	<p><i>High Survival:</i></p> <ul style="list-style-type: none"> Protection measures taken have been instrumental in greater plant survival in some of the sites. <p><i>Low Survival percentage:</i></p> <ul style="list-style-type: none"> Destruction of new shoots by wild boar and elephant impacting growth;

SN	Indicator	Observation
		<ul style="list-style-type: none"> Density of forest is the major factor to low survival percentage; Local cattle / livestock population have also been impacting upon plant growth and survival, apart from wild animal like Rabbit, Wild Boar, Elephant as well as Monkey.
4.	Impact of Plantation	<ul style="list-style-type: none"> Controlled illegal cutting of plant; Creation of wage opportunity for the local people; Contribute to increasing food and fodder availability for elephant and other wild animals; Reduction / reclamation of encroached area through plantation; Increase the density of forest;
5.	Fire Incident	<ul style="list-style-type: none"> No fire incident reported during 2021-22 in sample bamboo plantation sites
6.	Remarks	<ul style="list-style-type: none"> Mostly Bamboo plantations those are planted near to habitations are not so survive only because of possibilities of destroyed by local cattle or local people In some of sites indicating the growth rate of plants are not so satisfactory only because of density of natural species is high.

SSO Bamboo:

SN	Indicator	Observation
1.	Suitability of the site for SSO	<ul style="list-style-type: none"> All most all sites are coverage by natural Bamboo clumps which needs for SSO work for better protection.
2.	Reason for high/low regenerated culms	<ul style="list-style-type: none"> Sites observed having highly regenerated culms where stone packing with soil filling around the Bamboo clumps is taken up; The regeneration of culms has been low most of the clumps due to its destruction by wild animals like boar / rabbit / elephant; In some area it has observed that sites are stoney which is difficult to fill soil and hence regeneration culms are relatively less.
3.	Impact of the SSO work	<ul style="list-style-type: none"> Growth / regeneration of culms in Clumps; Conservation of degrading bamboo forest; Few sites stated that new culms are not found in all most all clumps after SSO work completed. Growth of Bamboo clumps has created shelter for wild boar/ rabbit etc.
4.	Fire incident	<ul style="list-style-type: none"> Out of 29 sites, fire incidence reported in 2 sits.
5.	Remarks	<ul style="list-style-type: none"> It has found that some of clumps are not properly numbered; Most of sites have no sign board.

Infrastructure & Assets:

SN	Indicator	Observation
A.	CAMPA, Infrastructure	
1.	Usability	<ul style="list-style-type: none"> All most all buildings are accommodated by forest officials like Ranger, Forester & Forest Guard etc. Besides that, Rage office builds are also functioning regularly; In case of forest road maintenance, all most all are used by forest officials and side by side by local people in all seasons. Very specific roads are exclusively used by forest officials; Similarly cause way, culverts which are constructed on the forest road are fulfil the purpose. One cause way and one culvert require rehabilitation whereas remaining are in good condition. These structures have been useful to drain out rainwater without damaging the forest road; The created boundary walls have been protecting and restricting outsider interference, provide safety and restricts outsider entry; Water supply is mostly through installation of deep bore well. The bore well/s supply water to staff quarter as well as used for irrigating nursery. Water quality of some of the bore wells are not so good, as reported. Some bore wells found defunct due to no water pump or existing water pump requiring maintenance; Mostly the Seized items are laying in Seizure yard building on safety condition.

SN	Indicator	Observation
2.	Utility/Effectiveness	<ul style="list-style-type: none"> Created infrastructures have been supportive to forest officials in discharging their duties; Construction / maintenance of forest road, cause way, and culvert has strengthened patrolling activities and hence imparted on pouching; Installation of tube well / bore well has been effective in not only providing portable drinking water to the constructed residential buildings, but also to provide irrigation to the nearby nursery.; Construction of seizure yard has been helpful to store sized items in safe condition.
3.	Present condition	<ul style="list-style-type: none"> Most of the constructed buildings are well furnished with availability of basic amenities like water supply, electric connection, and toilet facility. In few cases after completion of work, electrification and water supply is yet to be provided. All most all forest roads are having Murom top up and in well condition; The constructed cause way & culverts are in good condition, baring a few cases where the created structures require repairing; While most of the tube-wells are in good and used condition, a few tube-wells are not in working condition due to inadequate water availability in summer and / or poor quality of water. All most all sample seizure yards are in good condition and being used,
4.	Duration of Use	<ul style="list-style-type: none"> All the infrastructures are used throughout year except structures that are not in usable condition; All forest roads are used depending upon the movement requirement; Except a few culvert & cause ways, that are not in usable condition, all are found helpful, mostly in monsoon; Most of the tube wells are used, except a few that are having poor water quality and/or not having water lifting device.
5.	Way Forward	<p>Provision of basic facilities in some of the infrastructures created under CAMPA in the year 2021-22, such as:</p> <ul style="list-style-type: none"> The forest guard quarters in Dhama & Kotagarh Range of Sambalpur & Baliguda division may be taken up to provide connectivity to basic amenities like electricity, sanitation, and water supply. Similar steps may be taken for forester quarter of Umarmot & Tumudibandha Range of Nawarangpur & Baliguda division; Water connectivity to residence of range officer (RO) of Sora & Oupada Range of Balasore WL; Electric connection to Forest Guard quarter of Bhatli Range of Baragarh Division & Forester quarter of Sora Range of Balasore WL Division Sewerage tank in RO Residence of Deogarh Range of Deogarh Division Water supply / connectivity of FG quarter of Jhilinda Range of Satakosia WL Division; Toilet facility & electric connection to FG quartet of Sonepur Range of Subarnapur Division; Approach road to connect FG quarter under Basudevpur Range, Bhadrakh WL Division.
6.		<p><i>Forest Road & Fire line:</i></p> <ul style="list-style-type: none"> Mostly of Forest Roads need to maintenance ever one- or two-years interval. Fire line need to maintain every year prior to season start.
B.	CAMPA, Assets	
1.	Usability	<ul style="list-style-type: none"> Created fire line to protecting forest & wildlife in summer season; Less interference of cattle due to creation of cattle proof trench that also protects planted seedlings; Community centres, constructed under CA/PCA is used by locals for different purposes; Watch tower is used to monitor people's movement to prevent pouching activities in forest area Waterbodies created have been helpful for the drinking purpose of wild animals;
2.	Utility / Effectiveness	<ul style="list-style-type: none"> Creation & maintenance of fire line has not only reduced fire incidents but also fire affected area;

SN	Indicator	Observation
		<ul style="list-style-type: none"> • With the use of fire-fighting equipment & high technology, the incidents and spread of fire has been reduced; • Increased animal sighting near the created water bodies, mostly in summer; • The watch towers have become more useful with the provision created for rest purpose of patrolling staff; • The cattle proof trench has been effective to protection plantations from grazing by local cattle.
3.	Present condition	<ul style="list-style-type: none"> • Created cattle proof trench are found to be in good condition; • The community centres are presently used by local people for meeting purpose & centres are in good condition; • Most of fire lines are demarcated properly and are maintained on regular basis. In some cases, fire lines are not visible due to density of weeds; • VHF tower is in functional condition and helps to monitoring poaching activities; • The water bodies are in good condition and used by wild animals.
4.	Duration of Use	<ul style="list-style-type: none"> • The community centres are usually used by locals throughout the year; • The crated fire lines are basically more effective in summer season and most of the lines are maintained properly; • The VHF tower has provided required service.
5.	Way Forward	<ul style="list-style-type: none"> • Cleaning / clearing of created fire lines on annual basis would be helpful to prevent the fire spread.
C	Wildlife Management, Infrastructure	
1	Usability	<ul style="list-style-type: none"> • Mostly the antipoaching bark used by para staff, Anti Depredation Squard (ADS), Trakker during performing their duty when required; • Forest road maintenance / creation has been undertaken under wildlife management for commutation during different requirements, including forest & fire protection activities; • It has more useful for the movement of patrolling vehicle.
2.	Utility/Effectiveness	<ul style="list-style-type: none"> • It has been controlling pouching activities due to presence of squad in core area of the forest; • It has become easy to approach the fire sport through the constructed / maintained forest roads.
3.	Present condition	<ul style="list-style-type: none"> • All the antipoaching barracks accommodated by squad, except one which is completed and planned to be used for the purpose; • All most all forest roads are motorable and can be used in all seasons.
4.	Duration of used	<ul style="list-style-type: none"> • Out of 9 barracks, one barrack is newly constructed and yet to be used whereas rest barracks are utilised; • Forest roads are used on regular basis by the forest officials for different purposes.
5.	Way Forward	<ul style="list-style-type: none"> • Boundary around antipoaching barracks may be constructed for privacy and safety; • The forest roads may be maintained for better movement on periodic basis, may be once in 2 years depending upon the road condition and maintenance requirement.
D	Wildlife Assets	
1	Usability	<ul style="list-style-type: none"> • 6 nos. of Bamboo Seed ball sites were visited. Proper germination of seed balls observed in most of the sites and created bamboo clumps; • Habitat improvement is the major activity for which different assets have been created, like creation or maintenance of water body, creation of grass land, plantation of fruit and fodder species around water body, meadow development etc. are created in most of all Divisions. Most of the assets have been useful and meant the purpose of habitant improvement. Plantation of fruit and fodder species around water bodies require additional attention for its proper maintenance; • Construction bear caves observed in Malkangiri & Nawarangpur division which are helpful; • The constructed elephant proof trench and excavation of trenches in different divisions have been useful to protect people from elephant movement;

SN	Indicator	Observation
		<ul style="list-style-type: none"> • Under “guided to unguided well”, protection measures have been taken to avoid the chances of falling of wild animals. In some wells, fencing by barbed wear is yet to be completed; • Different type of activities has been undertaken in bird habitation sites under “Improvement of Bird habitant” like fixation of bird nest in forest area, plantation of tree species near to water body, construction of water tank for bird bath etc.; • Installed VHF towers are in working condition and covering an area of 20 to 25 km. radius in forest area; • Weed eradication has been helpful for free movement of wild animals like; • Meadow development is taken up to meet the fodder requirement of wild animals; • Drone & trap camera are useful assets and working properly to track wild animal movement and poaching activities. All are in working condition and frequently used for this purpose; • Of the 9 visited solar fencing sites in different divisions, all most all are not in working condition. Even in 2 sites, it is found not existing and according to local people, it is stolen; • Solar light and solar pipe water supply have been useful in forest fringing villages and all the assets are in a functional stage; • All the 9 watch towers are completed and used by visitors as well as forest officials; • Construction of pathway, colouring of boundary wall, improvement of zoo hospital has been done under zoo management and all the activities are completed.
2	Utility/Effectiveness	<ul style="list-style-type: none"> • Increase in frequency of sighting of animals in bamboo seedball intervention area; • The population of wild animals like Spotted Deer, Barking Deer, Wild Boar, Rabbit etc. have increased in the visited sites with the creation of water bodies, meadow, and grass land near the water bodies; • According to locals, movement of bear has increase in visited areas of Malkangiri & Nawarangpur Divisions; • Crowding of birds in the evening in improved bird habitant; • Improved communication facility with the installation of VHF tower/s; • Freely movement of wild animals due to weed eradication measure; • Visit of wild animals like Spotted Deer, Rabbit, Barking Deer on regular basis to meadow field; • It is reported that more no. of Elephant, Bison, Sambar and other wild animals frequently come to Salt lick sites; • Solar Fencing found to be less effective due interference of local people; • Creation of WHS / water bodies found effective and accessed by wild animals;
3	Present condition	<ul style="list-style-type: none"> • All most all assets are in usable condition and working properly like VHF tower, Bear cave, Guided to Unguided well, Meadow, Watch Tower, WHS, Assets created under Zoo Management, Solar Street light & Solar Pipe water supply etc. • Fruit & fodder species planted or maintenance around water body and solar fencing require specific attention; • Assets created under habitat improvement like salt lick, improvement of bird habitat, meadow development, creation / maintenance of water body, weed eradication etc. are observed to be in good conditi • Use of bamboo seed ball for growing bamboo observed successful in many cases, baring a few sites due to lack of germination of seeds; • Trenches created / excavated to restrict elephant entry to crop field or habitation have been beneficial. However, some areas of the trench, which are silted heavily, may require cleaning; • Pillars posted to mark forest boundary are in good condition; • Assets / infrastructure like under way pass of rainwater, check dam, floating zette, blower, protection camp. rescue centre, park development, protection camp etc. are in usable and good condition.

SN	Indicator	Observation
4	Way Forward	<ul style="list-style-type: none"> • Creation of salt licks have been useful for animals which are created in core area of forest. Such salt licks, can be created near to water storage sites, based on feasibility; • Discussion with local forest officials reveals that in case of meadow development, available budget provision is for 3 years. But after 3 years, it requires maintenance for another 3-4 years. So, required maintenance measures may be taken after examination of maintenance requirements for 3-4 years; • The forest fringe villages, which are yet to be connected with electricity, may have solar streetlight provision; • In creation of artificial bamboo forest, bamboo seed ball has not been so effective in all places. While casting bamboo seedballs, local soil moisture condition may also be considered; • Strategy for solar fencing may be revisited as it is observed to be not so success due to deficient maintenance and management. In some of the cases, people are not interested as it restricts cattle movement. So, before installation, awareness, consultation with locals and feasibility may be examined with proper operation and maintenance plan. Selected person / community organization in the locality may be given responsibility for operation and maintenance with a nominal operating cost. Budget provision may also be created for its maintenance; • Survival and effectiveness of food & fodder species planted around water bodies can be increased with the provision of maintenance for 5-6 years. • The grassland promoted in private land can be made more effective with extended period of 3-4 years;

Observation of Type of Wildlife Assets

SN	Type of wildlife Assets	Total assets
1.	Bamboo Seed ball	06
2.	Bear Cave	3
3.	Elephant proof Trench & excavation of Trench	8
4.	Grass Land	2
5.	Guided the unguided well	4
6.	Improvement of Bird Habitant (fixation of artificial bird nest, plantation of seedling near to swimming of bird, Const. of water Tank)	13
7.	Installation of VHF Tower	6
8.	Invasive weed eradication	8
9.	Maintenance of Boundary area	4
10.	Creation & Maintenance of Fruit & Fodder species around water body	52
11.	Creation & maintenance of water body	54
12.	Meadow Development	8
13.	Drown & Trap Camera	5
14.	Creation of Salt lick	14
15.	Solar Fencing	9
16.	Installation of Solar light	5
17.	Solar Pipe water supply	1
18.	Water whole	1
19.	Watch Tower	9
20..	WHS	16
21.	Zoo management	5
22.	Others (Check dam, underway pass, Elephant approach concrete, Blower, flouting Zette, Green shop, Rescue Centre, Park development, Protection camp etc.)	18



Annexure



Annexure I: Details scoring for Plantation and other activities

Plantation details

Sl.No.	Name of Site	Beat	Section	Range	Division	Year of Plantation	Type of Plantation & Maintenance	Component	SMC Score	Plantation Journal	Map Score	Treatment Map Score	Pillar Score	Survival Percent	Survival Score	Rank
1	Badhamunda CAPCA ANR-600	Pallahada	Pallahada	Pallahada	Deogarh	2021-22	ANR @ 600 Creation	CA/PCA	2		2			92.58	2	6
2	Baliposi ANR Without gap(AJY)	Seegarh	Pallahada	Pallahada	Deogarh	2021-22	AJY ANR Without Gap Creation	AJY	2	2			2			8
3	Kenduapal, 3rd year maintenance of AR 1600	Taranga	Taranga	Reamal	Deogarh	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2		2	68.32	1	10
4	Kantabandha, 2nd year maintenance, AJY	Taranga	Reamal	Reamal	Deogarh	2020-21	AJY ANR @ 200 (2nd Year Maintenance)	AJY	2	2	2	2	2	81.46	1	10
5	Purunapani ANR 200, 2nd year maintenance	Batisama	Pallahada	Pallahada	Deogarh	2020-21	ANR @ 200 (2nd Year Maintenance)	SSWLMP	2			2		72.26	1	6
6	ANR 200 ,2nd year maintence	Jamardiha	Jamardiha	Pallahada	Deogarh	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		79.28	1	8
7	Bandhakhol (2nd year maintenance of Fruit & Fodder species plantation)	Hadamunda	Deogarh	Deogarh	Deogarh	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%	2	2	2		2	86.07	2	10
8	Miyawaki plantation 2021-22	A Kantapali	Burla	Town	Sambalpur	2021-22	Miyawaki Plantation	NPV 80%		2	2		2	100.00	2	10
9	ANR with out Gap.senha pali	Jampali	Jampali	Town	Sambalpur	2021-22	AJY ANR Without Gap Creation	AJY		2		2				6
10	Khira pada (food&fodder species)AMR 600	Jhankar pali	Jhankarpali	Sadar	Sambalpur	2021-22	ANR @ 600 Creation	NPV 80%	2				2	62.00	1	6
11	ANR 200, Jaduloising	Jaduloising	Basiapada	Sadar	Sambalpur	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2	2	71.39	1	10
12	Bhatra, ANR 400 Plantation	Megpal (west)	Megpal	Padiabahal	Sambalpur	2021-22	ANR @ 400 Creation	NPV 80%	2	2	2	2	2	70.21	1	10
13	ANR 200, Liadladi	Liadladi	padia lahal	Padiabahal	Sambalpur	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2	2	81.04	1	8
14	AR 1600, Khuntlamal VF	Gandakona	Katerdhua	Rengali	Sambalpur	2021-22	AR Plantation	CA/PCA	2	2	2	2	2	96.24	2	10
15	ANR400, Khuntlamal	Khuntlamal	Katerchuan	Rengali	Sambalpur	2021-22	ANR @ 400 Creation	CA/PCA	2	2	2	2	2	77.78	1	10
16	C/A ANR200, 2nd year maintenance, Bhimjor	Kenmal	Sardha pali	Rengali	Sambalpur	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2			2		79.75	1	6
17	2nd year maintenanc, ANR 200	Gumloi	Gumloi	Rengali	Sambalpur	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2			2		82.21	1	6
18	Talboi ANR Plantation 3rd year maintenance	Tabloi	Tabloi	Dhama	Sambalpur	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		74.69	1	8
19	Protection to RET Species(Bia)2nd year	Badmal	dhama	Dhama	Sambalpur	2020-21	ANR Without Gap- RET Species (2nd Year Maintenance)	NPV 80%	2	2		2				8
20	Binjhyagiri, ANR 200	Panchirida	Panchirida	Panchirida	Nayagarh	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2	2	97.95	2	10
21	Kenduabida, Bald Hill	Kenduabida	Gania	Gania	Nayagarh	2021-22	Bald Hill Plantation	NPV 80%	2	2	2		2	96.88	2	10
22	Kolar RL (AR 3rd year mentanau)	Pankua	sakeni	Daspalla	Nayagarh	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2		2	81.00	1	10
23	Hatimunda RF CAM:-19, ANR 200	Kanigiri	Mahipur	Mahipur	Nayagarh	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2	2	91.98	2	10
24	Componet-5, Sapua RF	Nuapali	Singhapada	Khandapada	Nayagarh	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		80.98	1	8
25	Ragadimuda RFC-9(2nd year maintenance)	Korada	Mahitama	Mahipur	Nayagarh	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		78.39	1	8

Sl.No.	Name of Site	Beat	Section	Range	Division	Year of Plantation	Type of Plantation & Maintenance	Component	SMC Score	Plantation Journal	Map Score	Treatment Map Score	Pillar Score	Survival Percent	Survival Score	Rank
26	Chunida AR Plantation 2 year maintenance	Satavuni	Bhadra	Bhadra	Bhadra	2020-21	AR (2nd Year Maintenance)	NPV 80%		2	2		2	96.88	2	10
27	Balijhara AR Plantation	Agarpada	Agarpada	Bhadra	Bhadra	2021-22	AR Plantation	NPV 80%		2	2		2	100.00	2	10
28	Deulapatna, Near Ghadagadi Bandha	Deulapatna	Khandagir (west)	Bhubaneswar	CT Forest Division, Bhubaneswar	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2	2	96.67	2	10
29	Kesuria to sai Temple (4th year maintenance)	Laxmi sagar	Rasulgarh	Mancheswar	CT Forest Division, Bhubaneswar	2018-19	Avenue Plantation (4th year maintenance)	NPV 80%		2				76.92	1	4
30	Medinipur, Garabasha(CA,AR 1600)	Sundargarh	Sundargarh	Sundargarh	Sundargarh	2021-22	AR Plantation	CA/PCA	2	2	2			96.25	2	10
31	Podajinga(CA ANR 400)	Sundargarh	Sundargarh	Sundargarh	Sundargarh	2021-22	ANR @ 400 Creation	CA/PCA	2	2	2	2		97.25	2	10
32	Podajinga(ANR 600)	Sundargarh	Sundargarh	Sundargarh	Sundargarh	2021-22	ANR @ 600 Creation	CA/PCA	2			2		95.96	2	6
33	Girima, ANR 200	Jamkani	Tihuria	Gopalpur	Sundargarh	2021-22	ANR @ 200 Creation	NPV 80%	2		2	2		94.38	2	8
34	4th year Bald hill plantation, Jhargoon	Sargipali	Nuadli	Ujalpur	Sundargarh	2018-19	Bald Hill Plantation (4th year Maintenance)	NPV 80%	2	2	2			92.41	2	10
35	2nd maintenance fodder and fruit species of plantation, Jhargoon	Saralegarh	Demabahal	Lephipada	Sundargarh	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2			96.84	2	10
36	Jhulendi,AR,3rd year maintenance	Deuli	Lephipata	Lephipada	Sundargarh	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2			91.10	2	10
37	4th year meaintenance AR Plantation, Raidi	Raidi	Nuadli	Ujalpur	Sundargarh	2018-19	AR (4th year Maintenance)	CA/PCA	2	2	2			91.56	2	10
38	Chuhiri bena 6th year maintenance of ANR200	Ganbaridih	Ujalpur	Ujalpur	Sundargarh	2016-17	ANR @ 200 (6th Year Maintenance)	CA/PCA	2	2	2			75.68	1	6
39	Patkijor (2nd year maintenance ANR 200)	Birkaldih	Kimirikela	Ujalpur	Sundargarh	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		92.72	2	10
40	3rd year aintenance of AR, Jimer	Badbhanga	Nuadli	Ujalpur	Sundargarh	2019-20	AR (3rd Year Maintenance)	CA/PCA	2		2			98.75	2	10
41	Kudarbahal, ANR 200	Barkani	Bandamunda	Panposh	Rourkela	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		97.60	2	10
42	Sanamarein ANR 200	Birda	Birda	Kuarmunda	Rourkela	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		91.49	2	10
43	Jadakudar, Baldhill plantation	Brikera	Birda	Kuarmunda	Rourkela	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			97.42	2	10
44	Gutdhar (Mundatoia) AYU ANR 200	Balanda	Kulungao	Kuarmunda	Rourkela	2021-22	AYU ANR With Gap @ 200 Creation	AYU	2	2	2	2		92.42	2	10
45	Daiposh Road,pedmini place	Bandamunda	Bandamunda	Panposh	Rourkela	2021-22	Avenue Plantation	CA/PCA	2					74.24	1	4
46	Majhipada AYU ANR 200	Chandiposh	Sunakhan	Rajgangapur	Rourkela	2021-22	AYU ANR With Gap @ 200 Creation	AYU	2			2		95.83	2	8
47	Katang (Artificial regeneration)	Rajingapur	Rajingapur	Rajgangapur	Rourkela	2021-22	ANR @ 600 Creation	NPV 80%	2	2	2	2		94.77	2	10
48	Mishrapali AYU ANR 200	Rajamunda	Banki	Banki	Rourkela	2021-22	AYU ANR With Gap @ 200 Creation	AYU		2	2	2		98.05	2	8

Sl.No.	Name of Site	Beat	Section	Range	Division	Year of Plantation	Type of Plantation & Maintenance	Component	SMC Score	Plantation Journal	Map Score	Treatment Map Score	Pillar Score	Survival Percent	Survival Score	Rank
49	Paragosh, AR Plantation	Lahulipada	Rajamunda	Banki	Rourkela	2021-22	AR Plantation	NPV 80%	2	2	2	2		100.00	2	10
50	Kumakela CA/PCA NAR 200 (2nd year maintenance)	Chandrapur	Banki	Banki	Rourkela	2020-21	ANR @ 200 (2nd Year Maintenance)	CA/PCA	2		2	2		90.94	2	10
51	Haaripur, (3rd year maintenance ANR400)	Kuarmunda	Kuarmunda	Kuarmunda	Rourkela	2019-20	ANR @ 400 (3rd Year Maintenance)	CA/PCA	2	2	2	2		87.74	2	10
52	Bahimal (2nd year maintenance ANR 200)	Lodhalasa	Malidih	Rajgangapur	Rourkela	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		77.85	1	8
53	Silikudar (ANR 200, 2nd year maintenance)	Buchkupada	Sunakhan	Rajgangapur	Rourkela	2020-21	ANR @ 200 (2nd Year Maintenance)	CA/PCA	2					79.84	1	6
54	Sangrampur (AJY ANR without gap, creation year)	Rengali	Badmal	Badmal	Rairakhol	2021-22	AJY ANR Without Gap Creation	AJY	2	2		2				8
55	Block plantation, Dangapathar RF (angul- sundragartower line under)	Gadgabahal	Bansajal	Charmal	Rairakhol	2021-22	AR Plantation	CA/PCA	2	2	2			91.88	2	10
56	Kholjhar RF, ANR @ 200	Kalindar	Rampur	Rairakhol	Rairakhol	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		94.23	2	10
57	Podabalanda, Fodder plantation, 3rd year maintenance	Podabalanda	Badbahal	Badbahal	Rairakhol	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2			88.13	2	10
58	ANR200,Dahimal VSS	Kadabahali	Ghesramal	Naktideul	Rairakhol	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		91.95	2	10
59	3rd year maintenance of ANR 200, Lusura	Kadabahali	Ghesramal	Naktideul	Rairakhol	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		92.57	2	10
60	Jharpada ANR 2nd year maintenance)	Saheli	Naktideul	Naktideul	Rairakhol	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		90.62	2	10
61	Chekuti(ANR200)	Rejpur	Rajpur	BR Nagar	Jharsuguda	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		90.46	2	10
62	Chekuti(AR 1600)	Rajpur	Rajpur	BR Nagar	Jharsuguda	2021-22	AR Plantation	CA/PCA	2	2	2	2		83.23	1	10
63	Kusroi village	Manaharpali	Bandbahal	BR Nagar	Jharsuguda	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		87.53	2	10
64	Krdaloi,CA/PCA, ANR 200	Kudaloi	Lakhanpur	Beipahad	Jharsuguda	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		97.48	2	10
65	Ecopark, Malimunda	Jharsuguda	Jharsuguda	Jharsuguda	Jharsuguda	2021-22	Miyawaki Plantation	NPV 80%		2	2			99.64	2	10
66	J.Pandkimal(AR1600)	J.Pandkimal	Lariapali	Kolabira	Jharsuguda	2021-22	AR Plantation	NPV 80%	2	2	2			91.88	2	10
67	Katikkela (2nd year maintenance)	Katikkela	Katikkela	Jharsuguda	Jharsuguda	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		70.79	1	8
68	Bejharan, 4th year maintenance of ANR 200	Kadamdih	Kadamdih	Beipahad	Jharsuguda	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		79.25	1	8
69	Sukhadhi, 4th year maintenance ANR 200	Sukhadhi	Kadamdih	Beipahad	Jharsuguda	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		65.40	1	8
70	Niktimal, 2nd year maintenance, ANR 400	Niktimal	Lariapali	Kolabira	Jharsuguda	2020-21	ANR @ 400 (2nd Year Maintenance)	CA/PCA	2		2	2		81.12	1	8
71	Kendudih, 3rd Year maintenance of AR 1600	Bhatiaida	Kolabira	Kolabira	Jharsuguda	2019-20	AR (3rd Year Maintenance)	NPV 80%	2					74.83	1	6
72	Mundabahal(ANR 200 Plantation)	Kumbho	Dwari	Bhatli	Baragarh	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		79.08	1	10
73	Jaypur(2nd year maintenance ANR 200)	Jaypur	Bhatli	Bhatli	Baragarh	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%		2	2	2		81.02	1	6
74	Singenpal	Talgaon	Barpali	Baragarh	Baragarh	2021-22	AR Plantation	NPV 80%	2	2	2	2		96.88	2	10

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75	Mulekhaman, Neer sargunapali village	Sargunapali	Sohela	Ghess	Baragarh	2021-22	AJY ANR Without Gap Creation	AJY	2	2						6
76	Mulekhaman, Near sargunapali village	Sarunapali	Sohela	Ghess	Baragarh	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2							4
77	Palsada village (2nd year maintenance ANR400)	Pal sada	Padmpur	Padmapur	Baragarh	2020-21	ANR @ 400 (2nd Year Maintenance)	CA/PCA	2	2	2	2		84.51	1	10
78	Ambahal, ANR 400 Plantation	Dahita	Padmapur	Padmapur	Baragarh	2021-22	ANR @ 400 Creation	CA/PCA	2	2	2	2		91.67	2	10
79	Chelimala 2nd year maintenance of ANR 200	Temri	Paikmal	Paikmal	Baragarh	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		87.18	2	8
80	Matikhania, ANR With Gap Plantation	Jhadachuan	Jhadachuan	Kuidiha	Balasure WL	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		85.19	2	10
81	AR Plantation ,Kamadiha Pada	Aghariapada	Kamadhapada	Sora	Balasure WL	2021-22	AR Plantation	NPV 80%	2	2	2			98.13	2	10
82	2nd Year Maintenance, Anlapala AJY	Naranpur	Sajanagarh	Niligiri	Balasure WL	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
83	Kalamchuan(AJY 2nd Year Maintenance ANR Without Gap)	Balihudi	Kupari	Sora	Balasure WL	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
84	AJY 2nd year Maintenance ANR Without Gap	Kendukhunta	Baradiha	Jaleswar	Balasure WL	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2						8
85	Menakasa	Kendukhunta	Baradiha	Jaleswar	Balasure WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		90.28	2	10
86	Bhagabati FS(ANR200)	Ramchandi	Ramchandi	Konark	Puri WL	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.75	2	10
87	Sahana,Casurian AR Plantation	Muhanamuha	Muhanamuha	Astarang	Puri WL	2021-22	AR Plantation	NPV 80%	2	2	2			78.38	1	6
88	Ramchandi FS (2nd year maintenance)	Ramchandi	Ramchandi	Konark	Puri WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		93.17	2	10
89	Samarei Sasana, 3rd year maintenance of AR 1600	Haripur	Nimapara	Gop	Puri WL	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2			97.50	2	10
90	Balukhand, 3rd year maintenance of ANR 600	Balukhanda	Balukhanda	Balukhanda	Puri WL	2019-20	ANR @ 600 (3rd Year Maintenance)	NPV 80%	2	2	2	2		77.76	1	8
91	Beleswar (2nd year AR Plantainance 1600)	Bhuan	Balighai	Balukhanda	Puri WL	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2			81.74	1	8
92	3rd year maintenance of AR 2500, Tikana (Near Kusabhadra River Land)	Kapileswar	Ramchandi	Konark	Puri WL	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2			96.69	2	8
93	Kanhepur	Sunakhala	Soran	Tangi	Chilika WL	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		97.42	2	10
94	Darlibati(bald Hill)	Badaghati	Keshpur	Rambha	Chilika WL	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			77.92	1	10
95	Samal (ANR200 2nd Year Maintenance)	Badaghati	Keshpur	Rambha	Chilika WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		74.76	1	10
96	Sipakuda (2nd Year Maintenance ANR200)	Rambha	Rambha	Rambha	Chilika WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		91.67	2	10
97	Gajapati Nagar(2nd Year AR 1600)	Palur	Rambha	Rambha	Chilika WL	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2			85.90	2	10
98	3rd Year Maintenance, ANR200, Pitital	Pitital	Pitital	Rambha	Chilika WL	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		73.17	1	8

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99	4th Year Maintenance, Nandala	Nandala	Pitisaal	Rambha	Chilika WL	2018-19	ANR @ 400 (4th Year Maintenance)	NPV 80%		2	2			84.05	1	6
100	Taragoan	Taragoan	Nabarangpur	Nabarangpur	Nabarangpur	2021-22	Miyawaki Plantation	NPV 80%		2	2			100.00	2	10
101	Pasubeda ANR 200	Sarguli	Dabugaon	Dabugaon	Nabarangpur	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		97.87	2	10
102	Mundaguda ANR 200 Plantation	Mundaguda	Papdahandi	Nabarangpur	Nabarangpur	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		98.17	2	10
103	Rajoda AR1600	Rajoda	Kosagumunda	Kodinga	Nabarangpur	2021-22	AR Plantation	NPV 80%	2	2	2			100.00	2	10
104	Longaldora VSS (ANR Without Gap)	Kusumi	Kosagumunda	Kodinga	Nabarangpur	2021-22	AJY ANR Without Gap Creation	AJY	2	2						6
105	Mudiguda VSS, ANR 200	Malbeda	Singsari	Uamrkot	Nabarangpur	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		89.97	2	10
106	AJY ANR 200 Dumarpadar	Beheda	Tohara	Uamrkot	Nabarangpur	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		96.75	2	10
107	Kusumbandha ANR 2nd Year Maintenance	Baigam	Dabugaon	Dabugaon	Nabarangpur	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		99.57	2	10
108	Bhirapjariguda AJY Without Gap ,2nd yr.	Shyamala	Maidalpur	DabuGoan	Nabarangpur	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				8
109	Malbeda AR200,2nd yr. Maintenance	Toraenga	Singsari	Uamrkot	Nabarangpur	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2			99.38	2	10
110	Toraenga ANR200 2nd yr. Maintenance	Toraenga	Singsari	Uamrkot	Nabarangpur	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2			82.60	1	10
111	Izarguda,3rd yr. Maintenance ANR	Toraenga	Singsari	Uamrkot	Nabarangpur	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		73.97	1	10
112	Dhumusuliguda(ANR200)	Kurkunda	Kurkunda	Malkangiri	Malkangiri	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		80.60	1	8
113	Bardabandha	Bardabandha	Chitrakunda	Chitrakunda	Malkangiri	2021-22	AR Plantation	NPV 80%	2	2	2			85.90	2	10
114	Charpajhala	Chitrakunda	Chitrakunda	Chitrakunda	Malkangiri	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		86.51	2	10
115	Motu	Motu	Motu	Motu	Malkangiri	2021-22	Miyawaki Plantation	NPV 80%						99.29	2	6
116	3rd year maintenance of Miyawaki	Balimela	Balimela	Balimela	Malkangiri	2019-20	Miyawaki Plantation (3rd year maintenance)	NPV 80%		2	2			100.00	2	10
117	3rd year maintenance of AR 1600, Puspali	Puspali	Somnathpur	Balimela	Malkangiri	2019-20	AR (3rd Year Maintenance)	NPV 80%	2					67.95	1	6
118	Tariakota,3rd year maintenance of ANR 200	Tariakota	Somnathpur	Balimela	Malkangiri	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2					66.84	1	6
119	Manyomkonda,2nd year maintenance of ARN 200	Manyamkonda	MV-79	Motu	Malkangiri	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		68.46	1	8
120	Badabahali	Bahirkhaman	Sonepur	Sonepur	Subarnapur	2021-22	AR Plantation	NPV 80%		2	2			93.83	2	10
121	Charvata	Charvata	Kumbharmunda	Sonepur	Subarnapur	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			92.36	2	10
122	Rachhapalli	Jaloi	Jaloi	Ulunda	Subarnapur	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		94.09	2	10
123	Kesalpur	Subalya	Subalya	BM Pur	Subarnapur	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		91.77	2	10
124	Kundapal	Hatilimunda	Hatilimunda	BM Pur	Subarnapur	2019-20	AR (3rd Year Maintenance)	NPV 80%		2	2			95.92	2	10
125	Kalapatthara	Nandighoshpali	Jaloi	Ulunda	Subarnapur	2020-21	Bald Hill Plantation (2nd year Maintenance)	CA/PCA	2	2	2			98.02	2	10
126	Arda	Rengsa	Kumbharmunda	Sonepur	Subarnapur	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%	2	2	2			93.96	2	10

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127	Gulunda	Binika	Binika	Binika	Subamapur	2020-21	ANR @ 800 (2nd year Maintenance)	CA/PCA	2	2	2	2		92.61	2	10
128	Papi	Singjudu	Rampur	Binika	Subamapur	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		84.31	1	10
129	Dumerkhol	Basiat	Lochhipur	Sonepur	Subamapur	2020-21	ANR Without Gap- RET Species (2nd Year Maintenance)	NPV 80%		2		2				8
130	Kutarimal	Mendhabahal	Mendhabahal	Jamankira	Bamra WL	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		92.50	2	10
131	Khandakata	Junani	Kuchinda	Kuchinda	Bamra WL	2021-22	AR Plantation	CA/PCA		2				93.13	2	8
132	Bandhabar	Sankolbhal	Gobindpur	Bamra	Bamra WL	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		91.32	2	10
133	Khandakata	Junani	Kuchinda	Kuchinda	Bamra WL	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		96.18	2	10
134	Tulesidhi	Bhojpur	Bhojpur	Jamankira	Bamra WL	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		91.94	2	10
135	Phuldumer	Phuldumer	Badposh	Bamra	Bamra WL	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		87.95	2	10
136	Binjipali (Baba matha)	Binjipali	Binjipali	Jamankira	Bamra WL	2020-21	ANR Without Gap- RET Species (2nd Year Maintenance)	NPV 80%	2	2						8
137	Kurmimunda	Kurmimunda	Mahulpali	Kuchinda	Bamra WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		93.58	2	8
138	Kulajjore	Siridi	Bhojpur	Jamankira	Bamra WL	2021-22	AJY ANR Without Gap Creation	AJY	2	2		2				10
139	Satkosia Camp -19	Jhurjhuri	Mahuldiha	Satakosia	Karanjia	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		92.72	2	10
140	Gudidhi	Purunapani	Tatto	Dudhiani	Karanjia	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		93.78	2	10
141	Pahadpur	Pahadpur	Bhanda	Dudhiani	Karanjia	2019-20	AR (3rd Year Maintenance)	NPV 80%		2	2			95.00	2	10
142	Purunapani RF	Baliposi	Baliposi	Thakurmunda	Karanjia	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		92.59	2	10
143	Taramura	Thakurmunda -1	Thakurmunda	Thakurmunda	Karanjia	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		87.86	2	10
144	Satakosia Camp -14	Bhaladal	Mahuldiha	Satakosia Wild	Karanjia	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		88.94	2	10
145	Phujjhar	Angul	Mahuldiha	Kuliposh	Bonai	2021-22	AR Plantation	NPV 80%		2	2			99.38	2	8
146	Toda RF (Near Bangala kacha)	Barsuan	Barsuan	Barsuan	Bonai	2020-21	Food & Fodder Plantation (2nd Year Maintenance)	NPV 80%	2	2	2	2		92.91	2	10
147	Toda RF (Near Bangala kacha)	Barsuan	Barsuan	Barsuan	Bonai	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		94.93	2	10
148	Balijodi	Koida	Koida	Koida	Bonai	2021-22	Urban Plantation	NPV 80%	2	2	2	2		95.58	2	10
149	Bandhabhuin	Danta	S.Balanga	Bonai	Bonai	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.06	2	10
150	Balai RF	Sirilguda	Mahuldiha	Sole	Bonai	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.15	2	10
151	Tungurupada	Kello	Majurdama	Jarda	Bonai	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		90.77	2	10
152	Kalta	Kalta	Toda	Koida	Bonai	2020-21	Urban Plantation (2nd Year Maintenance)	NPV 80%	2					95.63	2	6
153	Sainduria	Barghat	S.Balanga	Bonai	Bonai	2020-21	ANR @ 200 (2nd Year Maintenance)	CA/PCA	2	2	2	2		92.75	2	10
154	Khutgaon	Khutgaon	Kuliposh	Kuliposh	Bonai	2015-16	AR (7th Year Maintenance)	CA/PCA		2	2			100.00	2	10
155	Bonda & Kalihharan	Gadhrel	Balangir-I	Balangir	Balangir	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		90.51	2	10
156	Dharpagarh	Dharpagarh	Badmal	Titilagarh	Balangir	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		89.50	2	10
157	Lahadunguri	Ambahali	Rengali	Harisankar	Balangir	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		92.66	2	10
158	Kurlimal	Kuarlakhunta	Gambhari	Lathor	Balangir	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.50	2	10

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159	Makri VSS	Dharapgarh	Badmal	Titilagarh	Balangir	2021-22	AJY ANR Without Gap Creation	AJY	2	2		2				10
160	Rengatasil	Paruabhadi	Patnagarh	Patnagarh	Balangir	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		89.83	2	10
161	Paruabhadi	Sindhekela	Sindhekela	Bangomunda	Balangir	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			86.71	2	10
162	Lithermal	Jayintara	Jayintara	Muribahal	Balangir	2021-22	AR Plantation	NPV 80%	2	2	2			100.00	2	10
163	Bijamal-2	Gudighat	Gudighat	Muribahal	Balangir	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
164	Phulmunda	Padhel	Padhel	Patnagarh	Balangir	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2			90.60	2	10
165	Dharpagarh	Dharpagarh	Badmal	Titilagarh	Balangir	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		91.19	2	10
166	Ratanpur	Deogaon	Deogaon	Deogaon	Balangir	2020-21	ANR @ 200 (2nd Year Maintenance)	CA/PCA	2	2	2	2		92.65	2	10
167	Gandrel	Balangir-1	Balangir-1	Balangir	Balangir	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2			93.44	2	10
168	Gendakhal	Kaliasole	Deuli	Deuli	Baripada	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		92.42	2	10
169	Singimora	Baghada	Suliapada	Deuli	Baripada	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2			97.81	2	10
170	Ramachandrapur	Kuliana	Kuliana	Deuli	Baripada	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2			99.38	2	10
171	Baliasahi	Bangiriposhi	Bangiriposhi	Bangiriposhi	Baripada	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.42	2	10
172	Sasanadi	Rajaloka	Bangiriposhi	Bangiriposhi	Baripada	2021-22	AR Plantation	NPV 80%	2	2	2			98.09	2	10
173	Baunsiapat (Uchhagaon)	Sirsa	Sirsa	Bangiriposhi	Baripada	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			95.00	2	10
174	Kairakacha	Joka	Sirsa	Bangiriposhi	Baripada	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		97.00	2	10
175	Nuasahi	Damasahi	Kuamara	Udala	Baripada	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		90.99	2	10
176	Tikhali	Sanmaheswar	Sanmaheswar	Khariar	Khariar	2021-22	Bald Hill Plantation	NPV 80%	2		2			98.09	2	10
177	Morgaon	Khaira	Karlakote	Khariar	Khariar	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		100.00	2	10
178	Golipani	Pithapada	Pithapada	Sinapali	Khariar	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.21	2	10
179	Naikpada	Tarbod	Tarbod	Komana	Khariar	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.54	2	10
180	Maharadhi	Amonara	Amonara	Nuapada	Khariar	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		99.06	2	10
181	Mahulbhata	Bhera	Amonara	Nuapada	Khariar	2021-22	AR Plantation	NPV 80%	2	2	2			99.38	2	10
182	Suklimundi	Lakhana	Lakhana	Nuapada	Khariar	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		98.95	2	10
183	Sitikhalia	Kopia	Liad	Sinapali	Khariar	2021-22	AJY ANR Without Gap Creation	AJY	2	2		2				10
184	Poinr	Kamkeda	Kamkeda	Komana	Khariar	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
185	Palsipani	Kurmpuri	Tarbod	Komana	Khariar	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		92.46	2	10
186	Sial Lati	Khairpadar	Daripada	Sinapali	Khariar	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%	2	2	2			96.88	2	10
187	Pandarbhata	Sinapali	Sinapali	Sinapali	Khariar	2018-19	Bald Hill Plantation (4th year Maintenance)	NPV 80%	2	2	2			95.63	2	10
188	Palsipani	Dharamsagar	Sanamaheswa	Khariar	Khariar	2020-21	AR (2nd Year Maintenance)	NPV 80%			2			100.00	2	8
189	Around Tikhali Reservoir	Dharamsagar	Sanamaheswa	Khariar	Khariar	2019-20	Food and fodder Plantation (3rd Year Maintenance)	NPV 80%	2	2	2			87.97	2	10
190	Canal Bank Plantation (Bhaluduguri to Tukuda)	Lachhipur	Khariar	Khariar	Khariar	2019-20	Canal Bank Avenue Plantation (3rd Year Maintenance)	CA/PCA	2					64.00	1	4

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191	Handapa RF-Camp-1	Ichhapur	Handapa	Handapa	Athamallik	2020-21	Food & Fodder Plantation (2nd Year Maintenance)	NPV 80%	2	2	2			96.88	2	10
192	Handapa RF-Camp-5	Handapa	Handapa	Handapa	Athamallik	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		96.77	2	10
193	Pokanda	Pokanda	Paika Sahi	Dhandatopa	Athamallik	2021-22	AR Plantation (DWARF)	CA/PCA	2	2	2			97.50	2	10
194	Pokanda	Pokanda	Paika Sahi	Dhandatopa	Athamallik	2021-22	ANR @ 200 (DWARF)	CA/PCA	2	2	2	2		96.25	2	10
195	East Baruni RF-Camp-1	Tentelapani	Kadalimunda	Bampur	Athamallik	2016-17	ANR @ 200 (6th Year Maintenance)	CA/PCA	2	2	2	2		95.64	2	10
196	Northen RF-Camp-1 & 2	Bhangamunda	Bampur	Bampur	Athamallik	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		93.84	2	10
197	Barpadar	Tentelapani	Kadalimunda	Bampur	Athamallik	2015-16	AR (7th Year Maintenance)	CA/PCA	2	2	2			97.50	2	10
198	Nuegoan RF Comp-5	Bharatpur	Dekrud	Madhapur	Athamallik	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		93.36	2	10
199	Charakhola RF	Kunjakanita	Sadar	Dhenkanal (Sadar)	Dhenkanal	2021-22	Miyawaki Plantation	NPV 80%						100.00	2	6
200	Barabanka	Dihadola	Dihadola	Mahabirod	Dhenkanal	2021-22	AR Plantation	NPV 80%	2					88.13	2	8
201	Khalpal	Dihadola	Dihadola	Mahabirod	Dhenkanal	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2			92.42	2	10
202	Bankuala	Mangalpur	Badagila	Dhenkanal	Dhenkanal	2020-21	Bald Hill Plantation (2nd year Maintenance)	NPV 80%	2	2	2			93.75	2	10
203	Bampa RF	Babandha	Bampa	Hindol	Dhenkanal	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%	2	2	2			87.50	2	10
204	Kandahar	Bimbari	Bimbari	Hindol	Dhenkanal	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2					87.65	2	6
205	Maniabandha (Mahisapata)	Mahisapata	Dhenkanal (Sadar)	Dhenkanal	Dhenkanal	2020-21	Miyawaki Plantation (2nd Year Maintenance)	NPV 80%		2	2			93.75	2	10
206	Jiridamali	Batagaon	Jiridamali	Kamakhya Nag	Dhenkanal	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		93.28	2	10
207	Jiridamali to Baramahanigar	Batagaon	Jiridamali	Kamakhya Nag	Dhenkanal	2020-21	Avenue Plantation (2nd Year Maintenance)	NPV 80%	2	2	2			100.00	2	8
208	Kitalpadu	Gumuda	Naira	Gudari	Rayagada	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.33	2	10
209	Podupadar	Gumuda	Naira	Gudari	Rayagada	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		97.41	2	10
210	Kujendri B RF	Kujendri	Ramaguda	Gunupur	Rayagada	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		92.13	2	10
211	Durukupa	Durukupa	Mukundapur	Gunupur	Rayagada	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			92.25	2	10
212	Jamuguda	Sikarpai	Sikarpai	K.Singpur	Rayagada	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			99.38	2	10
213	Jamuguda	Tikiri	Tikiri	Tikiri	Rayagada	2021-22	Bald Hill Plantation	NPV 80%	2					87.72	2	8
214	Sanabudha Hada	Sahada	Bisam Cuttack	Muniuguda	Rayagada	2021-22	Bald Hill Plantation	CA/PCA	2	2	2			97.14	2	10
215	Gummi	Ramnagar	Siriguda	Gudari	Rayagada	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2	2	2				10
216	Balipanga	Siriguda I	Siriguda	Gudari	Rayagada	2021-22	AR Plantation	NPV 80%	2	2	2			96.25	2	10
217	Gumma Colony	Gumma	Gumma	Rayagada	Rayagada	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		95.23	2	10
218	Bandhamundi	Jarka	Mandibisi	Kasipur	Rayagada	2020-21	AR (2nd Year Maintenance)	CA/PCA	2	2	2			96.25	2	10
219	Sarati	Paligoan	K.Singpur	K.Singpur	Rayagada	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		92.00	2	10
220	Devala Ext -RF	Gumuda	Naira	Gudari	Rayagada	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		95.97	2	10
221	Bandhamandi	Minakhundi-B	Mandibisi	Kasipur	Rayagada	2021-22	AJY ANR Without Gap Creation	AJY	2	2	2	2				10
222	Jhulana	Ruansi	Goramhisian	Rairangpur	Rairangpur	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.50	2	10
223	Patkadilhi	Jharadihi	Jharadihi	Bahalga	Rairangpur	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		94.39	2	10

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224	Sanjayadhamposhi	Badampahada	Badampahada	Badampahada	Rairangpur	2021-22	Miyawaki Plantation	NPV 80%		2	2			100.00	2	10
225	Dova	Talapati	Badampahada	Badampahada	Rairangpur	2021-22	AR Plantation	CA/PCA	2		2			94.87	2	10
226	Sagghara	Jharadihi	Jharadihi	Bahalda	Rairangpur	2021-22	AR Plantation	NPV 80%	2	2	2			98.13	2	10
227	Gorumahisiani	Dhalabeda	Gorumahisiani	Rairangpur	Rairangpur	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2		2	2		91.22	2	10
228	Patkadidhi	Jharadihi	Jharadihi	Bahalda	Rairangpur	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		89.58	2	10
229	Purunapani	Purunapani	Suleipat	Badampahar	Rairangpur	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		93.48	2	10
230	Bhalkichua	Bijatala	Badamtala	Rairangpur	Rairangpur	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		96.12	2	10
231	Manbir RF	Manbir	Jamda	Bahalda	Rairangpur	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		94.32	2	10
232	ANR with gap Plantation, Jharighati	Supamaha	Lassery	Kotagarh	Baliguda	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.83	2	10
233	Bald hill Plantation, Pawangaon	Supamaha	Lassery	Kotagarh	Baliguda	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			96.88	2	10
234	ANR with gap plantation,Bataguda	Supamaha	Lassery	Kotagarh	Baliguda	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		95.00	2	10
235	ANR with gap plantation,Upper Madhuguda	Supamaha	Lassery	Kotagarh	Baliguda	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		94.79	2	10
236	ANR with gap plantation, Batabadi	Kurtamgada	Kurtamgada	Tumbudibandha	Baliguda	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		94.17	2	10
237	ANR with gap plantation, Maliguda	Maliguda	Tumbudibandha	Tumbudibandha	Baliguda	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.67	2	10
238	Fodder Plantation, Gumma	Gumma	Guma	Belghar	Baliguda	2018-19	Food & Fodder Plantation (4th Year Maintenance)	NPV 80%	2	2	2			94.74	2	10
239	ANR with gap plantation,Karlangi	Karnimaska	Belghar	Belghar	Baliguda	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		95.21	2	10
240	AR plantation, Sundardanda	Daringibadi	Daringibadi	Daringibadi	Baliguda	2021-22	AR Plantation	NPV 80%	2	2	2			94.38	2	10
241	AR plantation,Kadapana	Belghar	Belghar	Belghar	Baliguda	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2			95.63	2	10
242	ANR with gap plantation, Karipanga	Simanbadi	Simanbadi	Daringibadi	Baliguda	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.46	2	10
243	ANR with gap plantation, Kilokana	Khamankhol	Khamankhol	Baliguda	Baliguda	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.04	2	10
244	ANR with gap plantation, Pacharani	Khamankhol	Khamankhol	Baliguda	Baliguda	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		96.25	2	10
245	ANR with gap plantation, Didimaha	Budaguda	Budaguda	Daringibadi	Baliguda	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		97.38	2	10
246	AJY ANR with gap plantation, Sarballi	Mandalpadar	Lankagada	Tumbudibandha	Baliguda	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.11	2	10
247	AJY ANR with gap plantation, Arakhamba	Tilori	Budaguda	Daringibadi	Baliguda	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		90.85	2	10
248	ANR with gap plantation, Mediapanga	Bataguda	Baliguda	Baliguda	Baliguda	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		90.21	2	10

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249	AJY ANR without gap, Dungeri	Mangupura	Kurtamgada	Tumbudibandhi	Baliguda	2019-20	AJY ANR Without Gap (3rd year maintenance)	AJY	2	2		2				8
250	AJY ANR without gap,Kirami	Tilori	Budaguda	Daringibadi	Baliguda	2019-20	AJY ANR Without Gap (3rd year maintenance)	AJY	2	2		2				10
251	AJY ANR with out gap, Jhariapadar	Supamaha	Lassery	Kotagarh	Baliguda	2019-20	AJY ANR Without Gap (3rd year maintenance)	AJY	2	2		2				10
252	AJY ANR with out gap, Mardighati	Bhandrol	Jhiripani	Belghar	Baliguda	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
253	AJY ANR with out gap, Poteri	Daringibadi	Daringibadi	Daringibadi	Baliguda	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
254	AJY ANR with out gap, Kidramal	Daringibadi	Daringibadi	Daringibadi	Baliguda	2021-22	AJY ANR Without Gap Creation	AJY	2	2		2				10
255	CA/PCA ANR with gap plantation,Bhuasuni	Chandaka	Chandaka	Chandaka	Chandaka	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		92.59	2	10
256	CA/PCA AR plantation,Bhuasuni	Chandaka	Chandaka	Chandaka	Chandaka	2021-22	AR Plantation	CA/PCA	2	2	2	2		96.25	2	10
257	Pitagadia(Fodder Plantation)	Chandaka	Chandaka	Chandaka	Chandaka	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%		2	2	2		96.25	2	10
258	Behent sahi Fodder (Maintenance)	Nuakua	Talabasta	Damapada	Chandaka	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%		2	2	2		95.63	2	10
259	Pithakhia Fodder (Maintenance)	Pithakhia	Dampada	Damapada	Chandaka	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%		2	2	2		93.75	2	10
260	Kaniartangor Fodder	Bhola	Godibari	Chandaka	Chandaka	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%		2	2	2		95.63	2	10
261	Palaspur Fodder (Maintenance)	Mincingpatna	Mincingpatna	Haldia	Chandaka	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%		2	2	2		93.75	2	10
262	ANR with gap plantation,Dobandhi	Barunei	Rajnagar	Rajnagar WL	Rajnagar WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		95.25	2	10
263	AR plantation, Hawakhana	Hawakhana	Hawakhana	Kujang WL	Rajnagar WL	2021-22	AR Plantation	NPV 80%		2	2	2		96.50	2	10
264	ANR with gap plantation,Baruanh PF	Hawakhana	Hawakhana	Kujang WL	Rajnagar WL	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		96.91	2	10
265	ANR with gap plantation, Balitutha	Balitutha	Nuagaon	Kujang WL	Rajnagar WL	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		94.74	2	10
266	ANR with gap plantation, Sandhakuda	Sandhakuda	Kujanga	Kujang WL	Rajnagar WL	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		98.75	2	10
267	ANR with gap plantation, Hatamundia	Batighar	Batighar	Mahakalpada	Rajnagar WL	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		97.67	2	10
268	ANR with gap plantation, Jambu	Jambu	Jambu	Mahakalpada	Rajnagar WL	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		98.23	2	10
269	Bald hill Plantation, B.Ramachandrapur	Mahaparvat	Banki	Khorda	Khordha	2018-19	Bald Hill Plantation (4th year Maintenance)	NPV 80%	2	2	2	2		89.38	2	10
270	ANR with gap plantation,Barunei	Gadakhorda	Khorda	Khorda	Khordha	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		99.45	2	10
271	AR Plantation,Duburi	Bolagada	Bolagada	Khorda	Khordha	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2	2		87.81	2	10
272	ANR with gap plantation,Kunjuri	Dikhipada	Tangi	Tangi	Khordha	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		87.50	2	10

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273	ANR with gap plantation,Kanda Ambajhara	Salapadha	Nachuni	Tangi	Khordha	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		86.67	2	10
274	Bald hill plantation, Champagarh	Champagarh	Gopalpur	Ranpur	Khordha	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			90.00	2	10
275	ANR with gap plantation, Champagarh	Champagarh	Gopalpur	Ranpur	Khordha	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.42	2	10
276	AR Plantation Bhusan Padar	Hinjiligam	Chikiti	Diga Pahandi	Berhampur	2021-22	AR Plantation	NPV 80%	2	2	2			98.13	2	10
277	ANR with Gap Plantation Birabarpalli	Bamkei	Nuapada	Diga Pahandi	Berhampur	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.26	2	10
278	ANR with Gap Plantation, Mahura	Digapahandi	Digapahandi	Diga Pahandi	Berhampur	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		96.88	2	10
279	ANR Gap Plantation, Baniamari	Baniamari	Tamana	Berhampur	Berhampur	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		97.08	2	10
280	ANR plantation, S Badapur	Haripur	Samantiapalli	Samantiapalli	Berhampur	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		96.46	2	10
281	Bald hill plantation, Sngipur	Hinjilicut	Hinjilicut	Berhampur	Berhampur	2021-22	Bald hill plantation	NPV 80%	2	2	2			97.50	2	10
282	ANR plantation, Raogaon	Jarada	Samantiapalli	Samantiapalli	Berhampur	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		97.08	2	10
283	Bald hill plantation, Subarnapur, Jarada	Jarada	Samantiapalli	Samantiapalli	Berhampur	2018-19	Bald Hill Plantation (4th year Maintenance)	NPV 80%	2	2	2			96.88	2	10
284	AR Plantation, Gunakhal	Gonda gopha	Gonda gopha	Badagada	Ghumasar sou	2021-22	AR Plantation	NPV 80%	2	2	2			97.50	2	10
285	ANR Willi gap plantation, Gunakhal	Gonda gopha	Gonda gopha	Badagada	Ghumasar sou	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.78	2	10
286	AR plantation ,Kharikuti	Asurabandha	Panchavuti	sorada	Ghumasar sou	2019-20	AR (3rd Year Maintenance)	NPV 80%	2	2	2			96.25	2	10
287	AR Block plantation, Panchabhuti	Panchavuti	Panchavuti	Buguda	Ghumasar sou	2021-22	AR Plantation	NPV 80%	2	2	2			96.25	2	10
288	ANR With plantation, Panchabhuti	Panchavuti	Panchavuti	Buguda	Ghumasar sou	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		95.63	2	10
289	Bald hill plantation, Kalasuta	Khandarabali	Aska	Aska	Ghumasar sou	2021-22	Bald hill plantation	NPV 80%	2	2	2			95.00	2	10
290	ANR PLANTATION, Khirida	Khirida	Dharakote	Aska	Ghumasar sou	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		95.42	2	10
291	Conservation of RET Species, Manitara	Manitara	Manitara	Buguda	Ghumasar sou	2021-22	ANR Without Gap- RET Species (Creation)	NPV 80%	2	2	2	2				8
292	ANR Plantation, Ghogada	Ghogada North	Ghogada	Tarsingi	Ghumasura N	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.46	2	10
293	ANR with Gap Plantation Gallery	Bahapata	Tilisingi	Galery	Ghumasura N	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		96.25	2	10
294	ANR with Gap plantation Ragada	Lathipada	Lathipada	Central Range	Ghumasura N	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		94.79	2	10
295	ANR with Gap plantation , Rajakundu	Sidhapadar	Bhanjanagar	Mujagada	Ghumasura N	2019-20	ANR @ 200 (3rd Year Maintenance)	CA/PCA	2	2	2	2		96.46	2	10
296	ANR with Gap plantation, chandagiri	Beruanbdi	Tilisingi	Galery	Ghumasura N	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		95.42	2	10
297	ANR with gap Plantation, Gattibeda	Dhekumpani	Sunabeda	Sunabeda WL	Sunabeda WL	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.21	2	10
298	ANR with gap Plantation Michhapalli	Michhapalli	Cherichuan	Kamana WLL	Sunabeda WL	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.82	2	10

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299	ANR with Gap Plantation, Chericharan	Cherichuan	Cherichuan	Kamana WL	Sunabeda WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		94.79	2	10
300	ANR with Gap plantation, Saqunbadi	Katingpani	Katingpani	Nuapada WL	Sunabeda WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		95.21	2	10
301	ANR with gap plantation Gurjibhata	Jalmunda	Sogeng	Sunabeda WL	Sunabeda WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		94.58	2	10
302	ANR with gap plantation, Chandampur	Diamunda WL	Galabandha w	Nuapada WL	Sunabeda WL	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		95.96	2	10
303	ANR with gap plantation, Labanyaagad	Labanyaagada	Garabandha	Mahendra	Paralakemund	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.11	2	10
304	ANR with gap plantation sindhaba	Serango	Guma	Devgiri	Paralakemund	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.88	2	10
305	Bada hill plantation, BadaPutar	Jiranga	Jiranga	Ramgiri	Paralakemund	2020-21	Bald Hill Plantation (2nd year Maintenance)	NPV 80%	2	2	2	2		97.47	2	10
306	ANR with gap plantation (AJY), Bursingi	Jiranga	Jiranga	Ramgiri	Paralakemund	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		94.99	2	10
307	ANR with out gap plantation(RET), Raisingi	Raising	Ramagiri	Ramgiri	Paralakemund	2021-22	ANR Without Gap- RET Species (Creation)	NPV 80%		2						6
308	Bada hill plantation ,SARA	Khandaba 2	Kasinagar	Kasinagar	Paralakemund	2021-22	Bald hill plantation	NPV 80%	2	2	2	2		97.50	2	10
309	ANR WITH GAP plantation subadhadrapur	Kampur	Jiranga	Ramgiri	Paralakemund	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		95.12	2	10
310	ANR with gap plantation, Nalaghat	Nalaghat	Nalaghat	Mohana	Paralakemund	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		96.25	2	10
311	ANR will gap, dambapur	Padampur	Rayagada	Mahendra	Paralakemund	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		95.63	2	10
312	Bald Hill Plantation Tangdi	Baradakhhol	Chakapada	Tikabali	Phulbani	2021-22	Bald Hill Plantation	NPV 80%	2	2	2	2		96.25	2	10
313	ANR With Gap Plantation Baghasara	Sankarakhol	Sankarakhol	Tikabali	Phulbani	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.32	2	10
314	ANR Plantation Dampadia	Musalipanga	Phiringia	Phiringia	Phulbani	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		94.27	2	10
315	ANR Plantation Tengeri	Gumagarh	Bisipada	Phulbani	Phulbani	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		94.70	2	10
316	ANR Plantation Panganeju	Puburia	Puburia	G. Udayagiri	Phulbani	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		100.00	2	10
317	ANR Plantation Rugudisahi	Rabingia	Nuapada	Phiringia	Phulbani	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		94.38	2	10
318	ANR Plantation Gumagarh	Gumagarh	Bisipada	Phulbani	Phulbani	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		94.06	2	10
319	RET ANR Plantation Jargipada	Phiringia	Phiringia	Phiringia	Phulbani	2020-21	ANR @ 200 -RET (2nd Year Maintenance)	NPV 80%	2	2	2	2		75.38	1	10
320	RET ANR Plantation Tikabali	Tikabali	Tikabali	Tikabali	Phulbani	2020-21	ANR @ 200 -RET (2nd Year Maintenance)	NPV 80%	2	2	2	2		93.57	2	10
321	ANR With Out Gap Basiamba	Sankarakhol	Tikabali	Tikabali	Phulbani	2019-20	AJY ANR Without Gap (3rd year maintenance)	AJY	2	2		2				10
322	ANR With Out Gap Kantiban	Karada	Karada	Raikia	Phulbani	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
323	ANR Plantation Chamakpur	Gumura	Balibandha	Champua	Keonjhar	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		93.77	2	10

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324	Avenue Plantation Bileipada to NH	Balita	Bileipada	Badbil	Keonjhar	2021-22	Avenue Plantation	CA/PCA	2					60.00	1	4
325	ANR Plantation Kandigudasahi	Baiganpal North	Ghatagaon	Ghatagaon	Keonjhar	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		95.82	2	10
326	ANR With Out Gap Sinduria	Patakhali	Bimala	Teikoi	Keonjhar	2021-22	AJY ANR Without Gap Creation	AJY	2	2		2				10
327	ANR Plantation Basntapur	Gopal pur West	Naranpur	Keonghr	Keonjhar	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		95.11	2	10
328	ANR Plantation Raghunathpur	Raghunathpur	Naranpur	Keonghr	Keonjhar	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		94.97	2	10
329	ANR With Out Gap Kirikanjipani	Kanjipari	Kanjipari	BJP	Keonjhar	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
330	ANR Plantation Champajhar	Taramakanta	Suakathi	BJP	Keonjhar	2020-21	ANR @ 200 (2nd Year Maintenance)	CA/PCA	2	2	2	2		95.00	2	10
331	Bald Hill Plantation Padmapur	Rajnagar	Khiritangiri	Patna	Keonjhar	2020-21	Bald Hill Plantation (2nd year Maintenance)	NPV 80%	2	2	2			97.50	2	10
332	ANR Plantation Pandakamal	Pandakamal	M.Rampur	M.Rampur	Kalahandi(N)	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		94.26	2	10
333	Bald Hill Plantation Patiguda	Ramund	M.Rampur	M.Rampur	Kalahandi(N)	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			91.88	2	10
334	AR Plantation Antarla	Mandanpur	Mandanpur	M.Rampur	Kalahandi(N)	2021-22	AR Plantation	NPV 80%	2	2	2			89.29	2	10
335	ANR Plantation Gandharbari	Kamanda	Kamarda	Narla	Kalahandi(N)	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.96	2	10
336	AR Plantation Kespala	Sargiguda	Narla	Narla	Kalahandi(N)	2021-22	AR Plantation	NPV 80%	2	2	2			93.13	2	10
337	ANR Plantation Kespala	Sargiguda	Narla	Narla	Kalahandi(N)	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		93.32	2	10
338	AR Plantation Tundla	Tundla	Kusurpada	Kesinga	Kalahandi(N)	2021-22	AR Plantation	NPV 80%	2	2	2			92.50	2	10
339	ANR Plantation Tulangpadar	Bjakhaman	Kasurpada	Kesinga	Kalahandi(N)	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		93.54	2	10
340	ANR Plantation Tundla	Tundla	Kasurpada	Kesinga	Kalahandi(N)	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		92.99	2	10
341	ANR Plantation Bjakhaman	Bjakhaman	Kasurpada	Kesinga	Kalahandi(N)	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.05	2	10
342	ANR Plantation Dhauramal	Gargav	Gargav	Kegaon	Kalahandi(N)	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		95.38	2	10
343	Food and Fodder Plantation Taparanga	Goudkela	M.Rampur	M.Rampur	Kalahandi(N)	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%	2	2	2			94.38	2	10
344	ANR Plantation Bankel	Narla	Narla	Narla	Kalahandi(N)	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.38	2	10
345	ANR With Out Gap Kikia	Degaon	Kesinga	Kesinga	Kalahandi(N)	2020-21	ANR Without Gap- RET Species (2nd Year Maintenance)	NPV 80%	2	2		2				10
346	Bald Hill Plantation Kirakani	Kirkakanti	Golamunda	Kegaon	Kalahandi(N)	2018-19	Bald Hill Plantation (4th year Maintenance)	NPV 80%	2	2	2			94.38	2	10
347	Miyawaki Plantation Kutrukhai	Siriguda	Bhawanipatna	Bhawanipatna	Kalahandi(N)	2020-21	Miyawaki Plantation (2nd Year Maintenance)	NPV 80%		2	2			93.78	2	10
348	ANR Plantation Mundeswar	Baring	Baring	Machapur	Boudh	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.46	2	10
349	AR Plantation Mundeswar	Teak Special Barif	Baring	Machapur	Boudh	2021-22	AR Plantation	NPV 80%	2	2	2			94.38	2	10
350	ANR Plantation Mundeswar	Teak Special Barif	Baring	Machapur	Boudh	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		95.60	2	10
351	ANR Plantation Podhal	Madhapur	Baring	Madhapur	Boudh	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		92.58	2	10
352	ANR Plantation Araguda	Sankulei	Harbhanga	Purunakatak	Boudh	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		92.14	2	10

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353	ANR Plantation Araguda	Sankulei	Harbhanga	Purunakatak	Boudh	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		92.71	2	10
354	ANR Plantation Parapit	Purunakatak	Purunakatak	Purunakatak	Boudh	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		93.68	2	10
355	AR Plantation Ponga	Baliparbat	Brahmanipal	Brahmanipal	Keonjhar WL	2021-22	AR Plantation	CA/PCA	2	2	2			93.13	2	10
356	ANR Plantation Khasapada	Brahmanipal	Brahmanipal	Brahmanipal	Keonjhar WL	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		96.61	2	10
357	ANR Plantation Nuhamalia	Baranga	Rama chandra	Andapur	Keonjhar WL	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		94.13	2	10
358	Bald Hill Plantation Sundarapal	Sangam	Hadagarh	Hadagarh	Keonjhar WL	2021-22	Bald Hill Plantation	CA/PCA	2	2	2			93.21	2	10
359	ANR Plantation Sundarapal	Sangam	Hadagarh	Hadagarh	Keonjhar WL	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		90.63	2	10
360	ANR With Out Gap Tentuligotha	Brahmanipal	Brahmanipal	Brahmanipal	Keonjhar WL	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
361	AR Plantation Samara	Baidakhia	Hadagarh	Hadagarh	Keonjhar WL	2018-19	AR (4th Year Maintenance)	CA/PCA	2	2	2			96.88	2	10
362	AR Plantation Antorta	Bahia	Kathakath	Hadagarh	Keonjhar WL	2017-18	AR (5th Year Maintenance)	CA/PCA	2	2	2			93.75	2	10
363	ANR Plantation Panga Rugudi	Baliparbat	Brahmanipal	Brahmanipal	Keonjhar WL	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		93.75	2	10
364	ANR Plantation Marda	Talapada	Daitari	Brahmanipal	Keonjhar WL	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		81.25	1	10
365	ANR Plantation Panchavaya	Safa	Safa	Dalijoda	Cuttack	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.31	2	10
366	AR Plantation Birchana	Safa	Safa	Dalijoda	Cuttack	2021-22	AR Plantation	NPV 80%	2	2	2			94.38	2	10
367	Bald Hill Plantation Charnagal	Lalitagiri	Chandikhol	Dalijoda	Cuttack	2021-22	Bald Hill Plantation	CA/PCA	2	2	2			86.25	2	10
368	Food and Fodder Plantation Sukurana	Sukinda	Sukinda	Sukinda	Cuttack	2021-22	Food and fodder Plantation	SSWLMP	2	2	2			95.00	2	10
369	ANR Plantation Sendapadia	Pimpudia	Sukinda	Sukinda	Cuttack	2021-22	ANR @ 200 Creation	SSWLMP	2	2	2	2		94.79	2	10
370	ANR Plantation Panchavaya	Tangi	Safa	Dalijoda	Cuttack	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		92.29	2	10
371	Bald Hill Plantation Sunduria	Sunduria	Chandikhol	Chandikhol	Cuttack	2020-21	Bald Hill Plantation (2nd year Maintenance)	SSWLMP	2	2	2			90.00	2	10
372	Bald Hill Plantation Mahavinayak	Chandikhol	Chandikhol	Dalijoda	Cuttack	2019-20	Bald Hill Plantation (3rd year Maintenance)	CA/PCA	2	2	2			91.25	2	10
373	AR Plantation Dalki	Sukinda	Sukinda	Sukinda	Cuttack	2020-21	AR (2nd Year Maintenance)	SSWLMP	2	2	2			91.25	2	10
374	Urban plantation Dakhinapasi	Duburi	Duburi	Tamka	Cuttack	2019-20	Urban Plantation (3rd Year Maintenance)	SSWLMP	2	2	2			95.63	2	10
375	AR Plantation Kilia	Kelia	Dharmagharh	Dharmagharh	Kalahandi (S)	2021-22	AR Plantation	NPV 80%	2	2	2			89.69	2	10
376	ANR Plantation Gotamunda	Gotamunda	Behera	Dharmagharh	Kalahandi (S)	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		91.63	2	10
377	AR Plantation Jabanga	Gunpur	Gunpur	T.H.Rampur(N)	Kalahandi (S)	2021-22	AR Plantation	CA/PCA	2	2	2			92.13	2	10
378	Bald Hill Plantation Talaampadar	Ampadar	Gunpur	T.H.Rampur(N)	Kalahandi (S)	2021-22	Bald Hill Plantation	CA/PCA	2	2	2			91.65	2	10
379	ANR Plantation Bantikiri	Rachuguda	Jugsalpatna	Karlapat	Kalahandi (S)	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		88.25	2	10
380	Bald Hill Plantation Kendupet	Bijepur	Bijepur	Biswanathpur	Kalahandi (S)	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			90.94	2	10
381	ANR Plantation Bijepur	Bijepur	Bijepur	Biswanathpur	Kalahandi (S)	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		92.58	2	10
382	ANR Plantation Barabuli	Bandhapari	Mushanal	Biswanathpur	Kalahandi (S)	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		92.13	2	10

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383	AR Plantation Teliguda	Dabriguda	Ampari	Dharmagharh	Kalahandi (S)	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2			87.29	2	10
384	ANR With Out Gap Vataguda	Jatangpada	Gunapur	T.H.Rampur(N)	Kalahandi (S)	2020-21	ANR Without Gap- RET Species (2nd Year Maintenance)	NPV 80%	2	2		2				10
385	Bald Hill Plantation Mardiguda	Jatangpada	Gunapur	T.H.Rampur(N)	Kalahandi (S)	2020-21	Bald Hill Plantation (2nd year Maintenance)	NPV 80%	2	2	2			90.31	2	10
386	ANR Plantation Tarangel	Dhadel	Mushanal	Biswanatpnr	Kalahandi (S)	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		92.26	2	10
387	Food and Fodder Plantation Brahmanabasta	Brahmarabasta	Nidhipur	Khuntuni	Athagarh	2021-22	Food and fodder Plantation	SSWLMP	2	2	2			93.75	2	10
388	Bald Hill Plantation Boula	Oranda	Oranda	Khuntuni	Athagarh	2021-22	Bald Hill Plantation	SSWLMP	2	2	2			92.50	2	10
389	Bald Hill Plantation Teiunia	Kantapada	Badamba	Badamba	Athagarh	2020-21	Bald Hill Plantation (2nd year Maintenance)	NPV 80%	2	2	2			88.75	2	10
390	Bald Hill Ganguari	Gopalpur	Gopapur	Badamba	Athagarh	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			90.00	2	10
391	ANR Plantation Telachandragiri	Kushapal	Gopapur	Badamba	Athagarh	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		92.92	2	10
392	ANR Plantation Devabhuin	Devabhuin	Devabhuin	Narsingpur East	Athagarh	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		92.97	2	10
393	Fruit and Fodder plantation Sukasan	Rajnagar	Rajnagar	Athagarh	Athagarh	2021-22	Food and fodder Plantation	NPV 80%	2	2	2			91.25	2	10
394	Bald Hill Plantation Phulbadi	Kandarpur	Athagarh	Athagarh	Athagarh	2020-21	Bald Hill Plantation (2nd year Maintenance)	NPV 80%	2	2	2			91.88	2	10
395	Miyawaki Plantation Manbar	Koraput-2	Koraput	Koraput	Koraput	2021-22	Miyawaki Plantation	NPV 80%		2	2			95.00	2	10
396	Bald Hill Plantation Pindi	Koraput-1	Koraput	Koraput	Koraput	2021-22	Bald Hill Plantation	NPV 80%	2	2	2			87.50	2	10
397	AR Plantation Uncheipada	Machkund	Machkund	Lamataput	Koraput	2021-22	AR Plantation	NPV 80%	2	2	2			93.75	2	10
398	ANR Plantation Khuda	Andruguda	Padua	Balda	Koraput	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.75	2	10
399	ANR Plantation Bilaput	Darliput	Padua	Balda	Koraput	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		94.58	2	10
400	ANR Plantation Gangapaniguda	Sunki-1	Sunki	Similiguda	Koraput	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		93.75	2	10
401	ANR Plantation Khajuriguda	Kunduli	Similiguda	Similiguda	Koraput	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		91.71	2	10
402	Bald Hill Plantation Benguguda	Kandili	Sunki	Similiguda	Koraput	2020-21	Bald Hill Plantation (2nd year Maintenance)	NPV 80%	2	2	2			88.75	2	10
403	ANR With Out Gap Mathalput	Mathalput	Damanjodi	Koraput	Koraput	2020-21	ANR Without Gap- RET Species (2nd Year Maintenance)	NPV 80%	2	2		2				10
404	ANR Plantation Dakara	Litipat	Podagarh	Koraput	Koraput	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		93.65	2	10
405	AR Plantation Badapeta	Ranitota	Lamataput	Lamataput	Koraput	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2			91.25	2	10
406	Dwarf Tree Plantation Silling	Seepur	Seepur	Talcher	Angul	2021-22	AR Plantation (DWARF)	CA/PCA	2	2	2			93.10	2	10
407	Tall tree plantation kulei	Kulei	Seepur	Talcher	Angul	2021-22	ANR @ 200 - Tall Tree	CA/PCA	2	2	2	2		91.53	2	10
408	Bald Hill Plantation Kuluma	Rengali	Rengali	Kaniha	Angul	2021-22	Bald Hill Plantation	CA/PCA	2	2	2			88.75	2	10
409	ANR Plantation Paranga	Paranga	Nisha	Angul	Angul	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		89.46	2	10
410	ANR Plantation Chendipada	Chendipada 2	Chendipada -1	Chendipada	Angul	2019-20	ANR @ 200 (3rd Year Maintenance)	NPV 80%	2	2	2	2		89.86	2	10
411	ANR Plantation Chendipada	Chendipada 2	Chendipada -1	Chendipada	Angul	2018-19	ANR @ 200 (4th Year Maintenance)	NPV 80%	2	2	2	2		86.71	2	10

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412	ANR With Out Gap Kosala	Kosala		Chendipada	Angul	2021-22	AJY ANR Without Gap Creation	AJY	2	2		2				10
413	ANR Plantation Para	Jarapada	Jarapada	Jarapada	Angul	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		95.65	2	10
414	ANR Plantation Katada	Katada 2	Jarapada	Jarapada	Angul	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		94.59	2	10
415	ANR With Out Gap Laxmidharpur	Katada 1	Jarapada	Jarapada	Angul	2020-21	AJY ANR Without Gap (2nd Year Maintenance)	AJY	2	2		2				10
416	ANR Plantation Bherubania	Kanja	Kanja	Bantala	Angul	2021-22	AR Plantation	CA/PCA	2	2	2			95.63	2	10
417	ANR Plantation Basla	Kanja	Kanja	Bantala	Angul	2021-22	ANR @ 800 Crtiation	CA/PCA	2	2	2	2		96.88	2	10
418	ANR Plantation Hamamira	Kanja	Kanja	Bantala	Angul	2021-22	ANR @ 200 Creation	CA/PCA	2	2	2	2		95.00	2	10
419	ANR Plantation Mahulaguda	Katharagada	Katharagada	Boriguma	Jeypore	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		93.09	2	10
420	ANR Plantation Kanjei	Patraput	Patraput	Jeypore	Jeypore	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		93.08	2	10
421	ANR Plantation Ghataghamura	Ggatghamura	Jeypore	Jeypore	Jeypore	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.56	2	10
422	Miyawaki Plantation Makaput	Pennangl B	Jeypore	Jeypore	Jeypore	2021-22	Miyawaki Plantation	NPV 80%		2	2			88.96	2	10
423	ANR Plantation Ghodaghat	Ghodaghat	Hliadikund	Gupteswar	Jeypore	2021-22	AJY ANR With Gap @ 200 Creation	AJY	2	2	2	2		91.29	2	10
424	AR Plantation Pujariput	Pujariput	Gupteswar	Gupteswar	Jeypore	2021-22	AR Plantation	NPV 80%	2	2	2			95.00	2	10
425	ANR Plantation Majhiguda	Majhiguda	Ramgiri	Gupteswar	Jeypore	2021-22	ANR @ 200 Creation	NPV 80%	2	2	2	2		93.10	2	10
426	Bald Hill Plantation Lenja	Kotta	Baipatigunda	Baipatiguda	Jeypore	2021-22	Bald Hill Plantation	NPV 80%	2	2	2	2		93.75	2	10
427	ANR Plantation Dibiguda	Jenua	Jaynagar	Jeypore	Jeypore	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		91.06	2	10
428	ANR Plantation Sandhaguda	Ramaguda	B.Singpur	Boriguma	Jeypore	2020-21	ANR @ 200 (2nd Year Maintenance)	NPV 80%	2	2	2	2		94.93	2	10
429	Food and Fodder Plantation Janiguda	Boriguma	Boriguma	Boriguma	Jeypore	2020-21	Food and fodder Plantation (2nd year Maintenance)	NPV 80%	2	2	2			93.75	2	10
430	AR Plantation Chatrala	Boriguma	Boriguma	Boriguma	Jeypore	2020-21	AR (2nd Year Maintenance)	NPV 80%	2	2	2			95.00	2	10
431	Bald Hill Plantation Paral	Kotta	Boriguma	Boriguma	Jeypore	2020-21	Bald Hill Plantation (2nd year Maintenance)	NPV 80%	2	2	2			94.38	2	10

Bamboo Plantation and Maintenance work

SN	Division	Range	Section	Beat	Name of Site	Component	Year of plantation	SMC Score	Plant Protection Score	Jonal Score	Available Map Score	Signboard Score	Pillars Score	Survival Rate	Survival Scoring	Rank
1	Athamalik	Dhandatopa	Dhandatopa	Hatasimili	Hatidhara RF, Comp. No.-10	NPV 80%	2021-22	2	2	2	2	2	0	91.25	3	10
2	Athamalik	Dhandatopa	Dhandatopa	Hatasimili	Hatidhara RF, Comp. No.-10	NPV 80%	2020-21	2	2	2	2	2	2	90.00	3	10
3	Dhenkanal	Hindol	Hindol	Karnapur	Karnapur	NPV 80%	2019-20	2	2	2	2	2	2	83.75	1	10
4	Kharlar	Komma	Komma	Kamkeda	Bahangarbasa	NPV 80%	2020-21	2	2	0	0	2	2	90.00	3	8
5	Subarnapur	Sonepur	Kumbharmunda	Kumbharmunda	Polebandha	NPV 80%	2019-20	2	2	2	2	2	2	94.38	3	10
6	Bonai	Kuliposh	Daleisara	Daleisara	Daleisara	NPV 80%	2019-20	2	2	2	2	2	2	96.25	3	10
7	Bama WL	Badarama	Gaudapalli	Gaudapalli	Gudguda PRF	NPV 80%	2019-20	2	2	2	2	2	2	92.50	3	10
8	Balangir	Lathor	Mahanilaha	Mahanilaha	Mahanilaha	NPV 80%	2021-22	2	2	2	2	2	0	96.67	3	10
9	Rayagada	K.Singpur	K.Singpur	Bijenagar	Pandarapada	NPV 80%	2019-20	2	2	2	2	2	2	80.00	1	10
10	Phulbani	Phiringia	Gochhapada	Gochhapada	Bamboo Plantation Bailikia	NPV 80%	2021-22	2	2	2	2	2	2	90.00	3	10
11	Phulbani	Phiringia	Phiringia	Phiringia	Bamboo Plantation Krandibali	NPV 80%	2020-21	2	2	2	2	2	2	87.50	2	10
12	Phulbani	Phubani	Khajuripada	Dutpada	Bamboo Plantation Dutimundi	NPV 80%	2021-22	2	2	2	2	2	2	90.00	3	10
13	Kalahandi North	M.Rampur	M.Rampur	Goudakela	Bamboo Plantation Taparanga	NPV 80%	2019-20	2	2	2	2	2	2	88.75	2	10
14	Kalahandi South	Junagarh	Junagarh	Rajpur	Bamboo Plantation Jharabandha	NPV 80%	2019-20	2	2	2	2	2	2	87.50	2	10
15	Athagarh	Khuntuni	Nidhipur	Nidhipur	Bamboo Plantation Brahmaabastia	NPV 80%	2020-21	2	2	2	2	2	2	90.00	3	10
16	Angul	Angul	Purunagarh	Purunagarh North	Bamboo Plantation Badadandasahi	NPV 80%	2021-22	2	2	2	2	2	2	80.00	1	10
17	Angul	Jarpada	Balipata	Basantapur	Bamboo Plantation Machaketa	NPV 80%	2020-21	2	2	2	2	2	2	90.00	3	10
18	Jeypore	Gupteswar	Rangiri	Majhiguda	Bamboo Plantation Majhiguda	NPV 80%	2021-22	2	2	2	2	2	2	83.75	1	10
19	Balasure WL	Kuldiha	Panchalingeswar	Kuldiha	Chalaka	NPV 80%	2021-22	2	2	0	0	0	2	86.67	2	6
20	Balasure WL	Nilgiri	Nilgiri	Dhobasila	Dhobasila (2nd year. maintenance)	NPV 80%	2020-21	2	2	2	2	2	0	92.50	3	10
21	Balasure WL	Jaleswar	Baradiha	Sukjodi	Upper tola	NPV 80%	2020-21	2	2	2	2	2	2	95.00	3	10
22	Nayagarh	Khandapada	Singapada	Kajhara	Guriabari	NPV 80%	2020-21	2	2	2	2	2	2	98.36	3	10
23	Rairakhol	Charmal	Bansajal	Gadgadbahal	Sagmalia	NPV 80%	2021-22	2	2	2	2	0	0	98.33	3	8
24	Sambalpur	Padlabahal	Chhamunda	Chhamunda	Jamdhar (Bamboo 400)	NPV 80%	2021-22	2	2	2	2	2	2	97.33	3	10
25	Sambalpur	Dhama	Dhama	Badmal	Deogaon	NPV 80%	2019-20	2	2	2	0	0	0	87.50	2	6
26	Deogarh	Deogarh	Kansara	Soda	Gurila (3rd year maintenance)	NPV 80%	2019-20	2	2	2	2	2	0	68.75	1	8
27	Rourkela	Banki	Rajamunda	Birtola	Deodhar (Bamboo Plantation 400)	NPV 80%	2021-22	2	2	2	2	2	0	78.95	1	8
28	Sundargarh	Hemgiri	Daghora	Lamaibahal	Budeikani (2nd year. maintenance)	NPV 80%	2020-21	2	2	2	2	2	0	93.75	3	10
29	Jharsuguda	Kolabira	Kolabira	Dhobenbud	Jamchuan (OBDF)	NPV 80%	2021-22	2	2	2	2	2	2	100.00	3	10
30	Jharsuguda	Kolabira	Lariapali	Lariapali	Lariapali (3rd year maintenance, OBDF)	NPV 80%	2019-20	2	2	2	2	2	2	95.00	3	10
31	Baragarh	Ghess	Diptipur	Jamkher	Mohanpali (3rd year. maintenance)	NPV 80%	2019-20	2	2	2	2	2	0	100.00	3	10
32	Baragarh	Paikmal	Paikmal	Paikmal	Gandapali (2nd year. maintenance)	NPV 80%	2020-21	2	2	2	2	2	0	80.83	1	8
33	Maikangiri	Maikangiri	Padmagiri	Padmagiri	Jhileriguda (2nd year. maintenance)	NPV 80%	2020-21	2	2	2	2	2	0	51.39	1	8
34	Maikangiri	Chitrakunda	Gunthawada	Gunthawada	Majhiguda	NPV 80%	2021-22	2	2	2	2	2	2	90.00	3	10
35	Nabarangpur	Umarkot	Karka	mur tuma	Mur tuma (2nd year Bamboo plantation)	NPV 80%	2020-21	2	2	2	2	2	2	92.50	3	10
36	Berhampur	Samantiapalli	Turubudi	Dutiasahi	Baniabasa	NPV 80%	2021-22	2	2	2	2	2	2	90.00	3	10
37	Ghumusar North	Tarsingi	Gayaganda	Gayaganda	Adibasi colony	NPV 80%	2021-22	2	2	2	2	2	2	86.25	2	10
38	Ghumusar North	Mujagada	Mujagada	Langalakhola	Langalakhola	NPV 80%	2019-20	2	2	2	2	2	2	86.25	2	10

SN	Division	Range	Section	Beat	Name of Site	Component	Year of plantation	SMC Score	Plant Protection Score	Jonal Score	Available of Map Score	Signboard Score	Pillars Score	Survival Rate	Survival Scoring	Rank
39	Ghumusar South	Badagada	Goudagotha	Goudagotha	Gunakhala	NPV 80%	2021-22	2	2	2	2	2	2	90.00	3	10
40	Ghumusar South	Aska	Aska	Digi	Padmapalli	NPV 80%	2019-20	2	2	2	2	2	2	87.50	2	10
41	Sunabeda WL	Komana WL	Chereichuan	Chereichuan	Dabri	NPV 80%	2021-22	2	2	2	2	2	2	90.00	3	10
42	Sunabeda WL	Nuapada WL	Katingpani WL	Katingpani WL	Godhus	NPV 80%	2020-21	2	2	2	2	2	2	90.00	3	10
43	Paralakhemundi	Mahendra	Garabandha I	Garabandha II	S.M.Peta	NPV 80%	2021-22	2	2	2	2	2	2	90.00	3	10
44	Paralakhemundi	Mahendra	Garabandha	Kinchilingi II	Satabhauni Bamboo plantation	NPV 80%	2020-21	2	2	2	2	2	2	87.50	2	10
45	Baliguda	Kotagada	Srirampur	Ora	Srirampur	NPV 80%	2020-21	2	2	2	2	2	2	90.00	3	10
46	Baliguda	Belghar	Belghar	Belghar	Sarjuakola	NPV 80%	2019-20	2	2	2	2	2	2	92.50	3	10
47	Baliguda	Baliguda	Khamankhol	Anaqui	Bainsakholljore	NPV 80%	2021-22	2	2	2	2	2	2	97.50	3	10

Regeneration of Degraded Bamboo Forest

SL. No	Division	Range	Section	Beat	Name of Site	Component	Year of plantation	Register Score	Sigboard Score	Congestion Score	Fire Line Score	All Plot 0-1 Year Score	All Plot 1 Year Score	Fire Incident Score	Rank
1	Rairkakhhol	Badmal	Badmal	Sagjor	Sagjor	NPV 80%	2021-22	2	2	2	2	1	2	2	10
2	Debagarh	Debagarh	Kansara	Kansar	Bhangamunda	NPV 80%	2021-22	0	0	2	2	1	2	2	8
3	Sambalpur	Dhama	Tablei	Tablei-I	Tablei	NPV 80%	2021-22	2	0	2	2	1	2	2	8
4	Jharsuguda	Beipahad	Bhikampali	Kadamghat	Baunsipali	NPV 80%	2021-22	2	2	2	2	1	2	2	10
5	Sundargarh	Hemgiri	Kodbahal	Jhulengarh	Gaurjanpahad	NPV 80%	2021-22	2	0	2	2	1	2	2	8
6	Nayagarh	Daspalla	Pakharigochha	Bhogabari	Budhapadar (Central RF compartment-II)	NPV 80%	2021-22	2	0	2	2	2	2	2	10
7	Baragarh	Padmapur	Jagdulpur	Putka	Nuapada-Loharkata	NPV 80%	2021-22	2	0	2	2	1	2	2	8
8	Malkangiri	Chitrukunda	Dankari	Chilkaimamudi	Ganmentpada	NPV 80%	2021-22	2	0	2	2	1	2	0	8
9	Berhampur	Samantiapalli	Samantiapalli	Haripur	Haripur 'D' Block	NPV 80%	2021-22	2	2	2	2	1	2	2	10
10	Ghumusar North	Gallery	Badangl	Badangl	Gopadar	NPV 80%	2021-22	2	2	2	2	2	2	2	10
11	Ghumusar North	Central	Bhanjanagar	Dumakumpa	Kaliamba	NPV 80%	2021-22	2	2	2	2	1	2	2	10
12	Ghumusar South	Sorada	Gadalbadi (S)	Adipanka	Adipanka	NPV 80%	2021-22	2	0	2	2	2	1	2	8
13	Paralakhemundi	Ramaqiri	Mahendragada	Sialliti	Duranga	NPV 80%	2021-22	2	2	2	2	2	2	2	10
14	Boudh	Boudh	Baghiapada	Jamkhol	SSO Bamboo Jamkhal	NPV 80%	2021-22	2	2	2	2	2	1	2	10
15	Boudh	Purunakatak	Harabhang	Sankulei	SSO Bamboo Araguda	NPV 80%	2021-22	2	2	2	2	2	1	2	10
16	Kalahandi North	Narla	Kamarda	Kamarda	SSO Bamboo Pongel	NPV 80%	2021-22	2	2	2	2	2	1	2	10
17	Kalahandi South	Junagarh	Junagarh	Banamalipur	SSO Bamboo Ghana	NPV 80%	2021-22	2	2	2	2	2	1	2	10
18	Athagarh	Badamba	Badamba	Aranda	SSO Bamboo Haladaseni	NPV 80%	2021-22	2	2	2	2	2	1	2	10
19	Angul	Jarpada	Jarpada	Jarada	SSO Bamboo Katada	NPV 80%	2021-22	2	2	2	2	2	1	2	10
20	Jepore	Gupteswar	Gupteswar	Ratakbandi	SSO Bamboo Dhandrakhal	NPV 80%	2021-22	2	2	2	2	2	1	2	10
21	Koraput	Similiguda	Sunki	Bangariguda	SSO Bamboo Bangariguda	NPV 80%	2021-22	2	2	2	2	2	1	2	10
22	Balangir	Lathor	Lathor	Jhalalit	Chandilii RF	NPV 80%	2021-22	2	2	2	2	2	1	2	10
23	Athamallik	Dhanda topa	Ambadamunda	Bhuasuni Nali	Taleipather RF	NPV 80%	2021-22	2	2	2	2	2	1	2	10
24	Dhenkanal	Hindol	Rasol	Rasol	Lahada RF Comp-8	NPV 80%	2021-22	2	0	2	2	2	1	2	8
25	Khariar	Khariar	Sanmaheswar	Dharamsagar	Dharamsagar	NPV 80%	2021-22	2	0	2	2	2	1	2	8
26	Bonai	Jarda	Kansar	Kansar	Katakeal	NPV 80%	2021-22	2	2	2	2	2	1	2	10
27	Rayagada	Rayagada	Gumma	Gumma	Sirisapadu	NPV 80%	2021-22	2	2	2	2	2	1	2	10
28	Subarnapur	Ulunda	Sindho	S. Patrapali	Singhasana RF	NPV 80%	2021-22	2	0	2	2	1	1	2	8
29	Bamra WL	Jamankira	Bhojpur	Sirdi	Prabhasuni RF. Comp.-32	NPV 80%	2021-22	2	0	2	2	1	1	2	8

Ama Jungle Yojana (AJY)

SN	Division	Range	Section	Beat	Village Name	VSS Name	Component	Register Score	EC Meeting Score	GB Meeting Score	Fire Incidence Score	Activities Score	Planning Score	Forest Cover Change Score	Satisfied Score	Migration Score	Total Score	Rank
1	Bamra WL	Jamankira	Bhojpur	Siridi	Kuilarijore	Kuilarijore VSS	NPV 80%	2	2	2	2	2	2	2	2	2	18	10
2	Bamra WL	Jamankira	Bhojpur	Bhojpur	Tulasidih	Tulasidih VSS	NPV 80%	2	2	2	2	2	2	2	2	2	18	10
3	Kharjar	Nuapada	Lakhana	Lakhana	Suklimundi	Suklimundi VSS	NPV 80%	2	2	1	2	2	2	2	2	2	17	10
4	Kharjar	Sinapali	Liad	Kopia	Sitlikhalla	Sitlikhalla VSS	NPV 80%	2	2	2	2	2	2	2	2	2	18	10
5	Kharjar	Komma	Komma	Komkeda	Poinr	Poinr VSS	NPV 80%	2	2	2	2	2	2	2	2	2	18	10
6	Balangir	Patnagarh	Patnagarh	Paruabhad	Rengatasil	Rengatasil VSS	NPV 80%	2	2	1	2	2	2	2	2	2	17	10
7	Balangir	Muribahal	Muribahal	Gudihat	Bijamal-2	Bijamal VSS	NPV 80%	2	2	1	2	2	2	2	2	2	17	10
8	Balangir	Titlagarh	Badmal	Dharagarh	Makri	Makri VSS	NPV 80%	2	2	1	2	2	2	2	2	2	17	10
9	Rayagada	Rayagada	Gumma	Gumma	Gumma Colony	Gumma Colony VSS	NPV 80%	2	2	1	2	2	2	2	2	2	17	10
10	Rayagada	Rayagada	Gumma	Gumma	Gumma Colony	Gumma Colony VSS	NPV 80%	2	2	1	2	2	2	2	2	2	17	10
11	Rayagada	Gudari	Siriguda	Ramnagar	Gummi	Gummi VSS	NPV 80%	2	2	1	2	2	2	2	2	2	17	10
12	Paralakhemundi	Ramagiri	Jiranga	Mandaisahi	Burusingi	Burusingi VSS	NPV 80%	2	2	2	2	2	2	2	2	2	18	10
13	Baliguda	Daringibadi	Daringibadi	Daringibadi	Pateri	Pateri VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
14	Baliguda	Daringibadi	daringibadi	Daringibadi	Kidramal	Kidramal VSS	NPV 80%	2	2	2	2	2	2	2	2	2	18	10
15	Baliguda	Daringibadi	Budaguda	Tilori	Arakhamba	Arakhamba VSS	NPV 80%	2	0	1	2	2	2	2	2	2	15	10
16	Baliguda	Tumbudibandha	Lankegada	Mandalpadar	Sarambali	Sarambali VSS	NPV 80%	2	1	2	2	2	2	2	2	2	17	10
17	Baliguda	Tumbudibandha	Kurtamgada	Mangapur	Dungeri	Dungeri VSS	NPV 80%	2	1	2	2	2	2	2	2	2	17	10
18	Baliguda	Daringibadi	Budaguda	Tilori	Kirami	Kirami VSS	NPV 80%	2	1	2	2	2	2	2	2	2	16	10
19	Rourkela	Banki	Banki	Rajamunda	Mishrapali	Mishrapali VSS	NPV 80%	2	0	1	2	0	2	2	2	2	13	8
20	Bhaadrakha WL	Chandbali	Dhamra	Chandnipal	Kalinali	Josna Mayee VSS	NPV 80%	2	0	1	2	0	2	2	2	2	13	8
21	Rairakhol	Naktideul	Ghusramal	Kadabahali	Dahimal	Dahimal VSS	NPV 80%	2	2	1	2	2	2	2	2	2	17	10
22	Rairakhol	Badmal	Badmal	Rengali	Sangarampur	Sangarampur VSS	NPV 80%	2	0	1	2	0	0	2	0	0	7	4
23	Rourkela	Rajgangpur	Sunakhan	Chandiposh	Majhipada	Majhipada VSS	NPV 80%	2	0	1	2	0	0	2	2	0	9	6
24	Rourkela	Kuanrunda	Kalungaon	Balanda	Gutidhar	Mundatola VSS	NPV 80%	2	0	1	2	0	0	2	2	0	9	6
25	Deogarh	Pallahara	Pallahara	Seegarh	Kelapasi	Kelapasi VSS	NPV 80%	2	0	1	2	0	2	2	2	0	11	8
26	Deogarh	Reamal	Reamal	Taranga	Kantabandha	Khantabandha VSS	NPV 80%	2	0	1	2	0	2	2	2	2	13	8
27	Balaswar WL	Jateswar	Baradia	Kenduknunta	Luhapada	Luhapada VSS	NPV 80%	2	0	1	2	0	2	2	2	0	11	8
28	Balaswar WL	Sora	Kupari	Palihndi	Kalamchua	Maa Tarini VSS	NPV 80%	2	0	1	2	2	2	2	2	0	13	8
29	Balaswar WL	Milajiri	Sajanagarh	Naranpur	Anlapal	Anlapal VSS	NPV 80%	2	0	1	2	2	2	2	2	2	15	10
30	Nabarangpur	Dabugaon	Maidalpur	Shyamala	Bhirapujariguda	Bhirapujariguda VSS	NPV 80%	2	0	1	2	2	2	2	2	2	15	10
31	Nabarangpur	Umarkot	Tohara	Beheda	Dumerpadar	Dumerpadar VSS	NPV 80%	2	1	1	2	2	2	2	2	0	14	8
32	Nabarangpur	Umarkot	Singsari	Malbeda	Mudiguda	Mudiguda VSS	NPV 80%	2	1	2	2	2	2	2	2	2	17	10
33	Nabarangpur	Kodinga	Kosagumuda	Kusumi	Langaldora	Langaldora VSS	NPV 80%	2	0	1	2	2	0	2	0	2	11	8
34	Kalahandi North	Narla	Narla	Sargiguda	Keshpala	Keshpala VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
35	Kalahandi North	Kesinga	Kasurpada	Bijkhaman	Tulangpadar	Tulangpadar VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
36	Kalahandi North	Kegaon	Gargab	Gargab	Dhanarmal	Dhanarmal VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
37	Angul	Chendipada	Kosala	Kosala	Kansanali Kosala VSS	Kansanali Kosala VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
38	Angul	Jarpada	Jarpada	Katada-1	Laxmidharpur	Laxmidharpur VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
39	Phulbani	Phiringia	Phiringia	Musulipanga	Dompdia	Dompadia VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
40	Phulbani	Phiringia	Phiringia	Robingia	Rugudi Sahi	Rugudisahi VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
41	Phulbani	Raikia	Karada	Karada	Kantibana	Kantibana VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
42	Phulbani	Tikabali	Tikabali	Sankarkhol	Basiamba	Basiamba VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
43	Phulbani	G. Udayagiri	Paburia	Paburia	Panganalu	Panganalu VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10

SN	Division	Range	Section	Beat	Village Name	VSS Name	Component	Register Score	EC Meeting Score	GB Meeting Score	Fire Incidence Score	Activities Score	Planning Score	Forest Cover Change Score	Satisfied Score	Migration Score	Total Score	Rank
44	Kalahandi South	Biswanathpur	Mushanal	Bandhapari	Barabuli	Barabuli VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
45	Kalahandi South	Karlapat	Jugseipatna	Ruchuguda	Bantikri	Bantikri VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
46	Keonjhar WL	Andapur	Ramachandra	Baranga	Nuhamaia	Nuhamaia VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
47	Keonjhar WL	Brahmanipal	Brahmanipal	Brahmanipal	Tentulipada	Tentulipada VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
48	Keonjhar	Ghatagaon	Ghatagaon	Baiganpal/Nori	Kandiguda	Kandiguda VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
49	Keonjhar	Telkoi	Bimala	Patakholi	Sinduria	Sinduria	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
50	Keonjhar	Keonjhar	Kanjipani	Kanjipani	Kirikanjipani	Pradhansahi VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
51	Koraput	Balda	Podua	Darliput	Billaput	Billaput VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
52	Koraput	Similiguda	Sunki	Sunki-1	Gangapaniguda	Gangapaniguda VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
53	Jeypore	Boriguma	Katharguda	Katharguda	Mahulaguda	Mahulaguda VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
54	Jeypore	Jeypore	Patraput	Patraput	Kanjei	Kanjei VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10
55	Jeypore	Gupteswar	Haladikund	Ghodaghat	Ghodaghat	Ghodaghat VSS	NPV 80%	2	0	2	2	2	2	2	2	2	16	10

Infrastructure & Assets

SN	Division	Range	Section	Boat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
1	Karanja	Thakurmunda	Mendujani	Khaparibhai	Kadapani RF	Water Body	NPV 80%	2	2	3	8
2	Karanja	Thakurmunda	Champajhar	Bhogidihia	Champashar	Forest Guard Quarter	NPV 20%	2	2	3	10
3	Karanja	Thakurmunda	Thakurmunda	Thakurmunda	Thakurmunda	Forester Quarter	NPV 20%	2	2	3	10
4	Karanja	Thakurmunda	Champajhar	Champajhar	Champashar	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	3	8
5	Karanja	Karanja	Karanja	Karanja	Karanja	Maintenance of fireline	NPV 80%	2	2	3	8
6	Karanja	Karanja	Karanja-1	Ghodaghuri RF	Ghodaghuri RF	WHs	NPV 80%	2	2	3	10
7	Karanja	Duchhiani	Eklali	Kumudabad	Kumudabad	Renovation of Water Body	NPV 80%	2	2	3	8
8	Karanja	Duchhiani	Borakanusda	Budhigoon	Ramchandrapur	Anti-Poaching Barrack	NPV 20%	2	2	3	10
9	Karanja	Duchhiani	Taitto	Taitto	Taitto	Range Officer Residence	NPV 20%	2	2	3	10
10	Karanja	Duchhiani	Tangabila	Tangabila	Tangabila	Boundary Wall	NPV 20%	2	2	3	8
11	Karanja	Thakurmunda	Kosodhia	Miluan	Khadaposi	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	3	8
12	Karanja	Salkosia	Mahuldihia	Jharjari	Comp-17	Causeway	NPV 20%	2	2	3	8
13	Karanja	Duchhiani	Taitto	Taitto	Side of Dudhiani Highway	Signage	NPV 20%	2	2	3	10
14	Karanja	Salkosia	Nadi	Masaghali	Watch Tower	NPV 20%	2	2	2	3	10
15	Karanja	Salkosia	Salkosia-I	Salkosia-II	Ghodaghali	Maintenance of Fireline	NPV 80%	2	2	3	8
16	Karanja	Salkosia	Mahuldihia	Jharjari	Salkosia RF, Comp-19	Culvert	NPV 20%	2	2	3	8
17	Karanja	Salkosia	Mahuldihia	Mahuldihia	Mahuldihia	Tube Well	NPV 20%	2	2	3	8
18	Banra WL	Badr ama	Badr ama	Amiang	Amiang	Forest Guard Quarter	NPV 20%	2	2	3	10
19	Banra WL	Badr ama	Bhutel	Putharia	Podadha	Forest Road	NPV 20%	2	2	3	8
20	Banra WL	Badr ama	Bhutel	Podadhi	Tower No.-3	Watch Tower	SSWAMP	2	2	3	10
21	Banra WL	Badr ama	Badr ama	Badr ama	Comp.-5	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	3	8
22	Banra WL	Badr ama	Badr ama	Gantab	Near Watch Tower-1	Construction of under way pass	SSWAMP	2	2	3	8
23	Banra WL	Badr ama	Badr ama	Kutab	Near Watch Tower-2	Salt Lick	NPV 80%	2	2	3	8
24	Banra WL	Badr ama	Badr ama	Gantab	Chirgenkol	WHs	NPV 80%	2	2	3	8
25	Banra WL	Badr ama	Bhutel	Podadhi	Podadhi	Forester Quarter	NPV 20%	2	2	3	10
26	Banra WL	Badr ama	Bhutel	Podadhi	Podadha	Anti-Poaching Barrack	SSWAMP	2	2	3	10
27	Banra WL	Badr ama	Goudipalli	Kan Bardihall	Kan Bardihall (Bhadrapada)	Guided the ungrazed well	SSWAMP	2	2	3	8
28	Banra WL	Badr ama	Odsing	Titobahal	Titobahal	Causeway	NPV 20%	2	2	3	8
29	Banra WL	Banra	Gorosh	Gorosh	Gorosh	Anti-Poaching Barrack	NPV 20%	2	2	3	10
30	Banra WL	Jamankira	Mendabahal	Mendabahal	Near Mendabahal Boat House	Tube Well	NPV 20%	2	2	3	8
31	Banra WL	Jamankira	Bhojpur	Sirdi	Jharpur	Forest Road	NPV 20%	2	2	3	8
32	Banra WL	Jamankira	Binjoli	Binjoli	Binjoli Baba Maiba	Forest Road	NPV 20%	2	2	3	8
33	Banra WL	Jamankira	Mendabahal	Chakula Bahal	Tigmunda to Kanakabhal	Maintenance of Fireline	NPV 80%	2	2	3	8
34	Banra WL	Jamankira	Binjoli	Binjoli	Kalomunda	Renovation of Water Body	NPV 80%	2	2	3	8
35	Banra WL	Jamankira	Bhojpur	Sirdi	Sirdi near FG qtr.	Boundary Wall	NPV 20%	2	2	3	8

SN	Division	Range	Section	Boat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
36	Subanapur	Sonepur	Narapur	Trialam	Teikamal	Forest Guard Quarter	NPV 20%		2	3	8
37	Subanapur	Sonepur	Sonepur	Ajapur	Ajapur	Renovation of Water Body	NPV 80%		2	3	8
38	Subanapur	Sonepur	Lachampur	Bardpada	Bardpada	Water Body	NPV 80%		2	3	8
39	Subanapur	Sonepur	Sonepur	Sonepur	Sonepur	Forester Quarter	NPV 20%		2	3	8
40	Subanapur	Birwa	Kaudlamunda	Siati	Naktlamunda	Maintenance of Fruit bearing & Fodder species around Water Body	NPV 80%		2	3	8
41	Subanapur	Birwa	Gadgadga Bahal	Gadgadga Bahal	Seledi	Maintenance of Fruit bearing & Fodder species around Water Body	NPV 80%		2	3	8
42	Subanapur	Birwa	Katapali	Katapali	Karnagote	Boundary Wall	NPV 20%		2	3	8
43	Subanapur	B.M.Pur	Subaliaya	Subaliaya	Kasapur	Maintenance of Frefine	NPV 80%		2	3	8
44	Balangir	Deogoon	Kudasingh	Chhilechhinda	Sikachinda	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
45	Balangir	Harisankar	Harisankar	Nundupala	Harisankar	Repairing of IB	NPV 80%		2	3	8
46	Balangir	Harisankar	Harisankar	Nundupala	Harisankar	Zoo Management	NPV 80%		2	3	8
47	Balangir	Harisankar	Rengali	Sapmund	Jhalbhal to Sapmund	Forest Road	NPV 20%		2	3	8
48	Balangir	Harisankar	Rengali	Beharapani	Beharapani	Water Body	NPV 80%		2	3	8
49	Balangir	Harisankar	Rengali	Sapmund	Sapmund	Culvert	NPV 20%		2	3	8
50	Balangir	Lathor	Bendi	Bagdore	Bagdore FG Cir.	Tube Well	NPV 20%		2	3	8
51	Balangir	Lathor	Bendi	Dhourakhaman	Bendi RF	Causeway	NPV 20%		2	3	8
52	Balangir	Lathor	Bendi	Dhourakhaman	Bendi RF	Forest Road	NPV 20%		2	3	8
53	Balangir	Murbahal	Murbahal	Murbahal	Murbahal	Forester Quarter	NPV 20%	2	2	3	10
54	Balangir	Bangomunda	Bangomunda	Chhatrang	Near Range Office, Bangomunda	Forest Guard Quarter	NPV 20%	2	2	3	10
55	Balangir	Balangir-I	Balangir-I	Balangir-I	Halsal Pada	Range Officer Residence	NPV 20%	2	2	3	10
56	Bonai	Jarada	Ramchhinda	Kandhadha	Kundhadha	Tube Well	NPV 20%		2	3	8
57	Bonai	Jarada	Majuridima	Majuridima	Kello RF	Maintenance of Fruit bearing & Fodder species around Water Body	NPV 80%		2	3	8
58	Bonai	Bonai	D.D.Pali	D.D.Pali	D.D.Pali RF	Boundary Wall	NPV 20%		2	3	8
59	Bonai	Bonai	D.D.Pali	D.D.Pali	D.D.Pali RF	Improvement of Bird habitat	SSWMAP		2	3	8
60	Bonai	Bonai	D.D.Pali	D.D.Pali	D.D.Pali RF	Improvement of Bird habitat	SSWMAP		2	3	8
61	Bonai	Bonai	D.D.Pali	Jharbeda	Sibatapur RF	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
62	Bonai	Bonai	Sansara Balang	Sansara Balang	Sansara Balang	Forester Quarter	NPV 20%		2	3	8
63	Bonai	Bonai	D.D.Pali	Jharbeda	Jharbeda	Forest Guard Quarter	NPV 20%		2	3	8
64	Bonai	Kulposh	Kulposh	Bendhabhain	Khandhadha	Protection Camp, Khandhadha	NPV 80%		2	3	8
65	Bonai	Bansuan	Bansuan	Bansuan	Bansuan	Elegant Approach Concrete Base	SSWMAP		2	3	8
66	Bonai	Jarada	Majuridima	Majuridima	Gudguda	Maintenance of Fruit bearing & Fodder species around Water Body	NPV 80%		2	3	8
67	Bonai	Kulposh	Dalesara	Lunga	Lunga RF	Maintenance of Fruit bearing & Fodder species around Water Body	NPV 80%		2	3	8
68	Bonai	Jarada	Majuridima	Majuridima	Baghluadar	Renovation of Water Body	NPV 80%		2	3	8

SN	Division	Range	Section	Boat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
69	Bonai	Bansuan	Bansuan	Bansuan	Bansuan	Range Officer Residence	NPV 20%		2	3	8
70	Bonai	Sole	Soleguda	Soleguda	Soleguda Forest Road	Causeway	NPV 20%		2	3	8
71	Bonai	Sole	Soleguda	Soleguda	Soleguda to Rame Forest Road	Forest Road	NPV 20%		2	3	8
72	Bonai	Sole	Kunjar	Kunjar	Kunjar	Culvert	NPV 20%		2	3	8
73	Bonai	Sole	Kunjar	Kunjar	Kunjar Section Office	Installation of VHF Tower	NPV 20%		2	3	8
74	Bonai	Sole	Kunjar	Kunjar	Kantamunda RF	Maintenance of fireline	NPV 80%		2	3	8
75	Bonai	Bansuan	Dengupa	Tensa	Tensa Market	Green Shop	SSWAMP		2	3	8
76	Bonai	Koda	Rengatpoda	Rengatpoda	Kalmanga	NPV Fencing	NPV 80%		0	2	4
77	Bonai	Bansuan	Dengupa	Tensa	Tensa	Picnic Outlet	SSWAMP		2	3	8
78	Rayagada	Rayagada	Gumma	Gumma	Jadighat	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
79	Rayagada	Rayagada	Gumma	Gumma	Kadalipali RF	Maintenance of fireline	NPV 80%		2	2	8
80	Rayagada	Tikiri	Sinkanda	Phujaba	Kadadadar	Checkdam	SSWAMP		2	3	8
81	Rayagada	Tikiri	Kodonga	Kodonga	Bankamba	Water Body	NPV 80%		2	3	8
82	Rayagada	Tikiri	Kodonga	Kodonga	Bankamba	Watch tower	SSWAMP		2	3	8
83	Rayagada	Tikiri	Sankarada	Phujaba	Kadadadar	Water Body	NPV 80%		2	3	8
84	Rayagada	K.Singpur	K.Singpur	K.Singpur	K.Singpur	Range Office	NPV 20%		2	3	10
85	Rayagada	K.Singpur	K.Singpur	K.Singpur	K.Singpur	Forest Guard Quarter	NPV 20%		2	3	10
86	Rayagada	K.Singpur	Skarpali	Solja	Arganda	WHIS	NPV 80%		2	3	8
87	Rayagada	Gadari	Naira	Naira	Naira Section Office	Boundary Wall	NPV 20%		2	3	8
88	Rayagada	Munguda	Munguda	Kudlma	Saketa PRF	Maintenance of fireline	NPV 80%		2	2	8
89	Rayagada	Munguda	Bisma Cutback	Sahada	Sansauthahata	Barbed Fencing	CAPCA		2	3	8
90	Rayagada	Munguda	Munguda	Kudlma	Kudlma	Vegetative Fencing	CAPCA		2	3	8
91	Athamalik	Bamur	Bamur	Bamur	NorthenRF, Comp. 9& 17	Culvert	NPV 20%		2	3	8
92	Athamalik	Bamur	Bamur	Bamur	Bangamalia	Forest Road	NPV 20%		2	3	8
93	Athamalik	Bamur	Bamur	Bamur	Dashtala	Maintenance of fireline	NPV 80%		2	2	8
94	Athamalik	Bamur	Bamur	Bamur	Northen RF, Comp-5	Water Hole	SSWAMP		2	3	8
95	Athamalik	Bamur	Kadalimunda	Tentulpanti	Tulaspur	Guided the unguarded well	SSWAMP		2	2	8
96	Athamalik	Handapa	Urukul	Takaba	NorthenRF, Comp-25	Maintenance of fireline	NPV 80%		2	2	8
97	Athamalik	Handapa	Handapa	Ethapur	Hondapa RF, Comp-1	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
98	Athamalik	Handapa	Urukul	Takaba	NorthenRF, Comp-25	Maintenance of fireline	NPV 20%		2	2	8
99	Athamalik	Handapa	Handapa	Handapa	Range Office Campus	Tube Well	NPV 20%		2	3	8
100	Athamalik	Handapa	Urukul	Takaba	Braukhola	Water Body	SSWAMP		2	3	8
101	Athamalik	Handapa	Urukul	Takaba	Karnelito Dimrdhi	Forest Road	NPV 20%		2	3	8
102	Athamalik	Handapa	Handapa	Handapa	Comp-5	Elephant proof trench	NPV 80%		2	3	8
103	Athamalik	Handapa	Urukul	Takaba	NorthenRF, Comp-34	Causeway	NPV 20%		2	3	8
104	Athamalik	Handapa	Urukul	Takaba	Takaba	Boundary Wall	NPV 20%		2	3	8

SN	Division	Range	Section	Boat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
105	Athamalk	Machapur	Deakrud	Dharatapur	Nuagaon RF	Signage	SSWAMP		2	3	8
106	Athamalk	Machapur	Kakata	Kakata	West Barani RF, Comp-2	Bamboo Seed ball	NPV 80%		2	3	8
107	Athamalk	Machapur	Machapur	Nuagaon	Nuagaon	Installation of VHF tower	NPV 20%		2	3	8
108	Athamalk	Dhanda topa	Paikashi	Dhanda topa	Dantari RF, Comp-2	Water Body	NPV 80%		2	3	8
109	Athamalk	Dhanda topa	Dhanda topa	Dhanda topa	Dhanda topa	Signage	SSWAMP		2	3	8
110	Kharar	Barar	Sarmaheswar	Dharansagar	Jalabanjhi PRF	Maintenance of fireline	NPV 80%		2	2	8
111	Kharar	Nuapada	Dharm Bandhu	Sethi Jamupani	Near Kalimdbidar	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
112	Kharar	Koma	Bojna	Chhupani	Pachara PRF	Water Body	NPV 80%		2	3	8
113	Kharar	Koma	Bojna	Chhupani	Khal to Reshnamal	Forest Road	NPV 20%		2	3	8
114	Kharar	Sinapali	Nangalbadia	Chilarama	Talokole	Forest Guard Quarter	NPV 20%	2	2	3	10
115	Dhenkanal	Sinapali	Liad	Kopla	Kopla	Forester Quarter	NPV 20%	2	2	3	10
116	Dhenkanal	Kamakhyia Nagar East	Jridamali	Balagaon	Jridamali	Boundary Wall	NPV 20%		2	3	8
117	Dhenkanal	Kamakhyia Nagar East	Jridamali	Baragaon	Jridamali	Range Office	NPV 20%	2	2	3	10
118	Dhenkanal	Kamakhyia Nagar East	Jridamali	Balagaon	Jridamali	Tube Well	NPV 20%		2	3	8
119	Dhenkanal	Kamakhyia Nagar East	Brasal	Haladkundli	Haladkundli	Forest Guard Quarter	NPV 20%	2	2	3	10
120	Dhenkanal	Kapilash	Kapilash	Kapilash	Kapilash Zoo	King Cobra & Python Rescue Center	NPV 80%	2	2	3	10
121	Dhenkanal	Kapilash	Kapilash	Kapilash	Kapilash Zoo	Salt Lick	NPV 80%	2	2	3	10
122	Dhenkanal	Bhuban	Jirala	Rankla	Budadeuli	Water Body	NPV 80%		2	3	8
123	Dhenkanal	Bhuban	Jirala	Rankla	Bhaukhia	Anti-Poaching Barrack	NPV 20%	2	2	3	10
124	Dhenkanal	Mahabirod	Mahabirod	Kuturia	Ambakhola	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
125	Dhenkanal	Hindol	Mukjurakata	Suresingh	Mukjurakata	Forester Quarter	NPV 20%		2	3	8
126	Dhenkanal	Hindol	Resol	Resol	Panchapada	MHS	NPV 80%		2	3	8
127	Dhenkanal	Hindol	Hindol	Hindol	Hindol To Faisaon	Forest Road	NPV 20%		2	3	8
128	Smitlal North	Gurguria	Kuliani	Kuliani	Near Smitlal Gate	Forester Quarter	NPV 20%		2	3	8
129	Smitlal North	Ghabala	Rajpai	Rajpai-2	Rajpai Office	Forest Guard Quarter	NPV 20%		2	3	8
130	Smitlal North	Barahpani	Maitighanti	Maitighati	Maitighati	Watch Tower	NPV 20%	2	2	3	10
131	Smitlal North	Barahpani	Maitighanti	Maitighati	Kalla Prasad To Nawana	Forest Road	NPV 20%		2	3	8
132	Smitlal North	Barahpani	Barahpani	Barahpani	Barahpani	Boundary Wall	NPV 20%		2	3	8
133	Smitlal North	Chhabala	Chhabala	Chhabala	Chhabala Range office	Salt Lick	NPV 80%		2	3	8
134	Smitlal North	Chhabala	Chhabala	Chhabala	Chhabala	Causeway	NPV 20%		2	3	8
135	Smitlal North	Nawana	Nawana	Nawana	Balarampur	Water Body	NPV 80%		2	3	8
136	Smitlal North	Ghabala	Ghabala	Ghabala	Ghabala	Forest Road	NPV 20%		2	3	8
137	Smitlal North	Gurguria	Gurguria	Gurguria	Gurguria	Range Officer Residence	NPV 20%		2	3	8
138	Smitlal North	Gurguria	Gurguria	Gurguria	Gurguria	Range Office	NPV 20%		2	3	8

SN	Division	Range	Section	Boat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
139	Simlipal North	Gurguria	Chahala	Chahala	Brundaban	Meadow Development	NPV 80%		2	3	8
140	Simlipal North	Navena	Navena	Navena	Navena	WHIS	NPV 80%		2	3	8
141	Simlipal North	Chahala	Chahala	Chahala	Solabhadri	Invasive Weed Eradication	NPV 80%		2	2	8
142	Simlipal North	Rajpal	Rajpal	Rajpal	Bakhutab	Maintenance of Fireline	NPV 80%		2	2	8
143	Simlipal North	Kendumundi	Rajpal	Rajpal	Barokumuda	Tube Well	NPV 20%		2	3	8
144	Simlipal North	Kendumundi	Rajpal	Kajhali	Kajhali	Renovation of Water Body	NPV 80%		2	3	8
145	Simlipal North	Kendumundi	Rajpal	Kiajhari	Kiajhari	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
146	Simlipal North	Kendumundi	Rajpal	Kiajhari	Kiajhari	Meadow Development	NPV 80%		2	3	8
147	Rairangpur	Bedampahar	Suleipat	Purupapani	Bedampahar RF near Rurapapani Village	Maintenance of Fireline	NPV 80%		2	2	8
148	Rairangpur	Bedampahar	Bedampahar	Talapat	Talip DPF	WHIS	NPV 80%		2	3	8
149	Rairangpur	Bahalda	Jimda	Sunamara	Sunamara	Water Body	NPV 80%		2	3	8
150	Rairangpur	Bahalda	Jimda	Manbir	Taran Khadia Sahi	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
151	Rairangpur	Rairangpur	Gorumahisani	Gorumahisani	Gorumahisani Section Office	Boundary Wall	NPV 20%		2	3	8
152	Rairangpur	Rairangpur	Gorumahisani	Gorumahisani	Gorumahisani Section Office	Forester Quarter	NPV 20%	2	2	3	10
153	Rairangpur	Rairangpur	Gorumahisani	Gorumahisani	Kusumghati to Bahupani	Forest Road	NPV 20%		2	3	8
154	Rairangpur	Rairangpur	Saragoda	Chadhapahadi	Chadhapahadi	Forest Guard Quarter	NPV 20%	2	2	3	10
155	Rairangpur	Rairangpur	Saragoda	Chadhapahadi	Saragoda section office	Tube Well	NPV 20%		2	3	8
156	Baripada	Deuli	Sulapada	Kantihisahi	Kantihisahi	Water Body	NPV 80%		2	3	8
157	Baripada	Deuli	Sulapada	Kantihisahi	Ghangana WB	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
158	Baripada	Deuli	Kuliana	Kuliana	Kuliana section	Forest Guard Quarter	NPV 20%	2	2	3	10
159	Baripada	Banglipoochi	Bodagson	Drobansoli	Purushotampur	WHIS	NPV 80%		2	3	10
160	Baripada	Banglipoochi	Bodagson	Badagson	Badagson	Signage	SSMAMP	2	2	3	10
161	Baripada	Banglipoochi	Bodagson	Drobansoli	Khadke sole	Maintenance of Fireline	NPV 80%		2	2	8
162	Baripada	Udala	Udala	Udala	Range office campus	Forester Quarter	NPV 20%	2	2	3	10
163	Baripada	Udala	Muamara	Dhaundia	Dhaundia	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
164	Baripada	Udala	Khurita	Khurita	Slaghati	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
165	Baripada	Kapripada	Naitoo	Serat Naitoo	Serat Naitoo	Trap camera	NPV 20%		2	3	8
166	Baripada	Kapripada	Sarisa	Sarisa Sarisa	Purushotampur	Watch Tower	NPV 20%		2	3	10
167	Baripada	Baripada	Dingdinga	Dingdinga	Dingdinga	Anti-Poaching Barrack	NPV 20%	2	2	3	10
168	Baripada	Baripada	Dingdinga	Dingdinga	Shyamsole	Renovation of Water Body	NPV 80%	2	2	3	10
169	Chandika WL	Dampada	Dampada	Dampada	Dampada Range office	Fire Fighting Blower	NPV 80%		2	3	8
170	Chandika WL	Dampada	Dampada	Dampada	Dampada	Causeway	NPV 20%		2	3	8

SN	Division	Range	Section	Boat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
171	Chandakha WL	Dampada	Dampada	Dampada	Dampada Range office	Anti-Poaching Barrack	NPV 20%	2	2	3	10
172	Chandakha WL	Dampada	Dampada	Pithakha	Pithakha	Maintenance of Freline	NPV 80%	2	2	3	8
173	Chandakha WL	Chandakha	Godbari	Bhola	Bhola	Water Body	NPV 80%	2	2	3	10
174	Chandakha WL	Chandakha	Godbari	Godbari	Godbari	Meadow Development	NPV 80%	2	2	3	8
175	Chandakha WL	Haladia	Haladia	Manapur	Manapur	Forest Road	NPV 20%	2	2	3	8
176	Chandakha WL	Haladia	Minchinpatna	Jamujhari	Jamujhari	WMS	NPV 80%	2	2	3	10
177	Chandakha WL	Haladia	Minchinpatna	Jamujhari	Jamujhari	Salt Lick	NPV 20%	2	2	3	8
178	Chandakha WL	Ohmunda	Dhupisahi	Dhupisahi	Dhupisahi	Plantation of Fruit & Fodder species around the Water Body	NPV 20%	2	2	3	10
179	Mahanadi WL	Ohmunda	Dhupisahi	Dhupisahi	Dhupisahi	Installation of VHF tower	NPV 20%	2	2	3	8
180	Mahanadi WL	Bangochha East	Bedasilingi	Bedasilingi	Bedasilingi	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	3	10
181	Mahanadi WL	Bangochha East	Dhupisahi	Dhupisahi	Comp-20	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	3	10
182	Mahanadi WL	Bangochha East	Dhupisahi	Dhupisahi	Girgidi chhakk to Osamaska chhakk	Forest Road	NPV 20%	2	2	3	8
183	Mahanadi WL	Bangochha East	Dhupisahi	Dhupisahi	Dhupisahi	Salt Lick	NPV 80%	2	2	3	10
184	Mahanadi WL	Bangochha East	Bangochha	Bangochha	Haripur, Nayagarh	Forest Guard Quarter	NPV 20%	2	2	3	10
185	Mahanadi WL	Bangochha East	Bangochha	Bangochha	Haripur, Nayagarh	Boundary Wall	NPV 20%	2	2	3	10
186	Mahanadi WL	Bangochha East	Bangochha	Bangochha	Haripur, Nayagarh	Seacureyard	NPV 20%	2	2	3	10
187	Mahanadi WL	Ohmunda	Bedamal	Kuturi	Kuturi	Culvert	NPV 20%	2	2	3	8
188	Mahanadi WL	Ohmunda	Dhupisahi	Dhupisahi	Dhupisahi	Maintenance of Freline	NPV 80%	2	2	3	8
189	Mahanadi WL	Ohmunda	Ohmunda	Ohmunda	Range office campus	Tube Well	NPV 20%	2	2	3	8
190	Mahanadi WL	Ohmunda	Ohmunda	Ohmunda	Chhamunda	Water Body	NPV 80%	2	2	3	8
191	Mahanadi WL	Bangochha East	Bangochha	Bangochha	Bangochha	Zoo Management	NPV 80%	2	2	3	8
192	Rajnagar WL	Kujanga	Hawakhana	Sahaada bedi	Sahaadabedi	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	3	8
193	Rajnagar WL	Rajnagar	Sitabehaya	Sitabehaya	Satabehya	Forester Quarter	NPV 20%	2	2	3	10
194	Rajnagar WL	Rajnagar	Gupti	Krushnapatyapur	Krushnapatyapur	Forester Guard Quarter	NPV 20%	2	2	3	10
195	Rajnagar WL	Rajnagar	Rajnagar	Rajnagar	Rajnagar	Range Officer Residence	NPV 20%	2	2	3	10
196	Rajnagar WL	Rajnagar	Rajnagar	Rajnagar	Rajnagar	Range Office	NPV 20%	2	2	3	10
197	Rajnagar WL	Rajnagar	Rajnagar	Rajnagar	Rajnagar	Boundary Wall	NPV 20%	2	2	3	8
198	Khurda	Bourda	Begunia	Begunia	Begunia	Forester Quarter	NPV 20%	2	2	3	10
199	Khurda	Tangi	Naisingi	Naisingi	Gayabandha	Watch Tower	NPV 20%	2	2	3	8
200	Khurda	Tangi	Bhusandapur	Bhusandapur	Naisingi	Signage	SSWAMP	2	2	3	8
201	Khurda	Tangi	Bhusandapur	Bhusandapur	Bhusandapur section office	Installation of VHF tower	NPV 20%	2	2	3	8
202	Khurda	Tangi	Bhusandapur	Bhusandapur	Bhusandapur section office	Anti-Poaching Barrack	NPV 20%	2	2	3	10
203	Khurda	Tangi	Patla	Patla	Patla section office	Boundary Wall	NPV 20%	2	2	3	8
204	Khurda	Tangi	Patla	Patla 2	Patla 2	Elephant proof trench	NPV 80%	2	2	3	8
205	Khurda	Tangi	Tangi	Tangi	Tangi Range office campus	Tube Well	NPV 20%	2	2	2	8
206	Khurda	Raniapur	Bituli	Bituli	Mali RF	Maintenance of Freline	NPV 80%	2	2	2	8

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207	Khurda	Ranapur	Batuli	Batuli	Mail RF	Forest Road	NPV 20%		2	3	8
208	Khurda	Ranapur	Kardapala	Bhetabara	Bhetabara	Maintenance of fruit bearing & Fodder species around Water Body	NPV 80%		2	3	8
209	Khurda	Ranapur	Batuli	Batuli	Nellpada palihar khani	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	3	10
210	Khurda	Belugaon	Dhuanmali	Sling padar	Tamena RF	Causeway	NPV 20%		2	3	8
211	Khurda	Belugaon	Padmapur	Padmapur 1	Padmapur	Forest Guard Quarter	NPV 20%	2	2	3	10
212	Khurda	Belugaon	Belugaon	Belugaon	Belugaon	Range Officer Residence	NPV 20%	2	2	3	10
213	Similipal South	Podadha	Podadha	Podadha	Podadha	Range Office	NPV 20%	2	2	3	10
214	Similipal South	Podadha	Podadha	Kantali	Hidsahi	Forest Guard Quarter	NPV 20%	2	2	3	10
215	Similipal South	Podadha	Podadha	Podadha	Podadha range of lice campus	Boundary Wall	NPV 20%		2	3	8
216	Similipal South	Podadha	Podadha	Podadha	Podadha range of lice campus	Sekureyard	NPV 20%		2	3	8
217	Similipal South	Podadha	Dangadha	Dangadha 1	Dangadhi	Causeway	NPV 20%		2	3	8
218	Similipal South	Podadha	Podadha	Baghaanta	Baghaanta	Culvert	NPV 20%		2	3	8
219	Similipal South	National park	Kabataghal	Kabataghal	Kabataghal	Range Officer Residence	NPV 20%		2	3	8
220	Similipal South	National park	Kabataghal	Kabataghal	Kabataghal	Meadow Development	NPV 80%		2	3	8
221	Similipal South	National park	Kabataghal	Kabataghal	Kabataghal	Maintenance of Water Body	NPV 80%		2	3	8
222	Similipal South	National park	Mahabrisal	Mahabrisal	Mahabrisal	Forester Quarter	NPV 20%	2	2	3	10
223	Similipal South	Jenabi	Jenabi	Sanapokhari	Sanapokhari	Salt Leck	NPV 80%		2	3	8
224	Similipal South	Jenabi	Jenabi	Sanapokhari	Sanapokhari	Maintenance of Fireline	NPV 80%		2	2	8
225	Similipal South	Jenabi	Jenabi	Sanapokhari	Sanapokhari	Forest Road	NPV 20%		2	3	8
226	Similipal South	Jenabi	Jenabi	Sanapokhari	Sanapokhari	Invasive Weed Eradication	NPV 80%		2	3	8
227	Similipal South	National park	Mahabrisal	Mahabrisal	Mahabrisal	Elegant proof trench	NPV 80%		2	3	8
228	Berhampur	Berhampur	Tamena	Tamena	Tamena	Forest Guard Quarter	NPV 20%	2	2	3	10
229	Berhampur	Berhampur	Tamena	Tamena	Khanda labandha	Forest Road	NPV 20%	2	2	3	10
230	Berhampur	Berhampur	Tamena	Tamena	Tamena	Tube Well	NPV 20%		2	3	8
231	Berhampur	Berhampur	Tamena	Belapada	Belapada	Maintenance of Water Body	NPV 80%	2	2	3	10
232	Berhampur	Berhampur	Hijlicut	Nandika	Nandika	Boundary Wall	NPV 20%		2	3	8
233	Berhampur	Berhampur	Lumba	Pur lasahi	Insido Singhraj RF	Maintenance of Fireline	NPV 80%		2	2	8
234	Ghumusar North	Tarsing	Ghogada	Ghogada	Ghogada	Forest Guard Quarter	NPV 20%	2	2	3	10
235	Ghumusar North	Tarsing	Ghogada	Ghogada	Ghogada	Boundary Wall	NPV 20%		2	3	10
236	Ghumusar North	Jaganath Prasad	Gereda	Sapang	Sapang	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
237	Ghumusar North	Jaganath Prasad	Belagumtha	Saranupali	Saranupali	Construction of Sources, Saltlick, Water pockets and Meadow cultivation for Black buck conservation	SSWMP		2	3	8

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238	Ghumusar North	Gallery	Gallery	Gallery	Gallery	Range Office	NPV 20%		2	3	8
239	Ghumusar North	Gallery	Tiasingi	Tiasingi	Tiasingi	Forester Quarter	NPV 20%		2	3	8
240	Ghumusar North	Central	Kalamba	Badagorsingha	Badagorsingha	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
241	Ghumusar North	Mujagada	Mujagada	Langa lakhola	Balilli RF	Maintenance of Water Body	NPV 80%		2	3	8
242	Ghumusar North	Mujagada	Mujagada	Langa lakhola	Balilli RF	Maintenance of Fireline	NPV 80%		2	2	8
243	Ghumusar South	Badagada	Dhaupada	Dhaupada	Dhaupada	Forester Quarter	NPV 20%	2	2	3	10
244	Ghumusar South	Sorada	Sorada	Dhaupada	Dhaupada	Forest Guard Quarter	NPV 20%	2	2	3	10
245	Ghumusar South	Sorada	Sorada	Ripada	Range office campus	Boundary Wall	NPV 20%		2	3	8
246	Ghumusar South	Sorada	Gadlibedi	Mingjodi	Pandikhali RF	WHIS	NPV 80%		2	3	8
247	Ghumusar South	Bugada	Kumunda	Mantara	Mantara	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
248	Ghumusar South	Bugada	Bhagabanpur	Bhagabanpur	Bhagabanpur	Tube Well	NPV 20%		2	3	8
249	Ghumusar South	Bugada	Bhagabanpur	Talasara	Talasara	Forest Road	NPV 20%		2	3	8
250	Ghumusar South	Bugada	Bhagabanpur	Talasara	Kiramba RF	Water Body	NPV 80%		2	3	8
251	Ghumusar South	Aska	Dharakole	Kusuraba	Kusuraba	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
252	Ghumusar South	Aska	Aska	Babanpur	Naryanpur	Watch Tower	NPV 20%		2	3	8
253	Ghumusar South	Aska	Aska	Babanpur	Bhetanai Jagati padia	Salt Lick	NPV 80%		2	3	8
254	Ghumusar South	Bugada	Bhagabanpur	Talasara	Kiramba RF C/4	Maintenance of Fireline	NPV 80%		2	2	8
255	Sunabeda WL	Sunabeda	Sosungi	Jalamedel	Kebdiom	Culvert	NPV 20%		2	3	8
256	Sunabeda WL	Sunabeda	Sosungi	Jalamedel	Dhaki	Boundary Wall	NPV 20%		2	3	8
257	Sunabeda WL	Sunabeda	Sosungi	Jalamedel	Bahabal	Water Body	NPV 80%	2	2	3	10
258	Sunabeda WL	Sunabeda	Sosungi	Jalamedel	Rullamba to Jalamedel	Maintenance of Fireline	NPV 80%		2	2	8
259	Sunabeda WL	Sunabeda	Sunabeda	Sunabeda	Mahabandha	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
260	Sunabeda WL	Sunabeda	Sunabeda	Sunabeda	Hethilal	WHIS	NPV 80%		2	3	8
261	Sunabeda WL	Komana	Chirchuan	Kirchuan	Chirchuan Seizure yard	Tube Well	NPV 20%		2	3	8
262	Sunabeda WL	Komana	Khulbhitar	Khulbhitar	Banskam to Khulbhitar road	Causeway	NPV 20%		2	3	8

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263	Sunabeda WL	Komana	Khulbhitar	Khulbhitar	Barklam to Indranala and Barklam to Rojana	Forest Road	NPV 20%		2	3	8
264	Sunabeda WL	Nuapada	Jharabandha	Palaja	Jharapani	Salt Lick	NPV 80%		2	2	8
265	Sunabeda WL	Nuapada	Golabandha	Diamanda	Chandrapur	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
266	Sunabeda WL	Komana	Chirchuan	Chirchuan	Patakhalia	Water Body	NPV 80%		2	3	8
267	Paralakhemundi	Mahendra	Garabandha	Garabandha	Naryanpur	Water Body	NPV 80%		2	3	8
268	Paralakhemundi	Mahendra	Garabandha	Garabandha	Durgam UDPF	Salt Lick	NPV 80%		2	3	8
269	Paralakhemundi	Mahendra	Mahendra	Mahendra	Mahendra Range office	Trap Camera	SSWAMP		2	3	8
270	Paralakhemundi	Debaghi	Bidura	Khar-sandha	Salamalle	Forester Quarter	NPV 20%		2	3	8
271	Paralakhemundi	Debaghi	Bidura	Khar-sandha	Salamalle	Forest Guard Quarter	NPV 20%		2	3	8
272	Paralakhemundi	Kasnagar	Kasnagar	Kasnagar	Kasnagar	Range Officer Residence	NPV 20%		2	3	8
273	Paralakhemundi	Mohana	Punganda	Botaganda	Janganda west UDPF	WHs	NPV 80%		2	3	8
274	Paralakhemundi	Chandragiri	Chandragiri	Chandragiri	Chakadhara	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
275	Paralakhemundi	Chandragiri	Taptapani	Taptapani	Taptapani Deer park	Zoo Management	NPV 80%		2	3	8
276	Nandanakanan Zoological Park	Sanctuary Management			Tiger Safari, Nandanakanan	Invasive Weed Eradication	NPV 80%		2	3	8
277	Nandanakanan Zoological Park	Sanctuary Management			Tiger Safari, Nandanakanan	Forest Road	NPV 20%		2	3	8
278	Nandanakanan Zoological Park	Sanctuary Management			Nandanakanan	Bear Cave	NPV 80%		2	3	8
279	Nandanakanan Zoological Park	Sanctuary Management			Nandanakanan	Weigh bridge	NPV 80%		2	3	8
280	Nandanakanan Zoological Park	Sanctuary Management			Nandanakanan	Glass house for Crocodile	NPV 80%		2	3	8
281	Nandanakanan Zoological Park	Sanctuary Management			Nandanakanan	Improvement of Bird habitat	NPV 80%		2	3	8
282	Nandanakanan Zoological Park	Sanctuary Management			Nandanakanan	Maintenance of Zoo Hospital	NPV 80%		2	3	8
283	Koonjar	BIP	Kanjipani	Kanjipani	Near Tandlajoda Nursery	Forest Guard Quarter	NPV 20%	2	2	3	10
284	Koonjar	BIP	Suakathi	Taramakanta	Champajhar	Solar Light	SSWAMP		2	3	8
285	Koonjar	BIP	Suakathi	Taramakanta	Champajhar	Solar Light	SSWAMP		2	3	8
286	Koonjar	Champur	Champur	Champur	Near Range office	Forester Quarter	NPV 20%	2	2	3	10
287	Koonjar	Telkoi	Bimala	Podanga	Bandhanjhal RF	Water Body	NPV 80%		2	3	8
288	Koonjar	Telkoi	Bimala	Podanga	Godhihudi	Renovation of Water Body	NPV 80%		2	3	8

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289	Koonjhar	Tekoi	Bimala	Dobapur	Machyapur	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
290	Koonjhar	Palna	Palna	Tandi	Vimakund to Baiganpal	Caesaway	NPV 20%		2	3	8
291	Koonjhar	Palna	Palna	Tandi	Vimakund to Baiganpal	Forest Road	NPV 20%		2	3	8
292	Koonjhar	Palna	Palna	Tandi	Vimakund to Baiganpal	Curvet	NPV 20%	2	2	3	10
293	Koonjhar	Ghatagaon	Ghatagaon	Baiganpal (S)	Baiganpal	Boundary wall	NPV 20%		2	3	8
294	Koonjhar	Ghatagaon	Ghatagaon	Baiganpal (S)	Baiganpal	Tube Well	NPV 20%		2	3	8
295	Koonjhar	Ghatagaon	Ghatagaon	Kudibahal (N)	Alei RF	Maintenance of Freeline	NPV 80%		2	2	8
296	Koonjhar	Ghatagaon	Ghatagaon	Kudibahal (N)	Alei RF	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
297	Koonjhar	Koonjhar	Brahmanpal	Bolda	Jatkiada NH 49	Signage	SSWAMP	2	2	3	10
298	Koonjhar WL	Brahmanpal	Brahmanpal	Brahmanpal	Brahmanpal	Forester Quarter	NPV 20%	2	2	3	10
299	Koonjhar WL	Brahmanpal	Andapur	Andapur	Saibada	Security Road	NPV 20%	2	2	3	10
300	Koonjhar WL	Andapur	Andapur	Andapur	Range office	Forest Guard Quarter	NPV 20%	2	2	3	10
301	Koonjhar WL	Hedagarh	Hedagarh	Hedagarh	Baighali	Watch Tower	NPV 20%	2	2	3	10
302	Koonjhar WL	Andapur	Remachandrapur	Ganpur Bit	Ganpur Bit	Boundary wall	NPV 20%		2	3	8
303	Koonjhar WL	Andapur	Remachandrapur	Boranga	Boranga	Maintenance of Water Body	NPV 80%		2	3	8
304	Koonjhar WL	Andapur	Remachandrapur	Boranga	Boranga	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	2	8
305	Koonjhar WL	Andapur	Gayalamunda	Gayalamunda	Gayalamunda	WHS	NPV 80%	2	2	3	10
306	Koonjhar WL	Andapur	Andapur	Andapur	Andapur	Fire Fighting Blower	NPV 80%		2	3	8
307	Koonjhar WL	Andapur	Andapur	Andapur	Range office	Tube Well	NPV 20%	2	2	3	8
308	Koonjhar WL	Hedagarh	Kathakata	Kathakata	Lunpabadi	Salt Lick	NPV 80%		2	3	8
309	Koonjhar WL	Hedagarh	Kathakata	Pitaneu	Kathakata to Dakli	Forest Road	NPV 20%		2	3	8
310	Koonjhar WL	Hedagarh	Kathakata	Pitaneu	Banjhakusuma	Meadow Development	NPV 80%		2	3	8
311	Koonjhar WL	Hedagarh	Kathakata	Pitaneu	Muhana	Invasive Weed Eradication	NPV 80%	2	2	3	8
312	Koonjhar WL	Hedagarh	Kathakata	Pitaneu	Kadapata	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
313	Koonjhar WL	Hedagarh	Kathakata	Pitaneu	Barakanya	Maintenance of Freeline	NPV 80%		2	3	8
314	Cuttack	Daligoda	Chandikhol	Chandikhol	Back side of IB	Maintenance of Freeline	NPV 80%		2	3	8
315	Cuttack	Sukinda	Sukinda	Palapur	Ashokpur Watch tower	Tube Well	NPV 20%		2	3	8
316	Cuttack	Daligoda	Chandikhol	Chandikhol	Near Parbatsova Galle	Caesaway	NPV 20%		2	3	8
317	Cuttack	Daligoda	Baire	Kolha	Kolha Forest Boat	Tube Well	NPV 20%		2	3	8
318	Cuttack	Sukinda	Rensol	Natur-2	Kumuti Bahali	Curvet	NPV 20%		2	3	8
319	Cuttack	Sukinda	Rensol	Natur-3	Dalak Sahi	Water Body	NPV 80%		2	3	10
320	Cuttack	Sukinda	Rensol	Natur-1	Beat Quarter	Boundary wall	NPV 20%	2	2	3	10
321	Cuttack	Tomka	Tomka	Tomka	Biodiversity Park	Park Development	SSWAMP	2	2	3	10
322	Cuttack	Tomka	Duburi	Sagadigula	NH Side	Signage	SSWAMP	2	2	3	10
323	Phulbari	Titkabi	Titkabi	Sankarakhil Boat	Sankarakhil Boat	Boundary wall	NPV 20%	2	2	3	10
324	Phulbari	Titkabi	Titkabi	Kupali	Kusuma to Andriguda	Forest Road	NPV 20%		2	3	8

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325	Phulbari	Tikabali	Chakapada	Chakapada	Chakapada	Forester Quarter	NPV 20%	2	2	3	10
326	Phulbari	G. Udayagiri	G. Udayagiri	G. Udayagiri	G. Udayagiri	Range Officer Residence	NPV 20%	2	2	3	10
327	Phulbari	Baika	Baika	Sagadabadi	Baika	Forest Guard Quarter	NPV 20%	2	2	3	10
328	Phulbari	Baika	Karada	Kendukhari	kandrimaha	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	2	8
329	Phulbari	Karada	Indragarh	Dimitipally	Machaghat RF	Water Body	NPV 80%	2	2	3	10
330	Kalahandi South	Dharmagarh	Ampani	Ampani	Ampani Barrack	Boundary wall	NPV 20%	2	2	3	10
331	Kalahandi South	Dharmagarh	Ampani	Ampani	Birumhan to Kukur	Forest Road	NPV 20%	2	2	3	8
332	Kalahandi South	Karlapat	Karlapat	Karlapat B	Karlapat RF	Invasive Weed Eradication	NPV 80%	2	2	3	8
333	Kalahandi South	Karlapat	Karlapat	Karlapat A	Karlapat RF	WHS	NPV 80%	2	2	3	10
334	Kalahandi South	Karlapat	Sagada	Jakam A	Jakam	Salt Leck	NPV 80%	2	2	3	8
335	Kalahandi South	Karlapat	Sagada	Jakam A	Jakam	Renovation of Water Body	NPV 80%	2	2	3	10
336	Kalahandi South	Karlapat	Sagada	Jakam A	Surugudi	Water Body	NPV 80%	2	2	3	10
337	Kalahandi South	Karlapat	Klapadar	Klapadar	Klapadar	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	2	8
338	Kalahandi South	Karlapat	Sagada	Katinglona	Karlapat Sanctuary	Maintenance of Fireline	NPV 80%	2	2	2	8
339	Kalahandi South	Biswanathpur	Sikripupa	Lanjigarh	Samajpola RF	Elephant proof trench	NPV 80%	2	2	3	10
340	Kalahandi South	Lunagarh	Amagarh	Benamalipur	Benamalipur	Tube Well	NPV 20%	2	2	3	8
341	Kalahandi North	M. Rampur	Jurakhaman	Tagrang	Jurakhaman	Forester Quarter	NPV 20%	2	2	3	10
342	Kalahandi North	Naria	Kamarda	Kamarda	Kamarda to Bhurti	Forest Road	NPV 20%	2	2	3	8
343	Kalahandi North	Naria	Kamarda	Bhurti	Bourgel	Maintenance of Fireline	NPV 80%	2	2	3	8
344	Kalahandi North	Naria	Naria	Naria	Naria	Anti-Poaching Barrack	NPV 20%	2	2	3	10
345	Kalahandi North	Naria	Belgaon	Gurungabeda	Pujliadu	WHS	NPV 80%	2	2	3	10
346	Kalahandi North	Naria	Belgaon	Gurungabeda	Hilbandha	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	2	8
347	Kalahandi North	Kosinga	Asurpada	Khaman	Amath	Forest Guard Quarter	NPV 20%	2	2	3	10
348	Kalahandi North	Kosinga	Asurpada	Khaman	Amath	Boundary wall	NPV 20%	2	2	3	10

SN	Division	Range	Section	Beat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
349	Kalahandi North	kegaon	Despur	Despur		Tube Well	NPV 20%		2	3	8
350	Kalahandi North	Bhawanipatna	Bhawanipatna	Bhawanipatna	Suruli	Water Body	NPV 80%	2	2	3	10
351	Kalahandi North	Bhawanipatna	Bhawanipatna	Bhawanipatna	Bhawanipatna Range office	Secureyard	NPV 20%	2	2	3	10
352	Boudh	Boudh	Baghiapada	Malligpada	Birigoda	Culvert	NPV 20%		2	3	8
353	Boudh	Boudh	Charichaka	Kharabuhin	Baispada	Causeway	NPV 20%		2	3	8
354	Boudh	Puruskatak	Harabhang	Sankuli	Arapada RF C-7	Maintenance of Fireline	NPV 80%	2	2	3	8
355	Boudh	Boudh	Charichaka	Kharabuhin	Adipadar	Bamboo Seed ball	NPV 80%	2	2	3	8
356	Boudh	Boudh	Baghiapada	Jamhal	Jamhal RF C-9	Water Body	NPV 80%	2	2	3	10
357	Boudh	Boudh	Baghiapada	Berdabari	Berkamundi RF C-9	WHs	NPV 80%	2	2	3	10
358	Boudh	Boudh	Baghiapada	Berdabari	Berkamundi RF C-8	Elephant proof trench	NPV 80%	2	2	3	10
359	Boudh	Boudh	Baghiapada	Baghiapada	Baghiapada	Forest Guard Quarter	NPV 20%	2	2	3	10
360	Boudh	Madhapur	Adenigarh	Karadkotha	Adenigarh to Khuntapada	Forest Road	NPV 20%	2	2	3	8
361	Alibagarh	Khuntuni	Nidhpur	Brahmanabasta	Brahmanabasta	Water Body	SSWAMP	2	2	3	10
362	Alibagarh	Khuntuni	Khuntuni	Adali	Banbandha RF	Water Body	SSWAMP	2	2	3	10
363	Alibagarh	Khuntuni	Khuntuni	Adali	Banbandha RF	Water Body	SSWAMP	2	2	3	10
364	Alibagarh	Khuntuni	Krusnapur	Mahalaxmi	Banbandha RF	Renovation of Water Body	SSWAMP	2	2	3	8
365	Alibagarh	Khuntuni	Oranda	Nuapara	Marcheswar to Nuadha	Solar Fencing	SSWAMP		2	3	8
366	Alibagarh	Narsingpur East	Devabuhin	Devabuhin	Sermunda to Guptamanik	Forest Road	NPV 20%		2	3	8
367	Alibagarh	Narsingpur East	Devabuhin	Devabuhin	Devabuhin RF C-15	Maintenance of Fireline	NPV 80%	2	2	3	8
368	Angul	Talcher	Seepur	Bulajhar-1	Bulajhar RF	Solar Fencing	SSWAMP	2	2	3	8
369	Angul	Talcher	Seepur	Bulajhar-1	Bulajhar RF	Elephant proof trench	SSWAMP	2	2	3	10
370	Angul	Kaniba	Kaniba-1	Kumuda	Badakhathia RF	Bamboo Seed ball	NPV 80%	2	2	3	8
371	Angul	Kaniba	Rengali	Rengali	Kuluma	Cattle Proof Trench	CA/PICA		2	3	8
372	Angul	Kaniba	Rengali	Rengali	Saleimada RF	Barbed Fencing	CA/PICA		2	3	8
373	Angul	Angul	Karatpata	Karatpata-B	Madhapur RF	Solar Fencing	SSWAMP	2	2	3	8
374	Angul	Angul	Karatpata	Karatpata -B	Krusnachakra PRF	Maintenance of Fireline	NPV 80%	2	2	3	8
375	Angul	Chendipada	Chendipada 2	Kanbi	Chendipada	Forest Guard Quarter	NPV 20%	2	2	3	10
376	Angul	Chendipada	Chendipada 2	Kanbi	Chendipada	Forester Quarter	NPV 20%	2	2	3	10
377	Angul	Chendipada	Chendipada 1	Chendipada 2	Chendipada RF	Maintenance of Fireline	NPV 80%	2	2	3	8
378	Angul	Chendipada	Chendipada 1	Chendipada 2	Chendipada RF	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
379	Angul	Chendipada	Bajjharan	Durgapur	Durgapur RF	Grass Land	SSWAMP		2	2	8
380	Angul	Jarpada	Antalia	Lembutaila	Lembutaila	Boundary wall	NPV 20%	2	2	3	10
381	Angul	Jarpada	Antalia	Lembutaila	Lembutaila	Forest Road	NPV 20%	2	2	3	8
382	Angul	Jarpada	Antalia	Kandha Koli	Ogi to Antalia	Sulver1	NPV 20%	2	2	3	8
383	Angul	Jarpada	Antalia	Kandha Koli	Ogi to Antalia	Causeway	NPV 20%		2	3	8
384	Angul	Jarpada	Antalia	Lembutaila	Lembutaila RF C-5	Maintenance of Fireline	NPV 80%	2	2	3	8

SN	Division	Range	Section	Boat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
385	Angul	Barrala	Pimpasari	Pimpasari	Balanga RF C-2	Maintenance of fireline	NPV 80%		2	3	8
386	Angul	Barrala	Nuakhata	Nuakhata-1	Nuakhata to New Balanga	Forest Road	NPV 20%		2	3	8
387	Angul	Barrala	Pimpasari	Balanga	Jukab	Forest Guard Quarter	NPV 20%	2	2	3	10
388	Angul	Barrala	Pimpasari	Balanga	Jukab	Tube Well	NPV 20%		2	3	8
389	Joypara	Bajpariguda	Mathapada	Mathapada	Mathapada to Goinapali	Forest Road	NPV 20%		2	3	8
390	Joypara	Bajpariguda	Mathapada	Mathapada	Mathapada to Goinapali	Culvert	NPV 20%		2	3	8
391	Joypara	Bajpariguda	Mathapada	Mathapada	Mathapada to Goinapali	Causeway	NPV 20%		2	3	8
392	Joypara	Gupitewar	Ramagiri	Ramagiri	Ramagiri Nursery	Tube Well	NPV 20%		2	3	8
393	Joypara	Borgama	Katikhata	Katikhata	Pohnanapada	Water Body	NPV 80%	2	2	3	10
394	Koraput	Lamataput	Lamataput	Lamataput	Lamataput	Range Office	NPV 20%	2	2	3	10
395	Koraput	Balda	Balda	Balda	Nageswari	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	2	8
396	Koraput	Balda	Balda	Balda	Nageswari	Renovation of Water Body	NPV 80%		2	3	8
397	Koraput	Balda	Balda	Balda	Nageswari Hill Road	Causeway	NPV 20%		2	3	8
398	Nayagarh	Daspalla	Takera	Takera	Takera Forest Office	Tube Well	NPV 20%	2	2	1	8
399	Nayagarh	Daspalla	Dispalla	Dispalla	Range Office	Fire Fighting Blower	SSWAMP		2	3	8
400	Nayagarh	Nayagarh	Khedapada	Khedag Prasad	Khedapada Section office	Forest Guard Quarter	NPV 20%	2	2	3	10
401	Nayagarh	Nayagarh	Khedapada	Jogipalli	Jogipalli Tg Quarter Boundary	Boundary Wall	NPV 20%	2	2	3	10
402	Nayagarh	Mahipur	Mahipur	Gateri	Gateri Barakola Forest Road	Culvert	NPV 20%		2	3	8
403	Nayagarh	Mahipur	Mahipur	Gateri	Ungibani Bajrakot forest road	Causeway	NPV 20%	2	2	3	10
404	Nayagarh	Mahipur	Mahilana	Kosalama	Kosalama	Forest Road	NPV 20%	2	2	3	10
405	Nayagarh	Mahipur	Mahipur	Mahipur	Michell Sempada RF	Water Body	NPV 80%	2	2	3	10
406	Nayagarh	Mahipur	Gumi	Dimitria	Near village Kusungadia	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	2	8
407	Nayagarh	Mahipur	Mahitma	Kosalanga	Kosalanga	Watch Tower	NPV 20%		2	3	8
408	Nayagarh	Daspalla	Sakeni	Sakeni	Gumhapaju	Guided the unregulated well	SSWAMP		2	2	8
409	Nayagarh	Panchdi	Darpanarayampur	Darpanarayampur	Darpanarayampur	Forester Quarter	NPV 20%	2	2	3	10
410	Jharsuguda	Isobira	Siripalli	Siripalli	Badhkula PRF, Buchamunda	Water Body	NPV 80%	2	2	3	10
411	Jharsuguda	Bogdhi	Bogdhi	Bogdhi	Bhunia Goyolmora PRF	Solar Fencing	NPV 80%		0	1	4
412	Jharsuguda	Bogdhi	Bogdhi	Kedobahal	Hatmal PRF	Solar Fencing	NPV 80%		0	1	4
413	Jharsuguda	Jharsuguda	Malka	Malka	Kukurjanga	Improvement of Bird habitat	NPV 80%		2	2	8
414	Jharsuguda	Jharsuguda	Jharsuguda	Jharsuguda	Singhabagha	Improvement of Bird habitat	SSWAMP	2	2	2	10
415	Jharsuguda	Jharsuguda	Jharsuguda	Jharsuguda	Jharsuguda range office site	Solar yard	NPV 20%		2	3	8
416	Jharsuguda	Jharsuguda	Katikela	Katikela	Katikela RF	Maintenance of Water Body	NPV 80%	2	2	2	10
417	Jharsuguda	Jharsuguda	Katikela	Katikela	Katikela RF	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	3	8
418	Jharsuguda	Belpahar	Bogmunda	Tangorpalli	Rampaluga	Watch Tower	SSWAMP		2	3	8

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419	Jharsuguda	Belipahar	Kmakotara	Badimal	Badimal	Forest Guard Quarter	NPV 20%		2	3	8
420	Jharsuguda	Belipahar	Bhampali	Kedampat	Kedampat	Maintenance of Freline	NPV 80%		2	3	8
421	Jharsuguda	B R Nagar	Rajpur	Badjor	On the forest road andhra to Badjor	Causeway	NPV 20%		2	3	8
422	Jharsuguda	B R Nagar	B R Nagar	Rajpur	Madhjar	Forest Guard Quarter	NPV 20%		2	3	8
423	Jharsuguda	B R Nagar	Rajpur	Badjor	Andhra to Badjor Forest Road	Culvert	NPV 20%		2	3	8
424	Jharsuguda	Jharsuguda	Jharsuguda	Badjori	New DFO office campus boundary	Boundary wall	NPV 20%		2	3	8
425	City Forest Bhubaneswar	Bhubaneswar	Khandagiri(west)	Mendabahal	Mendabahal RF	Maintenance of Freline	NPV 80%		2	2	8
426	City Forest Bhubaneswar	Phulnakhara	Phulnakhara	Phulnakhara	Bagalpur (Near panchayat office)	Boundary wall	NPV 20%		2	3	8
427	City Forest Bhubaneswar	Phulnakhara	Gopalpur	Gopalpur	Side of range office	Forest Guard Quarter	NPV 20%		2	3	8
428	Deogarh	Reamal	Taranga	Tranga	Permanent nursery campus at Kudalbaran	Secureyard	NPV 20%		2	2	8
429	Deogarh	Pallahada	Pallahad	Pallahada	Forester quarter campus	Tube Well	NPV 20%		2	3	8
430	Deogarh	Pallahada	Pallahada	Pallahada	Badhamura	Community Centre	CA/PCA		2	3	8
431	Deogarh	Barkot	Kala	Saida	Katei	Elephant proof trench	NPV 80%		2	2	8
432	Deogarh	Pallahada	Pallahada	Kishomagar	Malayagiri RF	Water Body	SSW/MMP		2	3	8
433	Deogarh	Barkot	Thamala	Serwali	Serwali to Aulata	Forest Road	NPV 20%		2	3	8
434	Deogarh	Barkot	Kala	Saida	Saida	Solar Light	SSW/MMP		2	3	8
435	Deogarh	Barkot	Barkot	Barkot	Campus of Barkot Range office, Barkot	Forest Guard Quarter	NPV 20%		2	3	8
436	Deogarh	Barkot	Dantarpahal	Dantarpahal	Village: Daudikhol	Culvert	NPV 20%		2	2	8
437	Deogarh	Barkot	Dantarpahal	Dantarpahal	Dudhikhol	Causeway	NPV 20%		2	3	8
438	Deogarh	Deogarh	Deogarh	Deogarh	Hedamura	Water Body	NPV 80%		2	3	8
439	Deogarh	Deogarh	Deogarh	Kansara	Kansara	Forester quarter	NPV 20%		2	3	8
440	Deogarh	Deogarh	Laimura	Ludhar	Ludhar	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	2	8
441	Deogarh	Deogarh	Telhibani	Telhibani	Telhibani	Maintenance of Freline	NPV 80%		2	3	8
442	Deogarh	Deogarh	Deogarh	Deogarh	Campus of Range of office	Range Officer Residence	NPV 20%	2	2	3	10
443	Deogarh	Deogarh	Laimura	Laimura	Laimura section of office campus	Installation of VHF Tower	NPV 20%		2	3	8
444	Deogarh	Pallahada	Pallahada	Pallahada	Range office	Boundary wall	NPV 20%		2	3	8
445	HrakudWL	Lakhanpur	Ultam	Gobindapur	Gobindapur	Tube Well	NPV 20%		2	2	8
446	HrakudWL	Lakhanpur	Jhagadabehera	Pathidunguri	Pathidunguri	Trap Camera	NPV 20%		2	3	8
447	HrakudWL	Lakhanpur	Jhagadabehera	Pathidunguri	Barabhandla chawk	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	2	8
448	HrakudWL	Lakhanpur	Sambarbhera	Mundabali	On the way from Barabanka Bente-spcr to village	Culvert	NPV 20%		2	3	8

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449	HrakudWL	Lakhanpur	Samarthara	Samarthara	Samarthara	Boundary wall	NPV 20%		2	3	8
450	HrakudWL	Kamgaon	Kamgaon	Junani	Forest Guard Quarter	Forest Guard Quarter	NPV 20%	2	2	2	10
451	HrakudWL	Kamgaon	Dhoduksum	Panachhida	Panachhida	Causeway	NPV 20%		2	2	8
452	HrakudWL	Kamgaon	Hrakudksum	Panachhida	Panachhida	Forest Road	NPV 20%		2	3	8
453	HrakudWL	Kamgaon	Dhoduksum	Rengali	Salt Lick	Salt Lick	NPV 80%		2	3	8
454	HrakudWL	Kamgaon	Dhoduksum	Rengali	Campus of Range of office	Installation of VHF tower	NPV 20%	2	2	3	10
455	HrakudWL	Kamgaon	Dhoduksum	Rengali	Rengali	Fire Fighting Blower	NPV 80%		2	2	8
456	HrakudWL	Sambapur	Sambapur	Sambapur	Sambapur	forester quarter	NPV 20%		2	3	8
457	Bhadrak WL	Chandbali	Chandbali	Chandbali	Chandbali	forester quarter	NPV 20%		2	3	8
458	Bhadrak WL	Chandbali	Dhamara	Dhamara	Dhamara	Barbed Fencing	SSWAMP		2	3	8
459	Bhadrak WL	Chandbali	Dhamara	Dhamara	Dhamara	Maintenance of Boundary area	SSWAMP		2	3	8
460	Bhadrak WL	Basudapur	Bedapur	Bedapur	Bedapur	Forest Guard Quarter	NPV 20%		2	3	8
461	Chilika WL	Tangi	Mukteswar	Mangaljodi	Mangaljodi	Forest Guard Quarter	NPV 20%		2	3	8
462	Chilika WL	Tangi	Mukteswar	Mangaljodi	Mangaljodi	Tube Well	NPV 20%		2	3	8
463	Chilika WL	Tangi	Soren	Sunakhala	Sunakhala	Boundary wall	NPV 20%		2	3	8
464	Chilika WL	Tangi	Tangi	Tangi	Range office Campus	Range Officer Residence	NPV 20%		2	3	8
465	Chilika WL	Balugaon	Parikud	Nalaban	Nalaban Santury	Invasive Weed Eradication	NPV 80%		2	3	8
466	Chilika WL	Balugaon	Parikud	Nalaban	Nalaban Santury	Maintenance of Boundary area	NPV 80%	2	2	3	10
467	Chilika WL	Bambha	Keshpur	Bedagbali	On the way of watch Tower within forest Road	Causeway	NPV 20%		2	3	8
468	Chilika WL	Bambha	Keshpur	Bedagbali	NH to watch Tower	Forest Road	NPV 20%		2	3	8
469	Chilika WL	Satapada	Arakhakuda	Arakhakuda	Arakhakuda village	Forester Quarter	NPV 20%		2	3	8
470	Sundargarh	Sundargarh	Sundargarh	Podajalanga	Salpatria RF	Solar Light	SSWAMP		2	3	8
471	Sundargarh	Sundargarh	Sundargarh	Podajalanga	Salpatria RF	Salpatria water supply	GA/PCA		2	3	8
472	Sundargarh	Sundargarh	Sundargarh	Podajalanga	Salpatria RF	Community Centre	CAPCA	2	2	3	10
473	Sundargarh	Sundargarh	Sundargarh	Podajalanga	Salpatria RF	Tube Well	NPV 20%		2	3	8
474	Sundargarh	Ujalpur	Ujalpur	Budabahal	Budabahal	Water Body	NPV 80%		2	3	8
475	Sundargarh	Ujalpur	Ujalpur	Budabahal	Budabahal	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	1	6
476	Sundargarh	Ujalpur	Sampatrapali	Rajpur	Karlagrahi	Bamboo seed ball	NPV 80%		2	2	8
477	Sundargarh	Hemgiri	Hemgiri	Hemgiri	Hemgiri to behera amunda	Forest Road	NPV 20%		2	3	8
478	Sundargarh	Hemgiri	Hemgiri	Hemgiri	Inside of Garjapahad in Marakumunda	Anti-Poaching Barrack	NPV 20%		2	3	8
479	Sundargarh	Hemgiri	Rohini	Rohini	Rohini	Boundary wall	NPV 20%		2	3	8
480	Sundargarh	Hemgiri	Rohini	Rohini	Rohini	Tube Well	NPV 20%		2	3	8
481	Sundargarh	Lefipada	Gudia	Dhneragudi	Bhursidand	Forest Guard Quarter	NPV 20%		2	3	8
482	Sundargarh	Gopalpur	Thuria	Jamkani	Gopalpur to Jamkani Forest road	Sulvert	NPV 20%		2	2	8
483	Sundargarh	Gopalpur	Thuria	Jamkani	On the Jamkani RF	Maintenance of fireline	NPV 80%		2	3	8
484	Sundargarh	Gopalpur	Thuria	Jamkani	On the way of forest road	Causeway	NPV 20%		2	3	8

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485	Rourkela	Kuarmunda	Birds	Birkera	Birkera section office campus	Tube Well	NPV 20%		2	3	8
486	Rourkela	Beljanganpur	Sonakhan	Buchupada	Silikudiar	Solar fencing	NPV 80%		0	1	4
487	Rourkela	Beljanganpur	Maldih	Bandkhaman	Budhaam to Bandkhaman forest road	Culvert	NPV 20%		2	2	8
488	Rourkela	Beljanganpur	Maldih	Ludabasa	Rengabada to Kalodhi	Forest Road	NPV 20%		2	3	8
489	Rourkela	Beljanganpur	Maldih	Maldih	Campus of Maldih section office	Boundary wall	NPV 20%		2	3	8
490	Rourkela	Banki	K.balang	K.balang	Inside the nursery of Lugada	Improvement of Bird habitat	NPV 80%		2	2	8
491	Rourkela	Banki	K.balang	K.balang	Jarabada RT	Water Body	NPV 80%		2	3	8
492	Rourkela	Banki	Dhangar	Birtoia	Dhangar near waterbody	Grass Land	SSWM/MP		2	1	6
493	Rourkela	Banki	Rejmunda	Birtoia	Dhangar near burutola	Renovation of water body	SSWM/MP		2	2	8
494	Rourkela	Beljanganpur	Sonakhan	Bukupada	Sonakhan to Silikudiar solar fencing	Solar fencing	NPV 80%		0	1	4
495	Rairakhol	Girish Chadrapur	Balkiari	Khoigarh	Khoigarh	Tube Well	NPV 20%	2	2	3	10
496	Rairakhol	Girish Chadrapur	Balkiari	Khoigarh	Khoigarh	Forest Guard Quarter	NPV 20%		2	3	8
497	Rairakhol	Girish Chadrapur	Balkiari	Balkiari	Balkiari	Guided the unguided well	SSWM/MP		2	3	8
498	Rairakhol	Girish Chadrapur	Balkiari	Balkiari	Charmal to balkiari Forest road	Culvert	NPV 20%		2	3	8
499	Rairakhol	Girish Chadrapur	Lunahar	Jaresinga	Phukusum to labab forest road	Causeway	NPV 20%		2	3	8
500	Rairakhol	Girish Chadrapur	Girish Chadrapur	Girish Chadrapur	Khoigarh RT	Maintenance of Fireline	NPV 80%		2	3	8
501	Rairakhol	Charmal	Charmal	Charmal	Charmal	Range Office	NPV 20%		2	3	8
502	Rairakhol	Bachbali	Kodalgarh	Tal	Kendumda watchtower	Maintenance of Fruit bearing & Foddlir species around Water Body	NPV 80%		2	3	8
503	Rairakhol	Bachbali	Kodalgarh	Ambajhari	Rehan near village ambajhari	Water Body	NPV 80%		2	3	8
504	Sambalpur	Town	Jempali	Jempali	Barahampur RT	Maintenance of Boundary area	NPV 80%		2	3	8
505	Sambalpur	Dhama	Goyalising	Goyalising	Digharan	Water Body	NPV 80%		2	3	8
506	Sambalpur	Dhama	Kuigoan	Kuigoan	Kuigoan	Forest Road	NPV 20%		2	3	8
507	Sambalpur	Dhama	Tabali	Tabali	Tabali	Maintenance of Fireline	NPV 80%		2	3	8
508	Sambalpur	Dhama	Lorasara	Lorasara	Lorasara	Forest Guard Quarter	NPV 20%		2	2	8
509	Sambalpur	Dhama	Lorasara	Lorasara	FRH boundary wall at Lorasara	Boundary wall	NPV 20%		2	3	8
510	Sambalpur	Sadar	Jhankarpali	Jhankarpali	Antunguri to Jhankarpali forest road	Culvert	NPV 20%		2	3	8
511	Sambalpur	Padibahal	Padibahal	Ludiali	Ludiali	Maintenance of Fruit bearing & Foddlir species around Water Body	NPV 80%		2	1	6

SN	Division	Range	Section	Beat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
512	Sambaipar	Padiabahal	Chhamunda	Chhamunda	Chambda to Jantila forest road	Causeway	NPV 20%		2	3	8
513	Sambaipar	Bengali	Gumlei	Gumlei	Jueghat to Badpali RF	Bamboo seed ball	NPV 80%		2	1	6
514	Sambaipar	Bengali	Sardhpalli	Sardhpalli	Forester Quarter	Forester Quarter	NPV 20%		2	3	8
515	Sambaipar	Sidar	Jujomura	Jujomura	Jujomura range office campus	Tube Well	NPV 20%		2	3	8
516	Sitkosia WL	Punurakot	Boghamunda	Boghamunda	Boghamunda	Meadow Development	NPV 80%		2	3	8
517	Sitkosia WL	Punurakot	Boghamunda	Boghamunda	Boghamunda	Plantation of Fruit & Fodder species around the Water Body	NPV 80%		2	2	8
518	Sitkosia WL	Punurakot	Punurakot	Punurakot	Punurakot	Invasive Weed Eradication	NPV 80%		2	2	8
519	Sitkosia WL	Punurakot	Punurakot	Punurakot	Baddamaka	Bamboo seed ball	NPV 80%		2	3	8
520	Sitkosia WL	Punurakot	Punurakot	Chakrei(A)	Inside Chakrei campus of forest guard quarter	Tube Well	NPV 20%		2	2	8
521	Sitkosia WL	Punurakot	Punurakot	Chakrei(B)	Hedbaseu	Escavation of elephant proof trench	NPV 80%		2	2	8
522	Sitkosia WL	Punurakot	Punurakot	Chakrei(B)	Bhurkundi village	Forest Road	NPV 20%		2	3	8
523	Sitkosia WL	Punurakot	Toka	Tuluka(D)	Tuluka village	Solar fencing	NPV 80%		0	1	4
524	Sitkosia WL	Punurakot	Tuluka	Tuluka(N)	Tuluka Forest guard quarter boundary wall	Boundary wall	NPV 20%		2	3	8
525	Sitkosia WL	Phillinda	Katrang	Katrang	Katrang	Forest Guard Quarter	NPV 20%	2	2	3	10
526	Sitkosia WL	Tikarpada	Tikarpada	Tikarpada	Tikarpada Eco park	Zoo Management	NPV 80%		2	3	8
527	Sitkosia WL	Tikarpada	Tikarpada	Tikarpada	Tikarpada	Maintenance of Fretline	NPV 80%		2	2	8
528	Sitkosia WL	Tikarpada	Tikarpada	Tikarpada	Tikarpada	Maintenance of Fretline	NPV 80%		2	3	8
529	Sitkosia WL	Tikarpada	Tikarpada	Tikarpada	Tikarpada	Salt Lick	NPV 20%		2	3	8
530	Sitkosia WL	Tikarpada	Tikarpada	Tikarpada	Tikarpada	Culvert	NPV 20%		2	3	8
531	Bargarh	Bhathi	Samardara	Samardara	Samardara	Anti-Poaching Barrack	NPV 20%		2	3	8
532	Bargarh	Bhathi	Dochuan	Junani	Junani, Boundary of FG Guard dt.	Boundary wall	NPV 20%		2	3	8
533	Bargarh	Bhathi	Samardara	Gangal	Gangal, in the campus of FG dt.	Tube Well	NPV 20%		2	3	8
534	Bargarh	Ghoss	Soneha	Sargunapali	Jharei	Maintenance of Fruit bearing & Fodder species around Water Body	NPV 80%		2	1	6
535	Bargarh	Bhathi	Duari	Pandritareli	Jaimunda to Dwari Forest Road (SDBR RF)	Forest Road	NPV 20%		2	3	8
536	Bargarh	Bhathi	Samardhara	Bhathi	Samardhara	Forest Guard quarter	NPV 20%		2	3	8
537	Malkangiri	Chitrakunda	Chitrakunda	Chitrakunda	Chitrakunda (Pujargada)	Forester quarter	NPV 20%	2	2	3	10
538	Malkangiri	Bairasia	Sin Nathapur	Sin Nathapur	Dudumaguda (on the way of Phaksumi to Podkhal)	Tube Well	NPV 20%		2	3	8
539	Malkangiri	Motu	Motu	Murfiguda	Kadmatale RF, Near to State highway	Causeway	NPV 20%		2	3	8
540	Malkangiri	Malkangiri	Motu	Murfiguda	Kadmatale RF	Maintenance of Fretline	NPV 80%		2	2	8

SN	Division	Range	Section	Boat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
541	Malkangiri	Motu	MV79	Maryamkanda	MV 79 (close to SH Motu to Malkangiri)	Forest Guard Quarter	NPV 20%	2	2	3	10
542	Malkangiri	Malkangiri	Kurkunda	Kurkunda	Boundary wall of Kurkunda Section office	Boundary wall	NPV 20%	2	2	2	8
543	Malkangiri	Malkangiri	Malkangiri	Malkangiri	Goparbat RI	Bear Cave	NPV 80%	2	2	3	10
544	Malkangiri	Malkangiri	Pedmagiri	Jharapali	Jharapali	Maintenance of Water Body	NPV 80%	2	2	2	8
545	Malkangiri	Malkangiri	Malkangiri	Jharapali	Sindimal PRF	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	2	8
546	Nawarangpur	Nabarangpur	Nabarangpur	Iragam	Charakaban Range office Boundary	Boundary wall	NPV 20%	2	2	3	8
547	Nawarangpur	Dabugao	Dabugao	Sarguli	In between Paragada to Jangula forest Road	Culvert	NPV 20%	2	2	3	8
548	Nawarangpur	Dabugao	Maidapur	Charmla	Charmla (gorget RI)	Bear Cave	SSWMP	2	2	3	10
549	Nawarangpur	Kodiga	Kodiga	Kusumi	In between of Jharakudapur to malboda	Causway	NPV 20%	2	2	3	8
550	Nawarangpur	Umariot	Singsari	Singsari	Singsari central Nursery campus	Forest Guard Quarter	NPV 20%	2	2	3	8
551	Nawarangpur	Umariot	Tohara	Tohara	Tohara Section office Campus	Forester Quarter	NPV 20%	2	2	3	8
552	Nawarangpur	Kodiga	Aligao	Kusumi	Aligao FG Quarter	Tube Well	NPV 20%	2	2	3	8
553	Balasure WL	Baleswar	Urdayapur	Urdayapur	Urdayapur sea-shore	Forest Guard Quarter	NPV 20%	2	2	3	8
554	Balasure WL	Baleswar	Budha	Sukjodi	Sukjodi	Tube Well	NPV 20%	2	2	3	8
555	Balasure WL	Sora	Khuntapatha	Khuntapatha	Khuntapatha	Forester Quarter	NPV 20%	2	2	3	8
556	Balasure WL	Sora	Khuntapatha	Khuntapatha	Khuntapatha	Fire Fighting Blower	SSWMP	2	2	3	8
557	Balasure WL	Sora	Khuntapatha	Dantur	Balimunduli to Champeswar	Forest Road	NPV 20%	2	2	3	8
558	Balasure WL	Sora	Opada	Agripada	Agripada	Water Body	NPV 80%	2	2	2	8
559	Balasure WL	Sora	Opada	Agripada	Agripada	Plantation of Fruit & Fodder species around the Water Body	NPV 80%	2	2	2	8
560	Balasure WL	Sora	Opada	Agripada	Kudha Century	Maintenance of Fireline	NPV 80%	2	2	2	8
561	Balasure WL	Kudha	Kupari	Kupari	Kupari Central Nursery	Boundary wall	NPV 20%	2	2	3	10
562	Balasure WL	Sora	Kupari	Paipada	Mansadali (Denuisahi)	Maintenance of Water Body	NPV 80%	2	2	3	8
563	Balasure WL	Sora	Opada	Opada	Opada range office Campus	Range Officer Residence	NPV 20%	2	2	3	10
564	Balasure WL	Kudha	Jharaghati	Kainmahudi	Kainmahudi	Maintenance of Boundary area	NPV 80%	2	2	3	8
565	Balasure WL	Kudha	Jharaghati	Kainmahudi	Jharaghati to Purunapani forest Road	Causway	NPV 20%	2	2	3	10
566	Balasure WL	Kudha	Jharaghati	Kainmahudi	Ghusria Nala	Culvert	NPV 20%	2	2	3	8
567	Balasure WL	Kudha	Kudha	Kudha	Near to Kudha Section office	SILTICK	NPV 80%	2	2	3	8
568	Balasure WL	Kudha	Panchalingeswar	Tenda	Tenda	Invasive Weed Eradication	NPV 80%	2	2	3	8
569	Balasure WL	Chandpur	Baleswar	Balesore	Division office	Purchasing of Drone & its assessorise	NPV 20%	2	2	3	8
570	Balasure WL	Chandpur	Chandpur	Chandpur	Chandpur Guest house	Solar Light	NPV 80%	2	2	3	8

SN	Division	Range	Section	Beat	Location/Site	Type of Assets	Component	Signboard Score	Usability Score	Condition Score	Rank
571	Puri WL	Konark	Konark	Konark	Mangaleswar	Maintenance of Fruit bearing & Fodder species around Water Body	NPV 80%	2	2	1	8
572	Puri WL	Konark	Konark	Konark	Mangaleswar FS-1	Meadow Development	SSWAMP	2	2	3	10
573	Puri WL	Konark	Konark	Konark	Bange office, Konark	Trap Camera	SSWAMP	2	2	3	8
574	Puri WL	Balukhand	Balukhand	Balukhand	Chidananda Ashram gat to Sea beach	Forest Road	SSWAMP	2	2	3	10
575	Puri WL	Brahmagiri	Moto	Kathua redi	Near to Moto section office	Floating Jetty with Speed boat	SSWAMP	2	2	3	8
576	Puri WL	Brahmagiri	Herchandi	Kathuali	Palanka VSS area to Moto VSS	Maintenance of Fireline	SSWAMP	2	2	3	8
577	Puri WL	Balukhand	Balukhand	Balukhand	Narsingaptra	Meadow Development	SSWAMP	2	2	3	10
578	Baliguda	Kotagarh	Lassey	Supamaha	Balukhand Road side	Causeway	NPV 20%	2	2	3	8
579	Baliguda	Kotagarh	Lassey	Supamaha	Pabangaon	Culvert	NPV 20%	2	2	3	8
580	Baliguda	Kotagarh	Lassey	Supamaha	Jarighali	Forest Guard Quarter	NPV 20%	2	2	3	8
581	Baliguda	Tumudibandha	Kurtamgarh	Kurtamgarh	Batabadi	Water Body	NPV 80%	2	2	3	8
582	Baliguda	Tumudibandha	Tumudibandha	Kurtamgarh	Batabadi	Forest Road	NPV 20%	2	2	3	8
583	Baliguda	Tumudibandha	Tumudibandha	Malguda	Batabadi	Forster Quarter	NPV 20%	2	2	3	8

Annexure II: Geo Coordinates

Plantation

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
1	Bedhamunda , CAPCA ANR-600	Pallahada	Pallahada	Pallahada	Deogarh	ANR @ 600 Creation	21.41174	85.20845
2	Baliposi ANR Without gap(AJY)	Seegarh	Pallahada	Pallahada	Deogarh	AJY ANR Without Gap Creation	21.46505	85.16324
3	Kenduapal, 3rd year mainenance of AR 1600	Taranga	Taranga	Reamal	Deogarh	AR (3rd Year Maintenance)	21.34631	84.61582
4	Kantabandha, 2nd year maintenance, AJY	Taranga	Reamal	Reamal	Deogarh	AJY ANR @ 200 (2nd Year Maintenance)	21.31094	84.58501
5	Purunapani ,ANR 200, 2nd year maintenance	Battsama	Pallahada	Pallahada	Deogarh	ANR @ 200 (2nd Year Maintenance)	21.41697	85.20504
6	ANR 200 ,2nd year maintence jamaridha	Jamardiha	Jamardiha	Pallahada	Deogarh	ANR @ 200 (2nd Year Maintenance)	21.49273	85.25047
7	Bandhakhol (2nd year maintenance of Fruit & Fodder species plantation)	Hadamunda	Deogarh	Deogarh	Deogarh	Food and fodder Plantation (2nd year Maintenance)	21.49244	84.7222869
8	Miyawaki plantation 2021-22 potapali VF	A Kantapali	Burla	Town	Sambalpur	Miyawaki Plantation	21.45046	83.92301
9	ANR with out Gap.senha pali	Jampali	Jampali	Town	Sambalpur	AJY ANR Without Gap Creation	21.39511	83.93885
10	Khira pada (food& fodder- spicies)AMR 600	Jhankar pali	Jhankarpali	Sadar	Sambalpur	ANR @ 600 Creation	21.38954	84.05737
11	ANR 200, Jaduloising	Jaduloising	Basiapada	Sadar	Sambalpur	ANR @ 200 Creation	21.30836	84.01082
12	Bhatra, ANR 400Plantation	Megpal (west)	Megpal	Padiabahal	Sambalpur	ANR @ 400 Creation	21.36555	84.27068
13	ANR 200, Lladladi	Ladladi	padia lahal	Padiabahal	Sambalpur	ANR @ 200 Creation	21.35507	84.23027
14	AR 1600, KhuntlamalVF	Gandakona	Katerdhua	Rengali	Sambalpur	AR Plantation	21.67298	84.1856
15	ANR400, Khuntlamal	Khuntlamal	Katerchuan	Rengali	Sambalpur	ANR @ 400 Creation	21.67303	84.18565
16	C/A ANR200, 2nd year maintenance , Bhimjor	Kenmal	Sardha pali	Rengali	Sambalpur	ANR @ 200 (2nd Year Maintenance)	21.76995	84.14406
17	2nd year maintenanc, ANR 200	Gumloi	Gumloi	Rengali	Sambalpur	ANR @ 200 (2nd Year Maintenance)	21.59544	84.13299
18	Talboi ANR Plantation 3rd year maintence	Tabloi	Tabloi	Dhama	Sambalpur	ANR @ 200 (3rd Year Maintenance)	21.15659	83.97353
19	Protection to RET Species(Bija)2nd year	Badmal	dhama	Dhama	Sambalpur	ANR Without Gap-RET Species (2nd Year Maintenance)	21.24438	83.99931
20	Binjhyagiri, ANR 200	Panchirida	Panchirida	Panchirida	Nayagarh	ANR @ 200 Creation	20.070113	85.1378306
21	Kenduabida, Bald Hill	Kenduabida	Ganla	Ganla	Nayagarh	Bald Hill Plantation	20.365177	84.9796664

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
22	Kolar RL (AR 3rd year mentanenu)	Pankua	sakeni	Daspalla	Nayagarh	AR (3rd Year Maintenance)	20.276612	84.812116
23	Hatimunda RF CAM-19, ANR 200	Kanigiri	Mahipur	Mahipur	Nayagarh	ANR @ 200 Creation	20.219136	84.986075
24	Componet-5, Sapua RF	Nuapali	Singhapada	Khandapada	Nayagarh	ANR @ 200 Creation	20.276627	85.074503
25	Regadimuda RFC-9(2nd year maintenance)	Korada	Mahitama	Mahipur	Nayagarh	ANR @ 200 (2nd Year Maintenance)	20.284191	84.920389
26	Chunida AR Plantation 2 year maintenance	Satavauni	Bhadraakh	Bhadraakh WL	Bhadraakh WL	AR (2nd Year Maintenance)	20.98725	86.480204
27	Baljhara AR Plantation	Agarpada	Agarpada	Bhadraakh WL	Bhadraakh WL	AR Plantation	21.1312	86.2126
28	Deulapatna, Near Ghadagadi Bandha	Deulapatna	Khandagir i(west)	Bhubaneswar	CT Forest Division, Bhubaneswar	ANR @ 200 Creation	20.27554	85.713453
29	Kesuria to sai Temple (4th year maintenance)	Laxmi sagar	Rasulgarrh	Mancheswar	CT Forest Division, Bhubaneswar	Avenue Plantation (4th year maintenance)	20.26402	85.869166
30	Medinipur ,Garabasha(CA,AR 1600)	Sundargarh	Sundargarh	Sundargarh	Sundargarh	AR Plantation	22.07051	84.0673
31	Podajalnga(CA ANR 400)	Sundargarh	Sundargarh	Sundargarh	Sundargarh	ANR @ 400 Creation	22.11269	84.06932
32	Podajalnga(ANR 600)	Sundargarh	Sundargarh	Sundargarh	Sundargarh	ANR @ 600 Creation	22.1128	84.06941
33	Girima, ANR 200	Jamkani	Tihuria	Gopalpur	Sundargarh	ANR @ 200 Creation	22.09414	83.60055
34	4th year Bald hill plantation, Jhargaon	Sargipali	Nuadli	Ujalpur	Sundargarh	Bald Hill Plantation (4th year Maintenance)	22.02347	83.92058
35	2nd maintenance fodder and fruit species of plantation,	Saralegarh	Demabahal	Lephripada	Sundargarh	AR (2nd Year Maintenance)	22.15869	83.75117
36	Jhulendih, AR, 3rd year mentanas	Deuli	Lephripala	Lephripada	Sundargarh	AR (3rd Year Maintenance)	22.0631	83.86802
37	4th year meantance AR Plantation, Raidih	Raidih	Nuadhi	Ujalpur	Sundargarh	AR (4th year Maintenance)	21.9979	83.88796
38	Chuhiri bona, 6th year maintenance of ANR200	Ganbharidih	Ujalpur	Ujalpur	Sundargarh	ANR @ 200 (6th Year Maintenance)	22.22232	83.98786
39	Patkijor (2nd year maintenance ANR 200	Birkaldih	Kimirikela	Ujalpur	Sundargarh	ANR @ 200 (2nd Year Maintenance)	22.0345	83.95032
40	3rd year aintenance of AR, Jimer	Badbhanga	Nuadhi	Ujalpur	Sundargarh	AR (3rd Year Maintenance)	22.034822	83.95128
41	Kudarbahal, ANR 200	Barkani	Bandamunda	Pamposh	Rourkela	ANR @ 200 Creation	22.20273	94.95118
42	Sanamarein ANR 200	Birda	Birda	Kuarmunda	Rourkela	ANR @ 200 Creation	22.07734	84.78608
43	Jadakudar, Baldhill plantation	Birikera	Birda	Kuarmunda	Rourkela	Bald Hill Plantation	22.07978	84.78622
44	Gutidhar (Mundatola) AJY ANR 200	Balanda	Kulungaon	Kuarmunda	Rourkela	AJY ANR With Gap @ 200 Creation	22.18005	84.77891
45	Dalposh Road, pedmini place	Bandamunda	Bandamunda	Pamposh	Rourkela	Avenue Plantation	22.25392	84.91556

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
46	Majhipada AJY ANR 200	Chandiposh	Sunakhan	Rajgangapur	Rourkela	AJY ANR With Gap @ 200 Creation	22.10836	84.5599
47	Katang (Artificial regeneration)	Rajjngapur	Rajjngapur	Rajgangapur	Rourkela	ANR @ 600 Creation	22.21614	84.49931
48	Mishrapali AJY ANR 200	Rajamunda	Banki	Banki	Rourkela	AJY ANR With Gap @ 200 Creation	21.86627	84.91815
49	Paraposh, AR Plantation	Lahulipada	Rajamunda	Banki	Rourkela	AR Plantation	21.86397	84.95661
50	Kumakela CA/PCA NAR 200 (2nd year mantanance)	Chandrapur	Banki	Banki	Rourkela	ANR @ 200 (2nd Year Maintenance)	22.05157	84.91296
51	Haarhar pur. (3rd year mantananceANR400)	Kuarmunda	Kuarmunda	Kuarmunda	Rourkela	ANR @ 400 (3rd Year Maintenance)	22.302398	84.779168
52	Bahimal (2nd year maintenance ANR 200)	Lodhalasa	Malidih	Rajgangapur	Rourkela	ANR @ 200 (2nd Year Maintenance)	22.158145	84.5711529
53	Silikudar (ANR 200, 2nd year mantanance)	Buchkupada	Sunakhan	Rajgangapur	Rourkela	ANR @ 200 (2nd Year Maintenance)	22.15865	84.57287
54	Sangrampur (AJY ANR without gap, creation year)	Rengali	Badmal	Badmal	Rairakhol	AJY ANR Without Gap Creation	21.050702	84.060215
55	Block plantation , Dangapathar RF (angul- sundragartower line under)	Gadgadbahal	Bansajal	Charmal	Rairakhol	AR Plantation	21.8303	84.16078
56	Khogharh RF, ANR @ 200	Kalindar	Rampur	Rairakhol	Rairakhol	ANR @ 200 Creation	21.1096	84.21872
57	Podabalanda, Fodder plantation, 3rdyear maintenance	Podabalanda	Badbahal	Badbahal	Rairakhol	AR (3rd Year Maintenance)	21.03774	84.29084
58	ANR200,Dahimal VSS	Kadabahali	Ghesramal	Naktideul	Rairakhol	AJY ANR With Gap @ 200 Creation	21.17261	84.4741
59	3rd year maintenance of ANR 200, Lusura	Kadabahali	Ghesramal	Naktideul	Rairakhol	ANR @ 200 (3rd Year Maintenance)	21.18079	84.49666
60	Jharpada ANR 2nd year mentenance)	Saheli	Naktideul	Naktideul	Rairakhol	ANR @ 200 (2nd Year Maintenance)	21.23565	84.60494
61	Chelkuti(ANR200)	Rajpur	Rajpur	BR Nagar	Jharsuguda	ANR @ 200 Creation	21.868504	83.906003
62	Chelkuti(AR 1600)	Rajpur	Rajpur	BR Nagar	Jharsuguda	AR Plantation	21.86853	83.905987
63	Kusrioi village	Manaharpali	Bandhbahal	BR Nagar	Jharsuguda	ANR @ 200 Creation	21.712859	83.861156
64	Krdaloi,CA/PCA, ANR 200	Kudaloi	Lakhanpur	Belpahad	Jharsuguda	ANR @ 200 Creation	21.79148	83.8163
65	Ecopark, Malimunda	Jharsuguda	Jharsuguda	Jharsuguda	Jharsuguda	Miyawaki Plantation	21.908443	83.072328
66	J.Pandkimal(AR1600)	J.Pandkimal	Lariapali	Kolabira	Jharsuguda	AR Plantation	21.851185	84.263294
67	Katikkela (2nd year maintenance)	Katikkela	Katikkela	Jharsuguda	Jharsuguda	ANR @ 200 (2nd Year Maintenance)	21.790246	84.083246
68	Bejharan, 4th year Maintenance of ANR 200	Kadamdihi	Kadamdihi	Belpahad	Jharsuguda	ANR @ 200 (4th Year Maintenance)	21.775094	83.71275
69	Sukhadahi, 4th year maintenance ANR 200	Sukhadahi	Kadamdihi	Belpahad	Jharsuguda	ANR @ 200 (4th Year Maintenance)	21.808543	83.645567
70	Niktimal, 2nd year maintenance, ANR 400	Niktimal	Lariapali	Kolabira	Jharsuguda	ANR @ 400 (2nd Year Maintenance)	21.842339	84.204089

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
71	Kendulhi, 3rd Year maintance of AR 1600	Bhatlaida	Kolabira	Kolabira	Jharsuguda	AR (3rd Year Maintenance)	21.87655	84.327193
72	Mundabahal(ANR 200 Plantation)	Kumbho	Dwari	Bhatli	Baragarh	ANR @ 200 Creation	21.499358	83.393196
73	Jaypur(2nd year maintance ANR 200)	Jaypur	Bhatli	Bhatli	Baragarh	ANR @ 200 (2nd Year Maintenance)	21.492727	83.41374
74	Singenpal	Talgaon	Barpali	Baragarh	Baragarh	AR Plantation	21.13495	83.65345
75	Mulekhaman,Near sargunapali village	Sargunapali	Sohela	Ghess	Baragarh	AJY ANR Without Gap Creation	21.217188	83.261233
76	Mulekhaman,Near sargunapali village	Sarunapali	Sohela	Ghess	Baragarh	AJY ANR Without Gap (2nd Year Maintenance)	21.230423	83.250938
77	Palsada village (2nd year maintance ANR400)	Pal sada	Padmpur	Padmapur	Baragarh	ANR @ 400 (2nd Year Maintenance)	21.0375	82.96272
78	Ambahal, ANR 400 Plantation	Dahita	Padmapur	Padmapur	Baragarh	ANR @ 400 Creation	20.883482	83.058272
79	CheliamaI2nd year maintenance of ANR 200	Temri	Paikmal	Paikmal	Baragarh	ANR @ 200 (2nd Year Maintenance)	21.020167	82.863811
80	Matikhania, ANR With Gap Plantation	Jhadachuan	Jhadachuan	Kuldiha	Balasore WL	ANR @ 200 Creation	21.43969	86.586438
81	AR Plantation ,Kamadliha Pada	Aghariapada	Kamadhiapada	Sora	Balasore WL	AR Plantation	21.35027	86.52555
82	2nd Year Maintenance, Anlapala AJY	Naranpur	Sajanagarh	Nilgiri	Balasore WL	AJY ANR Without Gap (2nd Year Maintenance)	21.52592	86.677467
83	Kalamchuan(AJY 2nd Year Maintenance ANR Without Gap)	Bailhudi	Kupari	Sora	Balasore WL	AJY ANR Without Gap (2nd Year Maintenance)	21.269421	86.376332
84	AJY 2nd year Maintenance ANR Without Gap	Kendukhunta	Baradiha	Jaleswar	Balasore WL	AJY ANR Without Gap (2nd Year Maintenance)	21.857461	87.11432
85	Menakasa	Kendukhunta	Baradiha	Jaleswar	Balasore WL	ANR @ 200 (2nd Year Maintenance)	21.856137	87.121096
86	Bhagabati FS(ANR200)	Ramchandi	Ramchandi	Konark	Puri WL	ANR @ 200 Creation	19.86273	86.066158
87	Sahana,Casurian AR Plantation	Muhanamuha	Muhanamuha	Astarang	Puri WL	AR Plantation	19.957745	86.34479
88	Ramchandi FS (2nd year maintenance)	Ramchandi	Ramchandi	Konark	Puri WL	ANR @ 200 (2nd Year Maintenance)	19.871442	86.06115
89	Samarei Sasana, 3rd year maintenance of AR 1600	Hariapur	Nimapara	Gop	Puri WL	AR (3rd Year Maintenance)	20.093967	85.862751
90	Balukhand, 3rd year maintenance of ANR 600	Balukhanda	Balukhanda	Balukhanda	Puri WL	ANR @ 600 (3rd Year Maintenance)	19.812478	85.880071
91	Beleswar (2nd year AR Plantainance 1600)	Bhuan	Balighai	Balukhanda	Puri WL	AR (2nd Year Maintenance)	19.829052	85.943506
92	3rd year maintenance of AR 2500, Tikana (Near Kusabhadra River Land)	Kapleswar	Ramchandi	Konark	Puri WL	AR (3rd Year Maintenance)	19.848239	86.025237
93	Kanheipur	Sunakhala	Soran	Tangi	Chilika WL	ANR @ 200 Creation	19.82466	85.283165

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
94	Darilbati (bald Hill)	Badaghati	Keshpur	Rambha	Chilika WL	Bald Hill Plantation	19.581748	85.103127
95	Samal (ANR200 2nd Year Maintenance)	Badaghati	Keshpur	Rambha	Chilika WL	ANR @ 200 (2nd Year Maintenance)	19.575179	85.133468
96	Sipakuda (2nd Year Maintenance ANR200)	Rambha	Rambha	Rambha	Chilika WL	ANR @ 200 (2nd Year Maintenance)	19.474768	85.101275
97	Gajapati Nagar(2nd Year AR 1600)	Palur	Rambha	Rambha	Chilika WL	AR (2nd Year Maintenance)	19.458506	85.114415
98	3rd Year Maintenance, ANR200, Pittisal	Pittisal	Pittisal	Rambha	Chilika WL	ANR @ 200 (3rd Year Maintenance)	19.515026	85.228894
99	4th Year Maintenance, Nandala	Nandala	Pittisal	Rambha	Chilika WL	ANR @ 400 (4th Year Maintenance)	19.478928	85.182941
100	Taragoan	Taragoan	Nabarangpur	Nabarangpur	Nabarangpur	Miyawaki Plantation	19.267741	82.540718
101	Pasubeda ANR 200	Sarguli	Dabugaoan	Dabugaoan	Nabarangpur	ANR @ 200 Creation	19.51477	82.281468
102	Mundaguda ANR 200 Plantation	Mundaguda	Papdahandi	Nabarangpur	Nabarangpur	ANR @ 200 Creation	19.381212	82.518947
103	Rajoda AR1600	Rajoda	Kosagumunda	Kodinga	Nabarangpur	AR Plantation	19.230748	82.26646
104	Longaldora VSS (ANR Without Gap)	Kusumi	Kosagumunda	Kodinga	Nabarangpur	AJY ANR Without Gap Creation	19.43018	82.223856
105	Mudiguda VSS,ANR 200	Malbeda	Singsari	Uamrkot	Nabarangpur	AJY ANR With Gap @ 200 Creation	19.487915	82.197291
106	AJY ANR 200 Dumarpadar	Beheda	Tohara	Uamrkot	Nabarangpur	AJY ANR With Gap @ 200 Creation	19.79877	82.135586
107	Kusumbandha ANR 2nd Year Maintatnce	Baigam	Dabugaoan	Dabugaoan	Nabarangpur	ANR @ 200 (2nd Year Maintenance)	19.51655	82.421958
108	Bhirapajariguda AJY Without Gap ,2nd yr.	Shyamala	Maidalpur	DabuGoan	Nabarangpur	AJY ANR Without Gap (2nd Year Maintenance)	19.44412	82.58643
109	Malbeda AR200,2nd yr. Maintnance	Toraenga	Singsari	Uamrkot	Nabarangpur	AR (2nd Year Maintenance)	19.480836	82.176596
110	Torenga ANR200 2nd yr. Maintnance	Toraenga	Singsari	Uamrkot	Nabarangpur	AR (2nd Year Maintenance)	19.488679	82.134195
111	Izarguda,3rd yr. Maintnance ANR	Toraenga	Singsari	Uamrkot	Nabarangpur	ANR @ 200 (3rd Year Maintenance)	19.48401	82.13319
112	Dhumusuliguda(ANR200)	Kurkunda	Kurkunda	Maikangiri	Maikangiri	ANR @ 200 Creation	18.286164	82.021872
113	Bardabandha	Bardabandha	Chitrakunda	Chitrakunda	Maikangiri	AR Plantation	18.102559	82.207851
114	Charpajhala	Chitrakunda	Chitrakunda	Chitrakunda	Maikangiri	ANR @ 200 Creation	18.073604	82.099148
115	Motu	Motu	Motu	Motu	Maikangiri	Miyawaki Plantation	17.83265	81.405326
116	3rd year maintenance of Miyawaki plantation,NAC,Balimela	Balimela	Balimela	Balimela	Maikangiri	Miyawaki Plantation (3rd year maintenance)	18.228968	82.059517
117	3rd year maintenance of AR 1600, Puspali	Puspali	Somnathpur	Balimela	Maikangiri	AR (3rd Year Maintenance)	18.302832	82.018523

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
118	Tarikota, 3rd year maintenance of ANR 200	Tarikota	Somnathpur	Balimeila	Malkangiri	ANR @ 200 (3rd Year Maintenance)	18.289058	82.066029
119	Manyamkonda, 2nd year maintenance of ARN 200	Manyamkonda	MV-79	Motu	Malkangiri	ANR @ 200 (2nd Year Maintenance)	17.929373	81.663861
120	Badabahali	Bahirkhaman	Sonepur	Sonepur	Subarnapur	AR Plantation	20.79549	83.73242
121	Charvata	Charvata	Kumbharmunda	Sonepur	Subarnapur	Bald Hill Plantation	20.57684	83.62161
122	Rachhapalli	Jaloi	Jaloi	Ulunda	Subarnapur	ANR @ 200 Creation	20.94291	83.97396
123	Kesalpur	Subalya	Subalya	BM Pur	Subarnapur	ANR @ 200 Creation	20.93533	84.19586
124	Kundapal	Hatilimunda	Hatilimunda	BM Pur	Subarnapur	AR (3rd Year Maintenance)	21.01758	84.11185
125	Kalapathara	Nandighoshpali	Jaloi	Ulunda	Subarnapur	Bald Hill Plantation (2nd year Maintenance)	20.92215	83.99924
126	Arda	Rengsa	Kumbharmunda	Sonepur	Subarnapur	Food and fodder Plantation (2nd year Maintenance)	20.58556	83.66839
127	Gulunda	Binika	Binika	Binika	Subarnapur	ANR @ 800 (2nd year Maintenance)	21.0223	83.78329
128	Papi	Singjuda	Rampur	Binika	Subarnapur	ANR @ 200 (3rd Year Maintenance)	21.06282	83.74481
129	Dumerkhol	Baslat	Lochhipur	Sonepur	Subarnapur	ANR Without Gap-RET Species (2nd Year Maintenance)	20.880383	83.623873
130	Kutarimal	Mendhabahal	Mendhabahal	Jamankira	Bamra WL	ANR @ 200 Creation	21.621121	84.178921
131	Khandakata	Junani	Kuchinda	Kuchinda	Bamra WL	AR Plantation	21.80403	84.3219
132	Bandhabar	Sankolbhal	Gobindpur	Bamra	Bamra WL	ANR @ 200 Creation	22.07399	84.38989
133	Khandakata	Junani	Kuchinda	Kuchinda	Bamra WL	ANR @ 200 Creation	21.80323	84.32312
134	Tulesidhi	Bhojpur	Bhojpur	Jamankira	Bamra WL	AJY ANR With Gap @ 200 Creation	21.638174	84.37618
135	Phuldumer	Phuldumer	Badposh	Bamra	Bamra WL	ANR @ 200 (4th Year Maintenance)	22.078974	84.443561
136	Binjipali (Baba matha)	Binjipali	Banjipali	Jamankira	Bamra WL	ANR Without Gap-RET Species (2nd Year Maintenance)	21.646197	84.219473
137	Kurmimunda	Kurmimunda	Mahulpali	Kuchinda	Bamra WL	ANR @ 200 (2nd Year Maintenance)	21.876332	84.33781
138	Kuilarijore	Siridi	Bhojpur	Jamankira	Bamra WL	AJY ANR Without Gap Creation	21.627685	84.440762
139	Satkosia Camp -19	Jhurjhuri	Mahuldha	Satakosia	Karanja	ANR @ 200 Creation	21.39756	86.23855
140	Gudidha	Purunapani	Tatto	Dudhani	Karanja	ANR @ 200 (4th Year Maintenance)	21.78428	86.03009

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
141	Pahadpur	Pahadpur	Bhanda	Dudhani	Karanjia	AR (3rd Year Maintenance)	22.01825	86.02334
142	Purunapani RF	Baliposi	Baliposi	Thakurmunda	Karanjia	ANR @ 200 (2nd Year Maintenance)	21.59012	86.11036
143	Taramura	Thakurmunda - 1	Thakurmunda - 1	Thakurmunda	Karanjia	ANR @ 200 (3rd Year Maintenance)	21.46336	86.14715
144	Satakosia Camp -14	Bhalaladal	Mahuldiha	Satakosia Wild life	Karanjia	ANR @ 200 (2nd Year Maintenance)	21.37671	86.22248
145	Phujhar	Angul	Mahuldiha	Kuliposh	Bonai	AR Plantation	21.71205	85.1049
146	Toda RF (Near Bangala Kacha)	Barsuan	Barsuan	Barsuan	Bonai	Food & Fodder Plantation (2nd Year Maintenance)	21.86851	85.11465
147	Toda RF (Near Bangala Kacha)	Barsuan	Barsuan	Barsuan	Bonai	ANR @ 200 Creation	21.87207	85.10945
148	Balijodi	Koida	Koida	Koida	Bonai	Urban Plantation	21.89325	85.22106
149	Bandhabhuin	Danta	S.Balanga	Bonai	Bonai	ANR @ 200 Creation	21.7755	84.79554
150	Balai RF	Siriguda	Mahuldiha	Sole	Bonai	ANR @ 200 Creation	22.010662	84.609939
151	Tungurupada	Kello	Majurdiama	Jarda	Bonai	ANR @ 200 (2nd Year Maintenance)	21.83135	84.59489
152	Kalta	Kalta	Toda	Koida	Bonai	Urban Plantation (2nd Year Maintenance)	21.96321	85.22091
153	Sainduria	Barghat	S.Balanga	Bonai	Bonai	ANR @ 200 (2nd Year Maintenance)	21.73435	84.73721
154	Khutgoan	Khutgaon	Kuliposh	Kuliposh	Bonai	AR (7th Year Maintenance)	21.74861	85.0071
155	Bonda & Kalihharan	Gadhrel	Balangir-I	Balangir	Balangir	ANR @ 200 Creation	20.682769	83.447184
156	Dharpagarh	Dharpagarh	Badmal	Titilagarh	Balangir	ANR @ 200 Creation	20.396052	83.212078
157	Lahadunguri	Ambahali	Rengali	Harisankar	Balangir	ANR @ 200 Creation	20.753466	82.747673
158	Kurlumal	Kuarlakhunta	Gambhari	Lathor	Balangir	ANR @ 200 Creation	20.71424	82.85374
159	Makri VSS	Dharapagarh	Badmal	Titilagarh	Balangir	AJY ANR Without Gap Creation	20.385054	83.254172
160	Rengatasil	Paruahadi	Patnagarh	Patnagarh	Balangir	AJY ANR With Gap @ 200 Creation	20.6943	83.2424
161	Paruahbadi	Sindhekel	Sindhekel	Bangomunda	Balangir	Bald Hill Plantation	20.242657	82.876188
162	Lithermal	Jayintara	Jayintara	Muribahal	Balangir	AR Plantation	20.454452	83.113268
163	Bijamat-2	Gudighat	Gudighat	Muribahal	Balangir	AJY ANR Without Gap (2nd Year Maintenance)	20.435905	83.058962

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
164	Phulmunda	Padhel	Padhel	Patnagarh	Balangir	AR (3rd Year Maintenance)	20.76813	83.09603
165	Dharpagarh	Dharpagarh	Badmal	Titilagarh	Balangir	ANR @ 200 (3rd Year Maintenance)	20.377152	83.223412
166	Ratanpur	Deogaon	Deogaon	Deogaon	Balangir	ANR @ 200 (2nd Year Maintenance)	20.586549	83.41287
167	Gandrel	Balangir-1	Balangir-1	Balangir	Balangir	AR (3rd Year Maintenance)	20.679574	83.448284
168	Gendakhai	Kailasole	Deuli	Deuli	Baripada	ANR @ 200 (4th Year Maintenance)	22.004447	86.904495
169	Singimora	Baghada	Sulipada	Deuli	Baripada	AR (2nd Year Maintenance)	21.962875	86.94236
170	Ramachandrapur	Kuliana	Kuliana	Deuli	Baripada	AR (3rd Year Maintenance)	22.144831	86.675596
171	Ballasahi	Bangiriposhi	Bangiriposhi	Bangiriposhi	Baripada	ANR @ 200 Creation	22.180768	86.62725
172	Sasanadi	Rajaloka	Bangiriposhi	Bangiriposhi	Baripada	AR Plantation	22.194163	86.620662
173	Baunsiapat (Uchhagaon)	Sirsa	Sirsa	Bangiriposhi	Baripada	Bald Hill Plantation	22.266286	86.608299
174	Kairakacha	Joka	Sirsa	Bangiriposhi	Baripada	ANR @ 200 (4th Year Maintenance)	22.297398	86.521025
175	Nuasahi	Damasahi	Kuamara	Udala	Baripada	ANR @ 200 (3rd Year Maintenance)	21.79276	86.80085
176	Tikhali	Sanmaheswar	Sanmaheswar	Khariar	Khariar	Bald Hill Plantation	20.38377	82.667766
177	Morgaon	Khaira	Karlakote	Khariar	Khariar	ANR @ 200 Creation	20.326197	82.641515
178	Golpani	Pithapada	Pithapada	Sinapali	Khariar	ANR @ 200 Creation	20.031176	82.723226
179	Naikpada	Tarbod	Tarbod	Komana	Khariar	ANR @ 200 Creation	20.605074	82.644383
180	Maharadhi	Amonara	Amonara	Nuapada	Khariar	ANR @ 200 Creation	20.803921	82.424993
181	Mahulbhata	Bhera	Amonara	Nuapada	Khariar	AR Plantation	20.796799	82.505382
182	Suklimundi	Lakhana	Lakhana	Nuapada	Khariar	AJY ANR With Gap @ 200 Creation	20.679554	82.705694
183	Sitlikhalia	Kopia	Liad	Sinapali	Khariar	AJY ANR Without Gap Creation	20.132602	82.748855
184	Poinr	Kamkeda	Kamkeda	Komana	Khariar	AJY ANR Without Gap (2nd Year Maintenance)	20.533992	82.699693
185	Palsipani	Kurmpuri	Tarbod	Komana	Khariar	ANR @ 200 (3rd Year Maintenance)	20.678858	82.622576
186	Sial Lati	Khairpada	Darlipada	Sinapali	Khariar	Food and fodder Plantation (2nd year Maintenance)	20.063247	82.53794
187	Pandarbhata	Sinapali	Sinapali	Sinapali	Khariar	Bald Hill Plantation (4th year Maintenance)	20.087722	82.677167

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
188	Palsipani	Dharamsagar	Sanamaheswar	Khariar	Khariar	AR (2nd Year Maintenance)	20.407797	82.696852
189	Around Tikhali Reservoir	Dharamsagar	Sanamaheswar	Khariar	Khariar	Food and fodder Plantation (3rd Year Maintenance)	20.421678	82.665244
190	Canal Bank Plantation (Bhaluduguri to Tukuda)	Lachhipur	Khariar	Khariar	Khariar	Canal Bank Avenue Plantation (3rd Year Maintenance)	20.303998	82.779802
191	Handapa RF-Camp-1	Ichhapur	Handapa	Handapa	Athamallik	Food & Fodder Plantation (2nd Year Maintenance)	20.99223	84.72924
192	Handapa RF-Camp-5	Handapa	Handapa	Handapa	Athamallik	ANR @ 200 Creation	20.98105	84.71237
193	Pokanda	Pokanda	Paika Sahi	Dhandatopa	Athamallik	AR Plantation (DWARF)	20.814601	84.732625
194	Pokanda	Pokanda	Paika Sahi	Dhandatopa	Athamallik	ANR @ 200 (DWARF)	20.814305	84.733615
195	East Baruni RF-Camp-1	Tentelapani	Kadalimunda	Bamur	Athamallik	ANR @ 200 (6th Year Maintenance)	20.871	84.412289
196	Northern RF-Camp-1 & 2	Bhangamunda	Bamur	Bamur	Athamallik	ANR @ 200 (3rd Year Maintenance)	21.060824	84.469952
197	Barpadar	Tentelapani	Kadalimunda	Bamur	Athamallik	AR (7th Year Maintenance)	20.878952	84.427642
198	Nuagoan RF Comp-5	Bharatpur	Dekrud	Madhapur	Athamallik	ANR @ 200 (4th Year Maintenance)	20.84112	84.44832
199	Charakhola RF	Kunjakanta	Sadar	Dhenkanal (Sadar)	Dhenkanal	Miyawaki Plantation	20.636599	85.613151
200	Barabanka	Dihadola	Dihadola	Mahabirod	Dhenkanal	AR Plantation	20.91034	85.36408
201	Khalpal	Dihadola	Dihadola	Mahabirod	Dhenkanal	ANR @ 200 Creation	20.94907	85.26875
202	Bankuala	Mangalpur	Badagila	Dhenkanal	Dhenkanal	Bald Hill Plantation (2nd year Maintenance)	20.61587	85.54675
203	Bampa RF	Babandha	Bampa	Hindol	Dhenkanal	Food and fodder Plantation (2nd year Maintenance)	20.665055	85.418565
204	Kandahar	Bimbari	Bimbari	Hindol	Dhenkanal	ANR @ 200 (3rd Year Maintenance)	20.543967	85.3282
205	Maniabandha (Mahisapata)	Mahisapata	Dhenkanal (Sadar)	Dhenkanal	Dhenkanal	Miyawaki Plantation (2nd Year Maintenance)	20.611607	85.596739
206	Jirdamali	Batagaon	Jirdamali	Kamakhyia Nagar East	Dhenkanal	ANR @ 200 (2nd Year Maintenance)	20.96997	85.62037

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207	Jiridamali to Baramahanigar	Batagaon	Jiridamali	Kamakhyha Nagar East	Dhenkanal	Avenue Plantation (2nd Year Maintenance)	20.95096	85.5879
208	Kitalpadu	Gumuda	Naira	Gudari	Rayagada	ANR @ 200 Creation	19.228169	83.713873
209	Podugupadar	Gumuda	Naira	Gudari	Rayagada	ANR @ 200 Creation	19.234988	83.732438
210	Kujendri B RF	Kujendri	Ramaguda	Gunupur	Rayagada	ANR @ 200 Creation	19.1448	83.75212
211	Durukupa	Durukupa	Mukundapur	Gunupur	Rayagada	Bald Hill Plantation	19.31028	83.6521
212	Jamuguda	Sikarpal	Sikarpal	K.Singpur	Rayagada	Bald Hill Plantation	19.39383	83.31898
213	Jamuguda	Tikiri	Tikiri	Tikiri	Rayagada	Bald Hill Plantation	19.187858	83.089921
214	Sanabudha Hada	Sahada	Bsam Cuttack	Munguda	Rayagada	Bald Hill Plantation	19.561922	83.58552
215	Gummi	Ramnagar	Siriguda	Gudari	Rayagada	AJY ANR Without Gap (2nd Year Maintenance)	19.456057	83.809162
216	Balipanga	Siriguda I	Siriguda	Gudari	Rayagada	AR Plantation	19.392967	83.81445
217	Gumma Colony	Gumma	Gumma	Rayagada	Rayagada	AJY ANR With Gap @ 200 Creation	19.199487	83.284929
218	Bandhamundi	Jarka	Mandibisi	Kasipur	Rayagada	AR (2nd Year Maintenance)	19.373324	83.26118
219	Sarati	Paligoan	K.Singpur	K.Singpur	Rayagada	ANR @ 200 (4th Year Maintenance)	19.48843	83.37331
220	Devala Ext -RF	Gumuda	Naira	Gudari	Rayagada	ANR @ 200 (2nd Year Maintenance)	19.228353	83.712229
221	Bandhamandi	Minakhundi-B	Mandibisi	Kasipur	Rayagada	AJY ANR Without Gap Creation	19.367918	83.248193
222	Jhulana	Ruansi	Gorumahisiani	Rairangpur	Rairangpur	ANR @ 200 Creation	22.416347	86.279155
223	Patkadahi	Jharadhi	Jharadhi	Bahalda	Rairangpur	ANR @ 200 Creation	22.40436	86.23205
224	Sanjayadhanposhi	Badampahada	Badampahada	Badampahada	Rairangpur	Miyawaki Plantation	22.09155	86.12183
225	Dova	Talapati	Badampahada	Badampahada	Rairangpur	AR Plantation	22.14347	86.03053
226	Sapghara	Jharadhi	Jharadhi	Bahalda	Rairangpur	AR Plantation	22.42507	86.24796
227	Gorumahisiani	Dhalabeda	Gorumahisiani	Rairangpur	Rairangpur	ANR @ 200 (4th Year Maintenance)	22.296795	86.258672

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
228	Patkadhi	Jharadhi	Jharadhi	Bahalda	Rairangpur	ANR @ 200 (4th Year Maintenance)	22.40336	86.23417
229	Purunapani	Purunapani	Suleipat	Badampahar	Rairangpur	ANR @ 200 (4th Year Maintenance)	22.12658	86.18921
230	Bhaikichua	Bijatata	Badamtalia	Rairangpur	Rairangpur	ANR @ 200 (2nd Year Maintenance)	22.197923	86.280323
231	Mambir RF	Mambir	Jamda	Bahalda	Rairangpur	ANR @ 200 (3rd Year Maintenance)	22.24682	85.985625
232	ANR with gap Plantation, Jharighati	Supamaha	Lassery	Kotagarh	Baliguda	ANR @ 200 Creation	19.5248	83.4248
233	Bald hill Plantation, Pawangaon	Supamaha	Lassery	Kotagarh	Baliguda	Bald Hill Plantation	19.5251	83.4242
234	ANR with gap plantation, Bataguda	Supamaha	Lassery	Kotagarh	Baliguda	ANR @ 200 (2nd Year Maintenance)	19.5112	83.4248
235	ANR with gap plantation, Upper Machuguda	Supamaha	Lassery	Kotagarh	Baliguda	ANR @ 200 (4th Year Maintenance)	19.8489	83.775936
236	ANR with gap plantation, Batabadi	Kurtamgada	Kurtamgada	Tumbudibandha	Baliguda	ANR @ 200 (2nd Year Maintenance)	20.025844	83.706873
237	ANR with gap plantation, Malignuda	Malignuda	Tumbudibandha	Tumbudibandha	Baliguda	ANR @ 200 Creation	19.5638	83.4316
238	Fodder Plantation, Gumma	Gumma	Gumma	Belghar	Baliguda	Food & Fodder Plantation (4th Year Maintenance)	19.5318	83.3913
239	ANR with gap plantation, Karlangi	Karnimaska	Belghar	Belghar	Baliguda	ANR @ 200 (4th Year Maintenance)	19.866926	83.561798
240	AR plantation, Sundardanda	Daringibadi	Daringibadi	Daringibadi	Baliguda	AR Plantation	19.5211	84.532
241	AR plantation, Kadapana	Belghar	Belghar	Belghar	Baliguda	AR (3rd Year Maintenance)	19.54534	83.37151
242	ANR with gap plantation, Karipanga	Simanbadi	Simanbadi	Daringibadi	Baliguda	ANR @ 200 Creation	20.01065	84.03125
243	ANR with gap plantation, Klokana	Khamankhol	Khamankhol	Baliguda	Baliguda	ANR @ 200 Creation	20.390071	83.755065
244	ANR with gap plantation, Pacharani	Khamankhol	Khamankhol	Baliguda	Baliguda	ANR @ 200 (4th Year Maintenance)	20.375502	83.768
245	ANR with gap plantation, Didimaha	Budaguda	Budaguda	Daringibadi	Baliguda	ANR @ 200 (4th Year Maintenance)	20.034431	83.9285257
246	AJY ANR with gap plantation, Sarbbali	Mandalpadar	Lankagada	Tumbudibandha	Baliguda	ANR @ 200 Creation	20.075299	83.652992
247	AJY ANR with gap plantation, Arakhamba	Tilori	Budaguda	Daringibadi	Baliguda	ANR @ 200 Creation	20.96891	83.996033
248	ANR with gap plantation, Mediapanga	Bataguda	Baliguda	Baliguda	Baliguda	ANR @ 200 (3rd Year Maintenance)	20.7408	83.50227
249	AJY ANR without gap, Dungeri	Mangupura	Kurtamgada	Tumbudibandha	Baliguda	AJY ANR Without Gap (3rd year maintenance)	20.106241	83.784861

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
250	AJY ANR without gap, Kirami	Tilori	Budaguda	Daringibadi	Baliguda	AJY ANR Without Gap (3rd year maintenance)	19.9094	83.9459
251	AJY ANR with out gap, Jhariapadar	Supamaha	Lassery	Kotagarh	Baliguda	AJY ANR Without Gap (3rd year maintenance)	19.83971	83.716538
252	AJY ANR with out gap, Mardighati	Bhandrol	Jhiripani	Belghar	Baliguda	AJY ANR Without Gap (2nd Year Maintenance)	20.059767	83.592087
253	AJY ANR with out gap, Poteri	Daringibadi	Daringibadi	Daringibadi	Baliguda	AJY ANR Without Gap (2nd Year Maintenance)	19.5434	84.0549
254	AJY ANR with out gap, Kidramal	Daringibadi	Daringibadi	Daringibadi	Baliguda	AJY ANR Without Gap Creation	19.5536	84.0219
255	CA/PCA ANR with gap plantation, Bhuasuni	Chandaka	Chandaka	Chandaka	Chandaka	ANR @ 200 Creation	20.2343	85.4633
256	CA/PCA AR plantation, Bhuasuni	Chandaka	Chandaka	Chandaka	Chandaka	AR Plantation	20.2341	85.4627
257	Pitagadia (Fodder Plantation)	Chandaka	Chandaka	Chandaka	Chandaka	Food and fodder Plantation (2nd year Maintenance)	20.39124	85.757515
258	Behent sahi Fodder (Maintenance)	Nuakua	Talabasta	Damapada	Chandaka	Food and fodder Plantation (2nd year Maintenance)	20.335007	85.671478
259	Pithakhia Fodder (Maintenance)	Pithakhia	Dampada	Damapada	Chandaka	Food and fodder Plantation (2nd year Maintenance)	20.373716	85.663579
260	Kaniartangor Fodder	Bhola	Godibari	Chandaka	Chandaka	Food and fodder Plantation (2nd year Maintenance)	20.353259	85.721244
261	Palespur Fodder (Maintenance)	Mincingpatna	Mincingpatna	Haldia	Chandaka	Food and fodder Plantation (2nd year Maintenance)	20.245788	8.56.61,681
262	ANR with gap plantation, Dobandhi	Barunei	Rajnagar	Rajnagar WL	Rajnagar WL	ANR @ 200 (2nd Year Maintenance)	20.527339	86.779477
263	AR plantation, Hawakhana	Hawakhana	Hawakhana	Kujang WL	Rajnagar WL	AR Plantation	20.064008	86.43956
264	ANR with gap plantation, Baruanh PF	Hawakhana	Hawakhana	Kujang WL	Rajnagar WL	ANR @ 200 (4th Year Maintenance)	20.054369	86.409007
265	ANR with gap plantation, Balitutha	Balitutha	Nuagaon	Kujang WL	Rajnagar WL	ANR @ 200 Creation	20.246543	86.542615
266	ANR with gap plantation, Sandhakuda	Sandhakuda	Kujanga	Kujang WL	Rajnagar WL	ANR @ 200 (4th Year Maintenance)	20.245261	86.634183
267	ANR with gap plantation, Hatamundia	Batighar	Batighar	Mahakalpada	Rajnagar WL	ANR @ 200 (4th Year Maintenance)	20.327211	86.738203

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
268	ANR with gap plantation, Jambu	Jambu	Jambu	Mahakalpada	Rajnagar WL	ANR @ 200 (4th Year Maintenance)	20.429117	86.724833
269	Bald hill Plantation, B.Ramachandrapur	Mahaparvat	Banki	Khorda	Khordha	Bald Hill Plantation (4th year Maintenance)	20.350736	85.488878
270	ANR with gap plantation, Barunei	Gadakhorda	Khorda	Khorda	Khordha	ANR @ 200 (4th Year Maintenance)	20.155301	85.618203
271	AR Plantation, Duburi	Bolagada	Bolagada	Khorda	Khordha	AR (2nd Year Maintenance)	20.159821	85.287535
272	ANR with gap plantation, Kunjuri	Dikhitpada	Tangi	Tangi	Khordha	ANR @ 200 (2nd Year Maintenance)	19.884613	85.332365
273	ANR with gap plantation, Kanda Ambajhara	Salapadiha	Nachuni	Tangi	Khordha	ANR @ 200 (3rd Year Maintenance)	19.865909	85.287811
274	Bald hill plantation, Champagarh	Champagarh	Gopalpur	Ranpur	Khordha	Bald Hill Plantation	19.972527	85.428763
275	ANR with gap plantation, Champagarh	Champagarh	Gopalpur	Ranpur	Khordha	ANR @ 200 Creation	19.968512	85.415308
276	AR Plantation Bhusan Padar	Hinjilgam	Chikiti	Diga Pahandi	Berhampur	AR Plantation	19.111166	84.40337
277	ANR with Gap Plantation Birbarpalli	Bamkei	Nuapada	Diga Pahandi	Berhampur	ANR @ 200 Creation	19.297838	84.518904
278	ANR with Gap Plantation, Mahura	Digapahandi	Digapahandi	Diga Pahandi	Berhampur	ANR @ 200 (2nd Year Maintenance)	19.371689	84.522104
279	ANR Gap Plantation, Baniamari	Baniamari	Tamana	Berhampur	Berhampur	ANR @ 200 (2nd Year Maintenance)	19.247648	84.6754114
280	ANR plantation, S Badapur	Hariapur	Samantiapalli	Samantiapalli	Berhampur	ANR @ 200 (2nd Year Maintenance)	19.041605	84.4922
281	Bald hill plantation, Sngipur	Hinjilicut	Hinjilicut	Berhampur	Berhampur	Bald hill plantation	19.480675	84.727391
282	ANR plantation, Raogaon	Jarada	Samantiapalli	Samantiapalli	Berhampur	ANR @ 200 (2nd Year Maintenance)	19.076228	84.486811
283	Bald hill plantation, Subamapur, Jarada	Jarada	Samantiapalli	Samantiapalli	Berhampur	Bald Hill Plantation (4th year Maintenance)	19.082438	84.501672
284	AR Plantation, Gunakhal	Gonda gopha	Gonda gopha	Badagada	Ghumasar south	AR Plantation	19.671449	84.328973
285	ANR Will gap plantation, Gunakhal	Gonda gopha	Gonda gopha	Badagada	Ghumasar south	ANR @ 200 Creation	19.672908	84.528333
286	AR plantation, Khari kuti	Asurabandha	Asurabandha	sorada	Ghumasar south	AR (3rd Year Maintenance)	19.802699	84.340367

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
287	AR Block plantation, Panchabhuti	Panchavuti	Panchavuti	Buguda	Ghumasar south	AR Plantation	19.96175	84.862431
288	ANR With plantation, Panchabhuti	Panchavuti	Panchavuti	Buguda	Ghumasar south	ANR @ 200 (2nd Year Maintenance)	19.962278	84.860624
289	Bald hill plantation, Kalasuta	Khandarabali	Aska	Aska	Ghumasar south	Bald hill plantation	19.715889	84.614395
290	ANR PLANTATION,Khirida	Khirida	Dharakote	Aska	Ghumasar south	ANR @ 200 (2nd Year Maintenance)	19.586909	84.56814
291	Conservation of RET Species, Manitarā	Manitarā	Manitarā	Buguda	Ghumasar south	ANR Without Gap-RET Species (Creation)	19.90967	84.766218
292	ANR Plantation, Ghogada	Ghogada North	Ghogada	Tarsingi	Ghumasura North	ANR @ 200 (Creation)	20.226221	84.781716
293	ANR with Gap Plantation Gallery	Bahapata	Tilisingi	Galery	Ghumasura North	ANR @ 200 (2nd Year Maintenance)	20.010151	84.586982
294	ANR with Gap plantation Ragada	Lathipada	Lathipada	Central Range	Ghumasura North	ANR @ 200 (2nd Year Maintenance)	19.287871	84.501035
295	ANR with Gap plantation , Rajakundu	Sidhapadar	Bhajanagar	Mujagada	Ghumasura North	ANR @ 200 (3rd Year Maintenance)	19.958241	84.595986
296	ANR with Gap plantation, chandegiri	Beruanbdi	Tilisingi	Gelery	Ghumasura North	ANR @ 200 (3rd Year Maintenance)	20.13421	84.37492
297	ANR with gap Plantation, Gatibeda	Dhekunpani	Sunabeda	Sunabeda WL	Sunabeda WL	ANR @ 200 Creation	20.519395	82.444988
298	ANR with gap Plantation Michhapalli	Michhapalli	Cherichuan	Kamana WLL	Sunabeda WL	ANR @ 200 Creation	20.552823	82.548946
299	ANR with Gap Plantation, Chericharan	Cherichuan	Cherichuan	Kamana WL	Sunabeda WL	ANR @ 200 (2nd Year Maintenance)	20.537664	82.535643
300	ANR with Gap plantation, Sagunbadi	Katingpani	Katingpani	Nuapada WL	Sunabeda WL	ANR @ 200 (2nd Year Maintenance)	20.662814	82.422378
301	ANR with gap plantation Gurjibhata	Jaimunda	Sogeng	Sunabeda WL	Sunabeda WL	ANR @ 200 (2nd Year Maintenance)	20.619872	82.485444
302	ANR with gap plantation , Chandanpur	Diamunda WL	Galabandha wl	Nuapada WL	Sunabeda WL	ANR @ 200 (2nd Year Maintenance)	20.684267	82.531433
303	ANR with gap plantation, Labanyagad	Labanyagada	Garabandha	Mahendra	Paralakemundi	ANR @ 200 Creation	18.813447	84.32605
304	ANR with gap plantation sindhava	Serango	Guma	Devgiri	Paralakemundi	ANR @ 200 Creation	19.035501	84.02683
305	Bada hill plantation ,BadaPutar	Jiranga	Jiranga	Ramgiri	Paralakemundi	Bald Hill Plantation (2nd year Maintenance)	19.000332	84.254701

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306	ANR with gap plantation (AJY), Bursingi	Jiranga	Jiranga	Ramgiri	Paralakemundi	AJY ANR With Gap @ 200 Creation	18.997253	84.259912
307	ANR with out gap plantation(RET), Raisingi	Raising	Ramagiri	Ramagiri	Paralakemundi	ANR Without Gap-RET Species (Creation)	19.135486	84.322017
308	Bada hill plantation ,SARA	Khandaba 2	Kasinagar	Kasinagar	Paralakemundi	Bald hill plantation	18.99844	83.812603
309	ANR WITH GAP plantation subhadrapur	Kainpur	Jiranga	Ramgiri	Paralakemundi	ANR @ 200 (3rd Year Maintenance)	18.934891	84.301251
310	ANR with gap plantation, Nalaghat	Nalaghat	Nalaghat	Mohana	Paralakemundi	ANR @ 200 (2nd Year Maintenance)	19.475961	83.987011
311	ANR will gap, dambapur	Padampur	Rayagada	Mahendra	Paralakemundi	ANR @ 200 (2nd Year Maintenance)	18.953295	84.163686
312	Bald Hill Plantation Tangjidi	Baradakhol	Chakapada	Tikabali	Phulbani	Bald Hill Plantation	20.341918	84.483204
313	ANR With Gap Plantation Baghasara	Sankarakhol	Sankarakhol	Tikabali	Phulbani	ANR @ 200 Creation	20.33967	84.349573
314	ANR Plantation Dampadia	Musalipanga	Phiringia	Phiringia	Phulbani	AJY ANR With Gap @ 200 Creation	20.397422	84.053195
315	ANR Plantation Tengeri	Gumagarh	Bisipada	Phulbani	Phulbani	ANR @ 200 Creation	20.364791	84.30595
316	ANR Plantation Panganaju	Puburia	Puburia	G. Udayagiri	Phulbani	AJY ANR With Gap @ 200 Creation	20.170586	84.257143
317	ANR Plantation Rugudisahi	Rabingia	Nuapada	Phiringia	Phulbani	AJY ANR With Gap @ 200 Creation	20.316042	84.025824
318	ANR Plantation Gumagarh	Gumagarh	Bisipada	Phulbani	Phulbani	ANR @ 200 Creation	20.36475	84.273368
319	RET ANR Plantation Jargipada	Phiringia	Phiringia	Phiringia	Phulbani	ANR @200 -RET (2nd Year Maintenance)	20.350111	84.138727
320	RET ANR Plantation Tikabali	Tikabali	Tikabali	Tikabali	Phulbani	ANR @200 -RET (2nd Year Maintenance)	20.251103	84.348433
321	ANR With Out Gap Basiamba	Sankarakhol	Tikabali	Tikabali	Phulbani	AJY ANR Without Gap (3rd year maintenance)	20.340895	84.305416
322	ANR With Out Gap Kantiban	Karada	Karada	Raikia	Phulbani	AJY ANR Without Gap (2nd Year Maintenance)	19.920723	84.29888
323	ANR Plantation Chamakpur	Gumura	Balibandha	Champua	Keonjhar	ANR @ 200 Creation	21.998488	85.488331
324	Avenue Plantation Bileipada to NH	Balita	Bileipada	Badbil	Keonjhar	Avenue Plantation	22.062764	85.465168

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325	ANR Plantation Kandigudasahi	Baiganpal North	Ghatagaon	Ghatagaon	Keonjhar	AJY ANR With Gap @ 200 Creation	21.46332	85.948847
326	ANR With Out Gap Sinduria	Patakhal	Bimala	Telkoi	Keonjhar	AJY ANR Without Gap Creation	21.191921	85.496957
327	ANR Plantation Basntapur	Gopal pur West	Naranpur	Keonghr	Keonjhar	ANR @ 200 (2nd Year Maintenance)	21.526855	85.671145
328	ANR Plantation Raghunathpur	Raghunathpur	Naranpur	Keonghr	Keonjhar	ANR @ 200 (3rd Year Maintenance)	21.627026	85.718912
329	ANR With Out Gap Kirikanjipani	Kanjipari	Kanjipari	BJP	Keonjhar	AJY ANR Without Gap (2nd Year Maintenance)	21.476105	85.476868
330	ANR Plantation Champajhar	Taramakanta	Suakathi	BJP	Keonjhar	ANR @ 200 (2nd Year Maintenance)	21.586101	85.296194
331	Bald Hill Plantation Padmapur	Rajnegar	Khiritangiri	Patna	Keonjhar	Bald Hill Plantation (2nd year Maintenance)	21.726087	85.788336
332	ANR Plantation Pandakamal	Pandakamal	M.Rampur	M.Rampur	Kalahandi(N)	ANR @ 200 Creation	20.195407	83.511792
333	Bald Hill Plantation Patiguda	Ramund	M.Rampur	M.Rampur	Kalahandi(N)	Bald Hill Plantation	20.212173	83.530277
334	AR Plantation Antarla	Mandanpur	Mandanpur	M.Rampur	Kalahandi(N)	AR Plantation	20.295677	83.51073
335	ANR Plantation Gandharbari	Kamanda	Kamarda	Narla	Kalahandi(N)	ANR @ 200 Creation	20.037088	83.436246
336	AR Plantation Kespala	Sargiguda	Narla	Narla	Kalahandi(N)	AR Plantation	20.003348	83.355721
337	ANR Plantation Kespala	Sargiguda	Narla	Narla	Kalahandi(N)	AJY ANR With Gap @ 200 Creation	20.204497	83.352735
338	AR Plantation Tundla	Tundla	Kusurpada	Kesinga	Kalahandi(N)	AR Plantation	20.279359	83.354063
339	ANR Plantation Tulangpadar	Bijakhman	Kasurpada	Kesinga	Kalahandi(N)	AJY ANR With Gap @ 200 Creation	20.268055	83.320896
340	ANR Plantation Tundla	Tundla	Kasurpada	Kesinga	Kalahandi(N)	ANR @ 200 Creation	20.262598	83.351979
341	ANR Plantation Bijakhman	Bijakhman	Kasurpada	Kesinga	Kalahandi(N)	ANR @ 200 Creation	20.26724	83.306283
342	ANR Plantation Dhauramal	Gargav	Gargav	Kegaon	Kalahandi(N)	AJY ANR With Gap @ 200 Creation	20.070618	83.026159
343	Food and Fodder Plantation Taparanga	Goudkela	M.Rampur	M.Rampur	Kalahandi(N)	Food and fodder Plantation (2nd year Maintenance)	20.173403	83.567062
344	ANR Plantation Bankel	Narla	Narla	Narla	Kalahandi(N)	ANR @ 200 Creation	20.006162	83.391155

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345	ANR With Out Gap Kikia	Degaon	Kesinga	Kesinga	Kalahandi(N)	ANR Without Gap-RET Species (2nd Year Maintenance)	20.135465	83.158659
346	Bald Hill Plantation Kirkakani	Kirkakanti	Golamunda	Kegaon	Kalahandi(N)	Bald Hill Plantation (4th year Maintenance)	19.971296	82.762472
347	Miyawaki Plantation Kutrukhai	Sirilguda	Bhawanipatna	Bhawanipatna	Kalahandi(N)	Miyawaki Plantation (2nd Year Maintenance)	19.846185	83.141144
348	ANR Plantation Mundeswar	Baring	Baring	Madhapur	Boudh	ANR @ 200 Creation	20.422016	84.551582
349	AR Plantation Mundeswar	Teak Special Baring	Baring	Madhapur	Boudh	AR Plantation	20.41407	84.557962
350	ANR Plantation Mundeswar	Teak Special Baring	Baring	Madhapur	Boudh	ANR @ 200 (4th Year Maintenance)	20.417625	84.556668
351	ANR Plantation Podhal	Madhapur	Baring	Madhapur	Boudh	ANR @ 200 (4th Year Maintenance)	20.443819	84.512328
352	ANR Plantation Araguda	Sankulei	Harbhanga	Purunakatak	Boudh	ANR @ 200 (4th Year Maintenance)	20.643151	84.521181
353	ANR Plantation Araguda	Sankulei	Harbhanga	Purunakatak	Boudh	ANR @ 200 (3rd Year Maintenance)	20.63848	84.525935
354	ANR Plantation Parapit	Purunakatak	Purunakatak	Purunakatak	Boudh	ANR @ 200 (2nd Year Maintenance)	20.605644	84.44048
355	AR Plantation Ponga	Balparbat	Brahmani pal	Brahmanipal	Keonjhar WL	AR Plantation	21.106693	85.881478
356	ANR Plantation Khasapada	Brahmanipal	Brahmani pal	Brahmanipal	Keonjhar WL	ANR @ 200 Creation	21.158736	85.89926
357	ANR Plantation Nuhamalia	Baranga	Rama chandrapur	Andapur	Keonjhar WL	AJY ANR With Gap @ 200 Creation	21.037865	86.06492
358	Bald Hill Plantation Sundarapal	Sangam	Hadagarh	Hadagarh	Keonjhar WL	Bald Hill Plantation	21.213903	86.266381
359	ANR Plantation Sundarapal	Sangam	Hadagarh	Hadagarh	Keonjhar WL	ANR @ 200 Creation	21.215547	86.267748
360	ANR With Out Gap Tentuligotha	Brahmanipal	Brahmani pal	Brahmanipal	Keonjhar WL	AJY ANR Without Gap (2nd Year Maintenance)	21.152725	85.894508
361	AR Plantation Samara	Baidakhia	Hadagarh	Hadagarh	Keonjhar WL	AR (4th Year Maintenance)	21.066819	86.212004
362	AR Plantation Antorta	Bahia	Kathakath	Hadagarh	Keonjhar WL	AR (5th Year Maintenance)	21.232991	86.227921
363	ANR Plantation Panga Rugudi	Balparbat	Brahmani pal	Brahmanipal	Keonjhar WL	ANR @ 200 (3rd Year Maintenance)	21.11193	85.905467

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364	ANR Plantation Warda	Talapada	Daitari	Brahmanipal	Keonjhar WL	ANR @ 200 (3rd Year Maintenance)	21.117688	85.829692
365	ANR Plantation Panchavaya	Safa	Safa	Dalijoda	Cuttack	ANR @ 200 Creation	20.589031	85.985101
366	AR Plantation Binchana	Safa	Safa	Dalijoda	Cuttack	AR Plantation	20.6511	85.971266
367	Bald Hill Plantation Chamagal	Lalitgiri	Chandikhol	Dalijoda	Cuttack	Bald Hill Plantation	20.646446	86.270118
368	Food and Fodder Plantation Sukurana	Sukinda	Sukinda	Sukinda	Cuttack	Food and fodder Plantation	20.961458	85.961465
369	ANR Plantation Sendapadia	Pimpudia	Sukinda	Sukinda	Cuttack	ANR @ 200 Creation	21.019546	85.812196
370	ANR Plantation Panchavaya	Tangi	Safa	Dalijoda	Cuttack	ANR @ 200 (2nd Year Maintenance)	20.600298	85.99308
371	Bald Hill Plantation Sunduria	Sunduria	Chandikhol	Chandikhol	Cuttack	Bald Hill Plantation (2nd year Maintenance)	20.71397	86.154122
372	Bald Hill Plantation Mahavinayak	Chandikhol	Chandikhol	Dalijoda	Cuttack	Bald Hill Plantation (3rd year Maintenance)	20.692313	86.104395
373	AR Plantation Dalki	Sukinda	Sukinda	Sukinda	Cuttack	AR (2nd Year Maintenance)	20.944782	85.897934
374	Urban plantation Dakhinapasi	Duburi	Duburi	Tamka	Cuttack	Urban Plantation (3rd Year Maintenance)	21.022393	85.993465
375	AR Plantation Kilia	Kelia	Dharmagharh	Dharmagharh	Kalahandi (S)	AR Plantation	19.917773	82.885711
376	ANR Plantation Gotamunda	Gotamunda	Behera	Dharmagharh	Kalahandi (S)	ANR @ 200 Creation	19.727181	82.594576
377	AR Plantation Jabanga	Gunpur	Gunpur	T.H. Rampur(N)	Kalahandi (S)	AR Plantation	19.589295	83.085923
378	Bald Hill Plantation Talaampadar	Ampadar	Gunpur	T.H. Rampur(N)	Kalahandi (S)	Bald Hill Plantation	19.53878	83.128312
379	ANR Plantation Bantikiri	Rachuguda	Jugsaipatna	Karlapat	Kalahandi (S)	AJY ANR With Gap @ 200 Creation	19.774423	83.171758
380	Bald Hill Plantation Kendupet	Bijepur	Bijepur	Biswanathpur	Kalahandi (S)	Bald Hill Plantation	19.613692	83.24158
381	ANR Plantation Bijepur	Bijepur	Bijepur	Biswanathpur	Kalahandi (S)	ANR @ 200 Creation	19.635949	83.271316
382	ANR Plantation Barabuli	Bandhapari	Mushanal	Biswanathpur	Kalahandi (S)	AJY ANR With Gap @ 200 Creation	19.749201	83.364799
383	AR Plantation Teilguda	Dabriguda	Ampari	Dharmagharh	Kalahandi (S)	AR (2nd Year Maintenance)	19.592444	82.603486
384	ANR With Out Gap Vataguda	Jatangpada	Gunapur	T.H. Rampur(N)	Kalahandi (S)	ANR Without Gap-RET Species (2nd Year Maintenance)	19.56968	83.040765

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385	Bald Hill Plantation Mardiguda	Jatangpada	Gunapur	T.H. Rampur(N)	Kalahandi (S)	Bald Hill Plantation (2nd year Maintenance)	19.567155	83.043569
386	ANR Plantation Tarangel	Dhadel	Mushanal	Biswanathpur	Kalahandi (S)	ANR @ 200 (2nd Year Maintenance)	19.697155	83.278251
387	Food and Fodder Plantation Brahmanabasta	Brahmarabasta	Nidhipur	Khuntuni	Athagarh	Food and fodder Plantation	20.518184	85.755925
388	Bald Hill Plantation Boula	Oranda	Oranda	Khuntuni	Athagarh	Bald Hill Plantation	20.53729	85.813372
389	Bald Hill Plantation Telunia	Kantapada	Badamba	Badamba	Athagarh	Bald Hill Plantation (2nd year Maintenance)	20.384302	85.404208
390	Bald Hill Ganguari	Gopalpur	Gopapur	Badamba	Athagarh	Bald Hill Plantation	20.424198	85.424198
391	ANR Plantation Telachandragiri	Kushapal	Gopapur	Badamba	Athagarh	ANR @ 200 (2nd Year Maintenance)	20.445395	85.254126
392	ANR Plantation Devabhuiin	Devabhuiin	Devabhuiin	Narsingpur East	Athagarh	ANR @ 200 (2nd Year Maintenance)	20.554992	85.177249
393	Fruit and Fodder plantation Sukasan	Rajnagar	Rajnagar	Athagarh	Athagarh	Food and fodder Plantation	20.472111	85.685825
394	Bald Hill Plantation Phulbadi	Kandarpur	Athagarh	Athagarh	Athagarh	Bald Hill Plantation (2nd year Maintenance)	20.467326	85.636022
395	Miyawaki Plantation Manbar	Koraput-2	Koraput	Koraput	Koraput	Miyawaki Plantation	18.840089	82.697844
396	Bald Hill Plantation Pindi	Koraput-1	Koraput	Koraput	Koraput	Bald Hill Plantation	18.779544	82.650058
397	AR Plantation Uncheipada	Machkund	Machkund	Lamataput	Koraput	AR Plantation	18.546706	82.41834
398	ANR Plantation Khuda	Andruguda	Padua	Balda	Koraput	ANR @ 200 Creation	18.302495	82.637535
399	ANR Plantation Bilaput	Darliput	Padua	Balda	Koraput	AJY ANR With Gap @ 200 Creation	18.347988	82.710806
400	ANR Plantation Gangapaniguda	Sunki-1	Sunki	Similiguda	Koraput	AJY ANR With Gap @ 200 Creation	18.476103	82.992291
401	ANR Plantation Khajuriguda	Kunduli	Similiguda	Similiguda	Koraput	ANR @ 200 (3rd Year Maintenance)	18.611871	82.893097
402	Bald Hill Plantation Bengenguda	Kandili	Sunki	Similiguda	Koraput	Bald Hill Plantation (2nd year Maintenance)	18.489272	82.959614
403	ANR With Out Gap Mathalput	Mathalput	Damanjodi	Koraput	Koraput	ANR Without Gap-RET Species (2nd Year Maintenance)	18.757686	82.929051

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
404	ANR Plantation Dakara	Litipat	Podagarh	Koraput	Koraput	ANR @ 200 (2nd Year Maintenance)	18.935869	82.692802
405	AR Plantation Badapeta	Ranitota	Lamatapat	Lamatapat	Koraput	AR (2nd Year Maintenance)	18.74184	82.567634
406	Dwarf Tree Plantation Silling	Seepar	Seepar	Talcher	Angul	AR Plantation (DWARF)	21.146559	85.144871
407	Tall tree plantation Kulei	Kulei	Seepar	Talcher	Angul	ANR @ 200 - Tall Tree	21.090012	85.135621
408	Bald Hill Plantation Kuluma	Rengali	Rengali	Kanha	Angul	Bald Hill Plantation	21.251915	84.982203
409	ANR Plantation Paranga	Paranga	Nisha	Angul	Angul	ANR @ 200 Creation	20.886545	85.047798
410	ANR Plantation Chendipada	Chendipada 2	Chendipada - 1	Chendipada	Angul	ANR @ 200 (3rd Year Maintenance)	21.052613	84.865519
411	ANR Plantation Chendipada	Chendipada 2	Chendipada - 1	Chendipada	Angul	ANR @ 200 (4th Year Maintenance)	21.046531	84.880401
412	ANR With Out Gap Kosala	Kosala	Kosala	Chendipada	Angul	AJY ANR Without Gap Creation	21.013732	84.903138
413	ANR Plantation Para	Jarpada	Jarpada	Jarpada	Angul	ANR @ 200 Creation	20.875973	84.873599
414	ANR Plantation Katada	Katada 2	Jarpada	Jarpada	Angul	ANR @ 200 (2nd Year Maintenance)	20.908565	84.793847
415	ANR With Out Gap Laxmidharpur	Katada 1	Jarpada	Jarpada	Angul	AJY ANR Without Gap (2nd Year Maintenance)	20.916071	84.846463
416	AR Plantation Bherubania	Kanja	Kanja	Bantala	Angul	AR Plantation	20.712048	85.131398
417	ANR Plantation Basla	Kanja	Kanja	Bantala	Angul	ANR @ 800 Criation	20.71525	85.131871
418	AR Plantation Hamamira	Kanja	Kanja	Bantala	Angul	ANR @ 200 Creation	20.706947	85.126255
419	ANR Plantation Mahulaguda	Kathagada	Katharagada	Boriguma	Jeypore	AJY ANR With Gap @ 200 Creation	19.129991	82.731341
420	ANR Plantation Kanjei	Patraput	Patraput	Jeypore	Jeypore	AJY ANR With Gap @ 200 Creation	18.780379	82.526687
421	ANR Plantation Ghataghamura	Ggatghamura	Joypore	Jeypore	Jeypore	ANR @ 200 Creation	18.827804	82.612447
422	Miyawaki Plantation Makaput	Pennangi B	Joypore	Jeypore	Jeypore	Miyawaki Plantation	18.890525	82.57711
423	ANR Plantation Ghodaghat	Ghodaghat	Hiladikund	Gupteswar	Jeypore	AJY ANR With Gap @ 200 Creation	18.911088	82.232101

SN	Name of Site	Beat	Section	Range	Division	Type of Plantation	Latitude	Longitude
424	AR Plantation Pujariput	Pujariput	Gupteswar	Gupteswar	Jeypore	AR Plantation	18.787827	82.2015
425	ANR Plantation Majhiguda	Majhiguda	Ramgiri	Gupteswar	Jeypore	ANR @ 200 Creation	18.449145	82.249639
426	Bald Hill Plantation Lenja	Kotta	Baiparigunda	Baipariguda	Jeypore	Bald Hill Plantation	18.717493	82.527679
427	ANR Plantation Dibiguda	Jenua	Jaynagar	Jeypore	Jeypore	ANR @ 200 (2nd Year Maintenance)	18.903773	82.471957
428	ANR Plantation Sandhaguda	Ramaguda	B.Singpur	Boriguma	Jeypore	ANR @ 200 (2nd Year Maintenance)	18.974831	82.657967
429	Food and Fodder Plantation Janiguda	Boriguma	Boriguma	Boriguma	Jeypore	Food and fodder Plantation (2nd year Maintenance)	19.066429	82.507794
430	AR Plantation Chatrala	Boriguma	Boriguma	Boriguma	Jeypore	AR (2nd Year Maintenance)	19.021713	82.569454
431	Bald Hill Plantation Paral	Kotta	Boriguma	Boriguma	Jeypore	Bald Hill Plantation (2nd year Maintenance)	18.739738	82.531512

Assets:

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
1	Karanjia	Thakurmunda	Kendujiani	Khaparkhai	Kadapani RF	Water Body	21.603435	86.163802
2	Karanjia	Thakurmunda	Champajhar	Bhogdhiha	Champashar	Forest Guard Quarter	21.48935	86.24483
3	Karanjia	Thakurmunda	Thakurmunda	Thakurmunda	Thakurmunda	Forester Quarter	21.522491	86.1544818
4	Karanjia	Thakurmunda	Champajhar	Champajhar	Champashar	Plantation of Fruit & Fodder species around the Water Body	21.500497	86.255992
5	Karanjia	Karanjia	Karanjia	Karanjia	Karanjia	Maintenance of Fireline	21.779459	85.975053
6	Karanjia	Karanjia	Karanjia	Karanjia-I	Ghodaghaguri RF	WHS	21.782935	85.971597
7	Karanjia	Dudhiani	Ektali	Ektali	Kumudabadi	Renovation of Water Body	21.90208	86.10784
8	Karanjia	Dudhiani	Barakanuda	Budhigaon	Ramachandrapur	Anti-Poaching Barrack	21.781088	86.127926
9	Karanjia	Dudhiani	Tatto	Tatto	Tatto	Range Officer Residence	21.84682	86.01671
10	Karanjia	Dudhiani	Tangabila	Tangabila	Tangabila	Boundary Wall	21.90403	86.04125
11	Karanjia	Thakurmunda	Kesadhia	Mituan	Kheadiaposi	Plantation of Fruit & Fodder species around the Water Body	21.561115	86.207459
12	Karanjia	Satkosia	Mahuldhiha	Jharjhari	Comp.-17	Causeway	21.389227	86.243651
13	Karanjia	Dudhiani	Tatto	Tatto	Side of Dudhiani Highway	Signage	21.90138	86.01425
14	Karanjia	Satkosia	Nada	Nada	Masaghati	Watch Tower	21.33211	86.226485

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
15	Karanjia	Satkosia	Satakosia	Satakosia-II	Ghodaghathi	Maintenance of Fireline	21.376006	86.149462
16	Karanjia	Satkosia	Mahudliha	Jharjhari	Satkosia RF, Comp-19	Culvert	21.40209	86.24332
17	Karanjia	Satkosia	Mahudliha	Mahudliha	Mahudliha	Tube Well	21.418505	86.166043
18	Bamra WL	Badrama	Badrama	Amlang	Amlang	Forest Guard Quarter	21.518783	84.337417
19	Bamra WL	Badrama	Bhutel	Pathuria	Podadliha	Forest Road	21.482296	84.350419
20	Bamra WL	Badrama	Bhutel	Podadlihi	Tower No.-3	Watch Tower	21.454919	84.392989
21	Bamra WL	Badrama	Badrama	Badrama	Comp.-5	Plantation of Fruit & Fodder species around the Water Body	21.505949	84.298526
22	Bamra WL	Badrama	Badrama	Gantab	Near Watch Tower -1	Construction of under way pass	21.45413	84.29861
23	Bamra WL	Badrama	Badrama	Kutab	Near Watch Tower -2	Salt Lick	21.4489	84.313749
24	Bamra WL	Badrama	Badrama	Gantab	Chirgenkhol	WHS	21.46459	84.30627
25	Bamra WL	Badrama	Bhutel	Podadlihi	Podadliha	Forester Quarter	21.459947	84.373171
26	Bamra WL	Badrama	Bhutel	Podadlihi	Podadliha	Anti-Poaching Barrack	21.460047	84.372822
27	Bamra WL	Badrama	Goudapalli	Kanibandhali	Kanibandhali (Khadiapada)	Guided the unguided well	21.495723	84.189519
28	Bamra WL	Badrama	Odsung	Odsung	Titobahal	Causeway	21.553969	84.232482
29	Bamra WL	Bamra	Garposh	Garposh	Garposh	Anti-Poaching Barrack	21.135495	84.417334
30	Bamra WL	Jamankira	Mendabahal	Mendabahal	Near Mendabahal Beat House	Tube Well	21.617057	84.183918
31	Bamra WL	Jamankira	Bhojpur	Siridi	Jharpur	Forest Road	21.614872	84.50924
32	Bamra WL	Jamankira	Binjipali	Binjipali	Binjipali Baba Matha	Forest Road	21.647109	84.219841
33	Bamra WL	Jamankira	Mendabahal	Chakulia Bahal	Tipimunda to Kankalakhol	Maintenance of Fireline	21.591335	84.23932
34	Bamra WL	Jamankira	Binjipali	Binjipali	Kalomunda	Renovation of Water Body	21.650332	84.210019
35	Bamra WL	Jamankira	Bhojpur	Siridi	Siridi near FG qtr.	Boundary Wall	21.620313	84.462793
36	Subarnapur	Sonepur	Naranpur	Tileimal	Tileimal	Forest Guard Quarter	20.85348	83.67515
37	Subarnapur	Sonepur	Sonepur	Arjunpur	Arjunpur	Renovation of Water Body	20.850769	83.831404
38	Subarnapur	Sonepur	Lachhipur	Badipadia	Badipadia	Water Body	20.936047	83.630457
39	Subarnapur	Sonepur	Sonepur	Sonepur	Sonepur	Forester Quarter	20.843902	83.905028
40	Subarnapur	Binika	Kaudiamunda	Siali	Naktamunda	Maintenance of Fruit bearing & Fodder species around Water Body	20.976211	83.670998
41	Subarnapur	Binika	Binika	Gadagada Bahal	Seledi	Maintenance of Fruit bearing & Fodder species around Water Body	20.954496	83.782966

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
42	Subarnapur	Binka	Binka	Katapali	Karnagote	Boundary Wall	20.97719	83.77035
43	Subarnapur	B.M.Pur	Subalaya	Subalaya	Kasalpur	Maintenance of Fireline	20.93599	84.19584
44	Balangir	Deogaon	Kudasingh	Chhikachhida	Sikachhida	Plantation of Fruit & Fodder species around the Water Body	20.641169	83.40316
45	Balangir	Harisankar	Harisankar	Nundupala	Harisankar	Repairing of IB	20.849485	82.863441
46	Balangir	Harisankar	Harisankar	Nundupala	Harisankar	Zoo Management	20.84949	82.86305
47	Balangir	Harisankar	Rengali	Sapmund	Jhalbahal to Sapmund	Forest Road	20.803182	82.79033
48	Balangir	Harisankar	Rengali	Beherapani	Beherapani	Water Body	20.801383	82.786625
49	Balangir	Harisankar	Rengali	Sapmund	Sapmund	Culvert	20.803383	82.788365
50	Balangir	Lathor	Bendri	Bagdore	Bagdore FG Qtr.	Tube Well	20.613978	82.850367
51	Balangir	Lathor	Bendri	Dhourakhaman	Bendri RF	Causeway	20.625851	82.82335
52	Balangir	Lathor	Bendri	Dhourakhaman	Bendri RF	Forest Road	20.825896	82.823404
53	Balangir	Muribahal	Muribahal	Muribahal	Muribahal	Forester Quarter	20.389921	83.0066
54	Balangir	Bangomunda	Bangomunda	Chhatrang	Near Range Office, Bangomunda	Forest Guard Quarter	20.360158	82.906748
55	Balangir	Balangir	Balangir-I	Balangir-I	Hatisal Pada	Range Officer Residence	20.70447	83.480318
56	Bonai	Jarada	Ramchhinda	Kundheidha	Kundheidha	Tube Well	21.797307	84.693318
57	Bonai	Jarada	Majuridima	Majuridima	Kello RF	Maintenance of Fruit bearing & Fodder species around Water Body	21.831235	84.551953
58	Bonai	Bonai	D.D.Pali	D.D.Pali	D.D.Pali RF	Boundary Wall	21.779538	84.921792
59	Bonai	Bonai	D.D.Pali	D.D.Pali	D.D.Pali RF	Improvement of Bird habitat	21.769222	84.921277
60	Bonai	Bonai	D.D.Pali	D.D.Pali	D.D.Pali RF	Improvement of Bird habitat	21.769292	84.921385
61	Bonai	Bonai	D.D.Pali	Jharbeda	Sibnathpur KF	Plantation of Fruit & Fodder species around the Water Body	21.788381	84.866263
62	Bonai	Bonai	Sarsara Balang	Sarsara Balang	Sarsara Balang	Forester Quarter	21.71052	84.809399
63	Bonai	Bonai	D.D.Pali	Jarbeda	Jharbeda	Forest Guard Quarter	21.801519	84.863333
64	Bonai	Kuliposh	Kuliposh	Bandhabhuin	Khandadhara	Protection Camp, Khandadhara	21.762563	85.10831
65	Bonai	Barsuan	Barsuan	Barsuan	Barsuan	Elephant Approach Concret Base	21.853179	85.111957
66	Bonai	Jarada	Majuridima	Majuridima	Gudguda	Maintenance of Fruit bearing & Fodder species around Water Body	21.840101	84.552801

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
67	Bonai	Kuliposh	Daleisara	Lunga	Lunga RF	Maintenance of Fruit bearing & Fodder species around Water Body	21.614995	85.058821
68	Bonai	Jarada	Majuridima	Majuridima	Baghiadar	Renovation of Water Body	21.865219	84.556513
69	Bonai	Barsuan	Barsuan	Barsuan	Barsuan	Range Officer Residence	21.86753	85.11467
70	Bonai	Sole	Soleguda	Soleguda	Soleguda Forest Road	Causeway	21.954545	84.627531
71	Bonai	Sole	Soleguda	Soleguda	Soleguda to Ranke Forest Road	Forest Road	21.944808	84.624592
72	Bonai	Sole	Kunjar	Kunjar	Kunjar	Culvert	21.887618	84.614798
73	Bonai	Sole	Kunjar	Kunjar	Kunjar Section office	Installation of VHF Tower	21.888477	84.615947
74	Bonai	Sole	Kunjar	Kunjar	Kantamunda RF	Maintenance of Fireline	21.905228	84.631615
75	Bonai	Barsuan	Dengula	Tensa	Tensa Market	Green Shop	21.87333	85.17168
76	Bonai	Koida	Koida	Rengalbada	Kalmanga	Solar Fencing	21.94208	85.30704
77	Bonai	Barsuan	Dengula	Tensa	Tensa	Picnic Outlet	21.9421	85.30703
78	Rayagada	Rayagada	Gumma	Gumma	Jadighat	Plantation of Fruit & Fodder species around the Water Body	19.203258	83.27629
79	Rayagada	Rayagada	Gumma	Gumma	Kadalipali RF	Maintenance of Fireline	19.196204	83.299832
80	Rayagada	Tikiri	Sankanada	Phuljaba	Kadadadar	Checkdam	19.090638	83.086857
81	Rayagada	Tikiri	Kodinga	Kodinga	Bankamba	Water Body	19.082027	83.069406
82	Rayagada	Tikiri	Kodinga	Kodinga	Bankamba	Watch Tower	19.081575	83.069257
83	Rayagada	Tikiri	Sankarada	Phuljaba	Kadadadar	Water Body	19.091137	83.088724
84	Rayagada	K.Singpur	K.Singhpur	K.Singhpur	K.Singhpur	Range Office	19.508948	83.314052
85	Rayagada	K.Singpur	K.Singhpur	K.Singhpur	K.Singhpur	Forest Guard Quarter	19.508897	83.314277
86	Rayagada	K.Singpur	Sikarpai	Sajja	Arganda	WHS	19.43135	83.36068
87	Rayagada	Gudari	Naira	Naira	Naira Section Office	Boundary Wall	19.301811	83.771255
88	Rayagada	Muniguda	Muniguda	Kudlima	Sakata PRF	Maintenance of Fireline	19.606947	83.489477
89	Rayagada	Muniguda	Bisama Cuttack	Sahada	Sanabudhahata	Barbed Fencing	19.562566	83.585904
90	Rayagada	Muniguda	Muniguda	Kudlima	Kuklima	Vegetative Fencing	19.644013	83.49421
91	Athamalik	Bamur	Bamur	Bamur	Northern RF, Comp. 9 & 17	Culvert	21.045925	84.54597
92	Athamalik	Bamur	Bamur	Bamur	Rangamatia	Forest Road	21.036089	84.525857
93	Athamalik	Bamur	Bamur	Bamur	Dasntala	Maintenance of Fireline	21.04132	84.496348
94	Athamalik	Bamur	Bamur	Bamur	Narthen RF, Comp-5	Water Hole	21.040203	84.497495
95	Athamalik	Bamur	Kadalimunda	Tentulipani	Tulasipur	Guided the unguided well	20.877388	84.407217

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
96	Athamalik	Handapa	Urukul	Takaba	Northern RF, Comp-25	Maintenance of Fireline	21.020315	84.640044
97	Athamalik	Handapa	Handapa	Ethapur	Hondapa RF, Comp.-1	Plantation of Fruit & Fodder species around the Water Body	20.99506	84.7453
98	Athamalik	Handapa	Urukul	Takaba	Narthen RF, Comp-25	Maintenance of Fireline	21.020315	84.640044
99	Athamalik	Handapa	Handapa	Handapa	Range Office Campus	Tube Well	20.9530072	84.686802
100	Athamalik	Handapa	Urukul	Takaba	Bhalukhola	Water Body	21.048513	84.647584
101	Athamalik	Handapa	Urukul	Takaba	Kamrei to Dimirdihi	Forest Road	21.016652	84.638947
102	Athamalik	Handapa	Handapa	Handapa	Comp.-5	Elephant proof trench	20.967233	84.699761
103	Athamalik	Handapa	Urukul	Takaba	Narthen RF, Comp.-34	Causeway	21.017048	84.661702
104	Athamalik	Handapa	Urukul	Takaba	Takaba	Boundary Wall	21.004364	84.637632
105	Athamalik	Madhapur	Deakrud	Dharatapur	Nuagaon RF	Signage	20.83918	84.44801
106	Athamalik	Madhapur	Kiakata	Kiakata	West Baruni RF, Comp-2	Bamboo Seed ball	20.90442	84.31276
107	Athamalik	Madhapur	Madhapur	Nuagaon	Nuagaon	Installation of VHF Tower	20.83115	84.4421
108	Athamalik	Dhandatopa	Paikasahi	Sisokata	Dantari RF, Comp-2	Water Body	20.861301	84.747469
109	Athamalik	Dhandatopa	Dhandatopa	Dhandatopa	Dhandatopa	Signage	20.794313	84.592797
110	Khariar	Khariar	Sanmaheswar	Dharamsagar	Latabanjhi PRF	Maintenance of Fireline	20.420558	82.671835
111	Khariar	Nuapada	Dharm Bandhu	Seth Jamupani	Near Kalimdadar	Plantation of Fruit & Fodder species around the Water Body	20.760702	82.364799
112	Khariar	Komna	Rajna	Chhujpani	Patdhara PRF	Water Body	20.358453	82.539805
113	Khariar	Komna	Rajana	Chhujpani	Khali to Redhamal	Forest Road	20.417049	82.561971
114	Khariar	Sinapali	Nangalbada	Chitarama	Talakote	Forest Guard Quarter	20.080247	82.42388
115	Khariar	Sinapali	Liad	Kopla	Kopla	Forester Quarter	20.117582	82.73475
116	Dhenkanal	Kamakhya Nagar East	Jiridamali	Batagaon	Jiridamali	Boundary Wall	20.936826	85.558613
117	Dhenkanal	Kamakhya Nagar East	Jiridamali	Batagaon	Jiridamali	Range Office	20.936763	85.558694
118	Dhenkanal	Kamakhya Nagar East	Jiridamali	Batagaon	Jiridamali	Tube Well	20.936719	85.558633
119	Dhenkanal	Kamakhya Nagar East	Birasal	Haladikundi	Haladikundi	Forest Guard Quarter	20.9967	85.636651
120	Dhenkanal	Kapilash	Kapilash	Kapilash	Kapilash Zoo	King Cobra & Python Resque Center	20.693071	85.751915
121	Dhenkanal	Kapilash	Kapilash	Kapilash	Kapilash Zoo	Salt Lick	20.692587	85.751209
122	Dhenkanal	Bhuban	Jirala	Rankla	Badadeuli	Water Body	20.85368	85.60974

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
123	Dhenkanal	Bhuban	Jirala	Rankla	Bhalukhia	Anti-Poaching Barrack	20.85464	85.62567
124	Dhenkanal	Mahabirod	Mahabirod	Kuturia	Ambakhola	Plantation of Fruit & Fodder species around the Water Body	21.036132	85.34423
125	Dhenkanal	Hindol	Khajuriakata	Sarsingh	Khajuriakata	Forester Quarter	20.585789	85.200149
126	Dhenkanal	Hindol	Rasol	Rasol	Panchapada	WHS	20.665431	85.289191
127	Dhenkanal	Hindol	Hindol	Hindol	Hindol to Fasiagon	Forest Road	20.585286	85.200964
128	Similipal North	Gurguria	Kaliani	Kaliani	Near Similipal Gate	Forester Quarter	21.899032	86.190088
129	Similipal North	Chahala	Rajpal	Rajpal-2	Rajpal Office	Forest Guard Quarter	21.962223	86.256245
130	Similipal North	Barehipani	Matigahati	Matigahati	Matigahati	Watch Tower	21.920722	86.371144
131	Similipal North	Barehipani	Matigahati	Matigahati	Kalia Prasad to Nawana	Forest Road	21.920962	86.371493
132	Similipal North	Barehipani	Barehipani	Barehipani	Barehipani	Boundary Wall	21.94949	86.34936
133	Similipal North	Chahala	Chahala	Chahala	Chahala Range office	Salt Lick	21.98581	86.29401
134	Similipal North	Chahala	Chahala	Chahala	Chahala	Causeway	21.986279	86.279041
135	Similipal North	Nawana	Nawana	Nawana	Balarampur	Water Body	21.88084	86.38479
136	Similipal North	Chahala	Chahala	Chahala	Chahala	Forest Road	21.98297	86.27933
137	Similipal North	Gurguria	Gurguria	Gurguria	Gurguria	Range Officer Residence	21.86303	86.24352
138	Similipal North	Gurguria	Gurguria	Gurguria	Gurguria	Range Office	21.86302	86.24328
139	Similipal North	Gurguria	Chahala	Chahala	Brundaban	Meadow Development	21.97784	86.27865
140	Similipal North	Nawana	Nawana	Nawana	Nawana	WHS	21.88493	86.38577
141	Similipal North	Chahala	Chahala	Chahala	Solabhadi	Invasive Weed Eradication	21.97822	86.29568
142	Similipal North	Chahala	Rajpal	Rajpal	Balehutab	Maintenance of Fireline	21.96122	86.24985
143	Similipal North	Kendumundi	Ranipat	Ranipat	Barakamuda	Tube Well	21.813885	86.111998
144	Similipal North	Kendumundi	Ranipat	Kiajhari	Kiajhari	Renovation of Water Body	21.835573	86.129725
145	Similipal North	Kendumundi	Ranipat	Kiajhari	Kiajhari	Plantation of Fruit & Fodder species around the Water Body	21.83546	86.12966
146	Similipal North	Kendumundi	Ranipat	Kiajhari	Kiajhari	Meadow Development	21.835052	86.13131
147	Rairangpur	Badampahar	Suleipat	Purunapani	Badampahar RF near Purunapani Village	Maintenance of Fireline	21.12612	86.18834
148	Rairangpur	Badampahar	Badampahar	Talapati	Tirilip DPF	WHS	22.05974	86.07752
149	Rairangpur	Bahalda	Jamda	Sunamara	Sunamara	Water Body	22.223899	86.062236
150	Rairangpur	Bahalda	Jamda	Manbir	Taran Khadia Sahi	Plantation of Fruit & Fodder species around the Water Body	22.249341	86.008445

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
151	Rairangpur	Rairangpur	Gorumahisiani	Gorumahisiani	Gorumahisiani Section Office	Boundary Wall	22.334579	86.277359
152	Rairangpur	Rairangpur	Gorumahisiani	Gorumahisiani	Gorumahisiani Section Office	Forester Quarter	22.3343	86.276586
153	Rairangpur	Rairangpur	Gorumahisiani	Gorumahisiani	Kusumghati to Dahupani	Forest Road	22.372048	86.310007
154	Rairangpur	Rairangpur	Saragoda	Chadhepahadi	Chadhepahadi	Forest Guard Quarter	22.302943	86.389727
155	Rairangpur	Rairangpur	Saragoda	Chadhepahadi	Saragoda section office compus	Tube Well	22.303036	86.389629
156	Baripada	Deuli	Suliapada	Kanthisahi	Kanthisahi	Water Body	20.055382	86.95829
157	Baripada	Deuli	Suliapada	Kanthisahi	Ghangana WB	Plantation of Fruit & Fodder species around the Water Body	20.083095	86.959694
158	Baripada	Deuli	Kuliana	Kuliana	Kuliana section	Forest Guard Quarter	22.06908	86.65048
159	Baripada	Bangiriposhi	Badagaon	Dhobanisol	Purushotampur	WHS	22.059277	86.566542
160	Baripada	Bangiriposhi	Badagaon	Badagaon	Badagaon	Signage	22.10966	86.533083
161	Baripada	Bangiriposhi	Badagaon	Dhobanisol	Khadikasole	Maintenance of Fireline	22.056146	86.53139
162	Baripada	Udala	Udala	Udala	Range office campus	Forester Quarter	21.575907	86.565745
163	Baripada	Udala	Kuamara	Dhaundia	Dhaundia	Plantation of Fruit & Fodder species around the Water Body	21.64561	86.74000
164	Baripada	Udala	Khunta	Khunta	Silaghathi	Plantation of Fruit & Fodder species around the Water Body	21.68276	86.77567
165	Baripada	Kaptipada	Natoo	Sarat Natoo	Sarat Natoo	Trap camera	21.18654	86.222442
166	Baripada	Kaptipada	Sarisua	SarisuaSarisua	Purushotampur	Watch Tower	21.185	86.2232
167	Baripada	Baripada	Dingdinga	Dingdinga	Dingdinga	Anti-Poaching Barrack	21.908636	86.628065
168	Baripada	Baripada	Dingdinga	Dingdinga	Shyamsole	Renovation of Water Body	21.908733	86.614799
169	Chandaka WL	Dampada	Dampada	Dampada	Dampada Range office	Fire Fighting Blower	20.390204	85.623504
170	Chandaka WL	Dampada	Dampada	Dampada	Dampada	Causeway	20.386107	85.6549
171	Chandaka WL	Dampada	Dampada	Dampada	Dampada Range office	Anti-Poaching Barrack	20.390149	85.623487
172	Chandaka WL	Dampada	Dampada	Pithakhia	Pithakhia	Maintenance of Fireline	20.354257	85.645303
173	Chandaka WL	Chandaka	Godibari	Bhola	Bhola	Water Body	20.363078	85.716903
174	Chandaka WL	Chandaka	Godibari	Godibari	Godibari	Meadow Development	20.329502	85.733277
175	Chandaka WL	Haladia	Haladia	Manapur	Manapur	Forest Road	20.285047	85.647017
176	Chandaka WL	Haladia	Minchinpatna	Jamujhari	Jamujhari	WHS	20.284962	85.664791
177	Chandaka WL	Haladia	Minchinpatna	Jamujhari	Jamujhari	Salt Lick	20.311984	85.67401
178	Chandaka WL	Chhamundia	Dhipisahi	Dhipisahi	Dhipisahi	Causeway	20.521545	84.790755

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
179	Mahanadi WL	Chhamundia	Dhipisahi	Dhipisahi	Dhipisahi	Plantation of Fruit & Fodder species around the Water Body	20.526857	84.781718
180	Mahanadi WL	Banigochha East	Badasilingi	Badasilingi	Badasilingi	Installation of VHF Tower	20.446472	84.801845
181	Mahanadi WL	Banigochha East	Dhipisahi	Dhipisahi	Comp-20	Plantation of Fruit & Fodder species around the Water Body	20.516149	84.766985
182	Mahanadi WL	Banigochha East	Dhipisahi	Dhipisahi	Girigidi chhak to Osamaska chhak	Forest Road	20.498417	84.812622
183	Mahanadi WL	Banigochha East	Dhipisahi	Dhipisahi	Dhipisahi	Salt Lick	20.515802	84.767269
184	Mahanadi WL	Banigochha East	Banigochha	Banigochha	Haripur, Nayagarh	Forest Guard Quarter	20.110945	85.085654
185	Mahanadi WL	Banigochha East	Banigochha	Banigochha	Haripur, Nayagarh	Boundary Wall	20.111118	85.085392
186	Mahanadi WL	Banigochha East	Banigochha	Banigochha	Haripur, Nayagarh	Seizureyard	20.111214	85.08545
187	Mahanadi WL	Chhamundia	Badamal	Kuturi	Kuturi	Culvert	20.547852	84.826209
188	Mahanadi WL	Chhamundia	Dhipisahi	Dhipisahi	Dhipisahi	Maintenance of Fireline	20.532258	84.767486
189	Mahanadi WL	Chhamundia	Chhamundia	Chhamundia	Range office campus	Tube Well	20.476678	84.943173
190	Mahanadi WL	Chhamundia	Chhamundia	Chhamundia	Chhamundia	Water Body	20.43208	84.921332
191	Mahanadi WL	Banigochha East	Banigochha	Banigochha	Banigochha	Zoo Management	20.356525	84.803945
192	Rajnagar WL	Kujanga	Hawakhana	Sahadabedi	Sahadabedi	Plantation of Fruit & Fodder species around the Water Body	20.085237	86.460842
193	Rajnagar WL	Rajnagar	Satabhaya	Satabhaya	Satabhaya	Forester Quarter	20.643498	86.872289
194	Rajnagar WL	Rajnagar	Gupti	Krushnapriyapur	Krushnapriyapur	Forest Guard Quarter	20.614888	86.85384
195	Rajnagar WL	Rajnagar	Rajnagar	Rajnagar	Rajnagar	Range Officer Residence	20.569197	86.673406
196	Rajnagar WL	Rajnagar	Rajnagar	Rajnagar	Rajnagar	Range Office	20.569454	86.673496
197	Rajnagar WL	Rajnagar	Rajnagar	Rajnagar	Rajnagar	Boundary Wall	20.6435281	86.87432
198	Khurdha	Khurda	Begunia	Begunia	Begunia	Forester Quarter	20.232778	85.471436
199	Khurdha	Tangi	Bhusandapur	Nalsingi	Gayabandha	Watch Tower	20.083757	85.531878
200	Khurdha	Tangi	Bhusandapur	Nalsingi	Nalsingi	Signage	20.071176	85.553183
201	Khurdha	Tangi	Bhusandapur	Bhusandapur	Bhusandapur section office	Installation of VHF Tower	19.959451	85.476713
202	Khurdha	Tangi	Bhusandapur	Bhusandapur	Bhusandapur section office	Anti-Poaching Barrack	19.959459	85.476727
203	Khurdha	Tangi	Patia	Patia	Patia section office	Boundary Wall	19.935174	85.318774
204	Khurdha	Tangi	Patia	Patia 2	Patia 2	Elephant proof trench	19.93405	85.286686
205	Khurdha	Tangi	Tangi	Tangi	Tangi Range office campus	Tube Well	19.928575	85.396355

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
206	Khurdha	Ranapur	Batuli	Batuli	Mal RF	Maintenance of Fireline	19.945952	85.155398
207	Khurdha	Ranapur	Batuli	Batuli	Mal RF	Forest Road	19.94584	85.14954
208	Khurdha	Ranapur	Kardapala	Bhetabara	Bhetabara	Maintenance of Fruit bearing & Fodder species around Water Body	19.997677	85.262642
209	Khurdha	Ranpur	Batuli	Batuli	Nelipada pathar khani	Plantation of Fruit & Fodder species around the Water Body	19.951523	85.18718
210	Khurdha	Balugaon	Dhuannali	Siling padar	Tamana RF	Causeway	19.915609	85.11098
211	Khurdha	Balugaon	Padmapur	Padmapur 1	Padmapur	Forest Guard Quarter	20.111485	85.085317
212	Khurdha	Balugaon	Balugaon	Balugaon	Balugaon	Range Officer Residence	19.751652	85.202038
213	Similipal South	Podadiha	Podadiha	Podadiha	Podadiha	Range Office	21.560291	86.431604
214	Similipal South	Podadiha	Podadiha	Kantiali	Hidisahi	Forest Guard Quarter	21.493782	86.279624
215	Similipal South	Podadiha	Podadiha	Podadiha	Podadiha range office campus	Boundary Wall	21.560282	86.431614
216	Similipal South	Podadiha	Podadiha	Podadiha	Podadiha range office campus	Seizureyard	21.560291	86.431604
217	Similipal South	Podadiha	Dangadiha	Dangadiha 1	Dangadihi	Causeway	21.493889	86.279722
218	Similipal South	Podadiha	Podadiha	Baghaanta	Baghaanta	Culvert	21.493281	86.279242
219	Similipal South	National park	Kabataghai	Kabataghai	Kabataghai	Range Officer Residence	21.798665	86.263393
220	Similipal South	National park	Kabataghai	Kabataghai	Kabataghai	Meadow Development	21.793805	86.264841
221	Similipal South	National park	Kabataghai	Kabataghai	Kabataghai	Maintenance of Water Body	21.792549	86.267969
222	Similipal South	National park	Mahabirsal	Mahabirsal	Mahabirsal	Forester Quarter	21.727069	86.230158
223	Similipal South	Jenabil	Jenabil	Sanapokhari	Sanapokhari	Salt Lick	21.729125	86.359887
224	Similipal South	Jenabil	Jenabil	Sanapokhari	Sanapokhari	Maintenance of Fireline	21.718427	86.351187
225	Similipal South	Jenabil	Jenabil	Sanapokhari	Sanapokhari	Forest Road	21.725541	86.413393
226	Similipal South	Jenabil	Jenabil	Sanapokhari	Sanapokhari	Invasive Weed Eradication	21.709492	86.328479
227	Similipal South	National park	Mahabirsal	Mahabirsal	Mahabirsal	Elephant proof trench	21.727153	86.2300165
228	Berhampur	Berhampur	Tamana	Tamana	Tamana	Forest Guard Quarter	19.255128	84.717597
229	Berhampur	Berhampur	Tamana	Khandalabandha	Khandalabandha	Forest Road	19.227565	84.653193
230	Berhampur	Berhampur	Tamana	Tamana	Tamana	Tube Well	19.255117	84.717556
231	Berhampur	Berhampur	Tamana	Belapada	Belapada	Maintenance of Water Body	19.327676	84.698226
232	Berhampur	Berhampur	Hinjilicut	Nandika	Nandika	Boundary Wall	19.441808	84.838063
233	Berhampur	Berhampur	Tumba	Puriasahi	Inside Singhraj RF	Maintenance of Fireline	19.0263267	84.376295
234	Ghumusar North	Tarsing	Ghogada	Ghogada	Ghogada	Forest Guard Quarter	20.214589	84.788088
235	Ghumusar North	Tarsing	Ghogada	Ghogada	Ghogada	Boundary Wall	20.214871	84.788175

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
236	Ghumusar North	Jaganath Prasad	Gereda	Sapang	Sapang	Plantation of Fruit & Fodder species around the Water Body	20.002394	84.688282
237	Ghumusar North	Jaganath Prasad	Belanguntha	Saranuapalli	Saranuapalli	Construction of Sources, Saltlick, Water pockets and Meadow cultivation for Black buk conservation	19.922367	84.638459
238	Ghumusar North	Gallery	Gallery	Gallery	Gallery	Range Office	20.081675	84.596321
239	Ghumusar North	Gallery	Tilasingi	Tilasingi	Tilasingi	Forester Quarter	20.113	84.3749
240	Ghumusar North	Central	Kailamba	Badagorsingha	Badagorsingha	Plantation of Fruit & Fodder species around the Water Body	19.850541	84.538191
241	Ghumusar North	Mujagada	Mujagada	Langalakhola	Baibili RF	Maintenance of Water Body	20.000174	84.428724
242	Ghumusar North	Mujagada	Mujagada	Langalakhola	Baibili RF	Maintenance of Fireline	20.000189	84.428747
243	Ghumusar South	Badagada	Dhaupada	Dhaupada	Dhaupada	Forester Quarter	19.596575	84.492317
244	Ghumusar South	Sorada	Sorada	Dhepaguda	Dhepaguda	Forest Guard Quarter	19.715902	84.369186
245	Ghumusar South	Sorada	Sorada	Ripada	Range office campus	Boundary Wall	19.745743	84.442185
246	Ghumusar South	Sorada	Gadalbadi	Minajodi	Pandakhal RF	WHS	20.090748	84.494829
247	Ghumusar South	Buguda	Kumunda	Manitara	Manitara	Plantation of Fruit & Fodder species around the Water Body	19.8998482	84.757465
248	Ghumusar South	Buguda	Bhagabampur	Bhagabampur	Bhagabampur	Tube Well	19.863003	84.858703
249	Ghumusar South	Buguda	Bhagabampur	Talasar	Talasar	Forest Road	19.851023	84.926394
250	Ghumusar South	Buguda	Bhagabampur	Talasar	Kiriamba RF	Water Body	19.870159	84.946335
251	Ghumusar South	Aska	Dharakote	Kusuraba	Kusuraba	Plantation of Fruit & Fodder species around the Water Body	19.59605	84.604726
252	Ghumusar South	Aska	Aska	Babanpur	Narayanpur	Watch Tower	19.674308	84.704682
253	Ghumusar South	Aska	Aska	Babanpur	Bhetanai Jagati padia	Salt Lick	19.670418	84.684549
254	Ghumusar South	Buguda	Bhagabampur	Talasar	Kiriamba RF C/4	Maintenance of Fireline	19.870177	84.946346
255	Sunabeda WL	Sunabeda	Sosungi	Jalamadei	Kebdlum	Culvert	20.630348	82.485021
256	Sunabeda WL	Sunabeda	Sosungi	Jalamadei	Dhaki	Boundary Wall	20.604979	82.479457
257	Sunabeda WL	Sunabeda	Sosungi	Jalamadei	Bahabal	Water Body	20.61588	82.483427
258	Sunabeda WL	Sunabeda	Sosungi	Jalamadei	Rutiamba to Jalmadei	Maintenance of Fireline	20.639665	82.462669
259	Sunabeda WL	Sunabeda	Sunabeda	Sunabeda	Mahabandha	Plantation of Fruit & Fodder species around the Water Body	20.515955	82.460025
260	Sunabeda WL	Sunabeda	Sunabeda	Sunabeda	Hatikhal	WHS	20.514763	82.462372

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
261	Sunabeda WL	Komana	Chirchuan	Chirchuan	Chirchuan Seizure yard	Tube Well	20.536632	82.536852
262	Sunabeda WL	Komana	Khulibhitar	Khulibhitar	Bankiam to Khulibhitar road	Causeway	20.48239	82.553428
263	Sunabeda WL	Komana	Khulibhitar	Khulibhitar	Bankiam to Indranala and Bankiam to Rojana	Forest Road	20.481834	82.454064
264	Sunabeda WL	Nuapada	Jharabandha	Palara	Jharapani	Salt Lick	20.684762	82.444344
265	Sunabeda WL	Nuapada	Golabandha	Diamanda	Chandanpur	Plantation of Fruit & Fodder species around the Water Body	20.683849	82.531453
266	Sunabeda WL	Komana	Chirchuan	Chirchuan	Patakhalla	Water Body	20.568742	82.544105
267	Paralakhemundi	Mahendra	Garabandha	Garabandha	Naryanpur	Water Body	18.786402	84.270023
268	Paralakhemundi	Mahendra	Garabandha	Garabandha1	Durgam UDPF	Salt Lick	18.811348	84.252333
269	Paralakhemundi	Mahendra	Mahendra	Mahendra	Mahendra Range office	Trap Camera	18.8845	84.18479
270	Paralakhemundi	Debgiri	Bidura	Kharsanda	Satamaile	Forester Quarter	18.822029	84.163039
271	Paralakhemundi	Debgiri	Bidura	Kharsanda	Satamaile	Forest Guard Quarter	18.822078	84.162939
272	Paralakhemundi	Kasinagar	Kasinagar	Kasinagar	Kasinagar	Range Officer Residence	18.888238	83.884706
273	Paralakhemundi	Mohana	Paniganda	Betaganda	Janiganda west UDPF	WHS	19.578651	84.086206
274	Paralakhemundi	Chandragiri	Chandragiri	Chandragiri	Chakadhara	Plantation of Fruit & Fodder species around the Water Body	19.32189	84.290106
275	Paralakhemundi	Chandragiri	Taptapani	Taptapani	Taptapani Deer park	Zoo Management	19.487703	84.39605
276	Nandankanan Zoological Park	Sanctuary Management			Tiger Safari, Nandankanan	Invasive Weed Eradication	20.391621	85.81573
277	Nandankanan Zoological Park	Sanctuary Management			Tiger Safari, Nandankanan	Forest Road	20.394488	85.815039
278	Nandankanan Zoological Park	Sanctuary Management			Nandankanan	Bear Cave	20.394608	85.823192
279	Nandankanan Zoological Park	Sanctuary Management			Nandankanan	Weigh bridge	20.393575	85.823141
280	Nandankanan Zoological Park	Sanctuary Management			Nandankanan	Glass house for Crocodile	20.394699	85.821537
281	Nandankanan Zoological Park	Sanctuary Management			Nandankanan	Improvement of Bird habitat	20.357761	85.827666
282	Nandankanan Zoological Park	Sanctuary Management			Nandankanan	Maintenance of Zoo Hospital	20.393986	85.823284
283	Keonjhar	BJP	Kanjipani	Tandijoda	Near Tandijoda Nursery	Forest Guard Quarter	21.536524	85.473085

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
284	Keonjhar	BJP	Suakathi	Taramakanta	Champajhar	Solar Light	21.851388	85.30277
285	Keonjhar	BJP	Suakathi	Taramakanta	Champajhar	Solar Light	21.851213	85.3025
286	Keonjhar	Champua	Champua	Champua	Near Range office	Forester Quarter	22.066237	85.667961
287	Keonjhar	Telkoi	Bimala	Podanga	Bandhanjhari RF	Water Body	21.282727	85.406907
288	Keonjhar	Telkoi	Bimala	Podanga	Godhihudi	Renovation of Water Body	21.260822	85.348725
289	Keonjhar	Telkoi	Bimala	Dobalpur	Madhyapur	Plantation of Fruit & Fodder species arround the Water Body	21.35277	85.355
290	Keonjhar	Patna	Patna	Tandi	Vimakund to Baiganpal	Causeway	21.5412273	85.984316
291	Keonjhar	Patna	Patna	Tandi	Vimakund to Baiganpal	Forest Road	21.335813	85.992322
292	Keonjhar	Patna	Patna	Tandi	Vimakund to Baiganpal	Culvert	21.535898	85.99198
293	Keonjhar	Ghatagaon	Ghatagaon	Baiganpal (S)	Baiganpal	Boundary wall	21.451669	85.904655
294	Keonjhar	Ghatagaon	Ghatagaon	Baiganpal (S)	Baiganpal	Tube Well	21.472874	85.936599
295	Keonjhar	Ghatagaon	Ghatagaon	Kadabahali (N)	Atei RF	Maintenance of Fireline	21.446642	85.957692
296	Keonjhar	Ghatagaon	Ghatagaon	Kadabahali (N)	Atei RF	Plantation of Fruit & Fodder species arround the Water Body	21.439825	85.9777229
297	Keonjhar	Keonjhar	Keonjhar	Belda	Jarbelda NH.49	Signage	21.684893	85.674834
298	Keonjhar WL	Brahmanipal	Brahmanipal	Brahmanipal	Brahmanipal	Forester Quarter	21.123313	85.919023
299	Keonjhar WL	Andapur	Andapur	Andapur	Salapada	Seizureyard	21.21425	86.115231
300	Keonjhar WL	Andapur	Andapur	Andapur	Range office	Forest Guard Quarter	21.21595	86.106467
301	Keonjhar WL	Hadagarh	Hadagarh	Hadagarh	Raighati	Watch Tower	21.307682	86.354821
302	Keonjhar WL	Andapur	Ramachandrapur	Ganpur	Ganpur Bit	Boundary wall	21.051761	86.076758
303	Keonjhar WL	Andapur	Ramachandrapur	Boranga	Boranga	Maintenance of Water Body	21.042494	85.04269
304	Keonjhar WL	Andapur	Ramachandrapur	Boranga	Boranga	Plantation of Fruit & Fodder species arround the Water Body	21.046763	86.07465
305	Keonjhar WL	Andapur	Gayalamunda	Gayalamunda	Gayalamunda	WHS	21.366938	86.098078
306	Keonjhar WL	Andapur	Andapur	Andapur	Andapur	Fire Fighting Blower	21.215772	86.105437
307	Keonjhar WL	Andapur	Andapur	Andapur	Range office	Tube Well	21.215964	86.105301
308	Keonjhar WL	Hadagarh	Kathakata	Kathakata	Tungabadi	Salt Lick	21.279074	86.240709
309	Keonjhar WL	Hadagarh	Kathakata	Pitanau	Kathakata to Dalai	Forest Road	21.279397	86.240455
310	Keonjhar WL	Hadagarh	Kathakata	Pitanau	Banjhakusuma	Meadow Development	21.292959	86.245196
311	Keonjhar WL	Hadagarh	Kathakata	Pitanau	Muhana	Invasive Weed Eradication	21.293945	86.244918
312	Keonjhar WL	Hadagarh	Kathakata	Pitanau	Kadapata	Plantation of Fruit & Fodder species arround the Water Body	21.268173	86.252201

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
313	Keonjhar WL	Hadagarh	Kathakata	Pitanau	Barakanya	Maintenance of Fireline	21.276002	86.236495
314	Cuttack	Dalijoda	Chandikhol	Chandikhol	Back side of IB	Maintenance of Fireline	20.70633	86.107122
315	Cuttack	Sukinda	Sukinda	Patapur	Ashokjhar Watch tower	Tube Well	21.032954	85.896842
316	Cuttack	Dalijoda	Chandikhol	Chandikhol	Near Parbatsova Gate	Causeway	20.705314	86.085609
317	Cuttack	Dalijoda	Bairee	Kolha	Kolha Forest Beat	Tube Well	20.6986111	85.95444
318	Cuttack	Sukinda	Ransol	Natur-2	Kumuti Bahali	Culvert	21.091957	85.74049
319	Cuttack	Sukinda	Ransol	Natur-3	Dalak Sahi	Water Body	21.079608	85.759382
320	Cuttack	Sukinda	Ransol	Natur-1	Beat Quarter	Boundary wall	21.133673	85.732071
321	Cuttack	Tomka	Tomka	Tomka	Biodiversity Park	Park Development	21.079092	85.939335
322	Cuttack	Tomka	Duburi	Sagadagula	NH Side	Signage	21.057336	85.984773
323	Phulbani	Tikabali	Tikabali	Sankarakhol	Sankarakhol Beat	Boundary wall	20.316338	84.297571
324	Phulbani	Tikabali	Chahali	Kupati	Kusuma to Andriuguda	Forest Road	20.155652	84.525105
325	Phulbani	Tikabali	Chakapada	Chakapada	Chakapada	Forester Quarter	20.287454	84.478379
326	Phulbani	G. Udayagiri	G. Udayagiri	G. Udayagiri	G. Udayagiri	Range Officer Residence	20.126965	84.362197
327	Phulbani	Raikia	Raikia	Sagadabadi	Raikia	Forest Guard Quarter	20.053646	84.24287
328	Phulbani	Raikia	Karada	Kendukhari	kandrimaha	Plantation of Fruit & Fodder species around the Water Body	19.892155	84.26091
329	Phulbani	Karada	Indragarh	Dimiripally	Machaghat RF	Water Body	21.079608	85.759382
330	Kalahandi South	Dharmagarh	Ampani	Ampani	Ampani Barrack	Boundary wall	19.568319	82.622546
331	Kalahandi South	Dharmagarh	Ampani	Ampani	Birimuhan to Kukur	Forest Road	19.550842	82.60166
332	Kalahandi South	Karlapat	Karlapat	Karlapat B	Karlapat RF	Invasive Weed Eradication	19.651885	83.11749
333	Kalahandi South	Karlapat	Karlapat	Karlapat A	Karlapat RF	WHS	19.731162	83.093833
334	Kalahandi South	Karlapat	Sagada	Jakam A	Jakam	Salt Lick	19.747798	83.110932
335	Kalahandi South	Karlapat	Sagada	Jakam A	Jakam	Renovation of Water Body	19.75050511	83.112256
336	Kalahandi South	Karlapat	Sagada	Jakam A	Suruguda	Water Body	19.747104	83.116106
337	Kalahandi South	Karlapat	Kiapadar	Kiapadar	Kiapadar	Plantation of Fruit & Fodder species around the Water Body	19.719792	83.069063
338	Kalahandi South	Karlapat	Sagada	Katingkona	Karlapat Sanctuary	Maintenance of Fireline	19.747764	83.110074
339	Kalahandi South	Biswanathpur	Sikirkupa	Lanjigarh	Samajhola RF	Elephant proof trench	19.92853	83.405343
340	Kalahandi South	Junagarh	Junagarh	Banamalipur	Banamalipur	Tube Well	19.864695	82.996618
341	Kalahandi North	M. Rampur	Jurakhman	Taprang	Jurakhman	Forester Quarter	20.139377	83.632355
342	Kalahandi North	Narla	Kamarda	Kamarda	Kamarda to Bhurti	Forest Road	20.016428	83.42459

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
343	Kalahandi North	Narla	Kamarda	Bhurti	Bourgel	Maintenance of Fireline	19.747764	83.110074
344	Kalahandi North	Narla	Narla	Narla	Narla	Anti-Poaching Barrack	20.056586	83.3735
345	Kalahandi North	Narla	Belgaon	Gunangbeda	Pujiladu	WHS	20.127627	83.501357
346	Kalahandi North	Narla	Belgaon	Gunangbeda	Hatibandha	Plantation of Fruit & Fodder species around the Water Body	20.132445	83.499322
347	Kalahandi North	Kesinga	Asurpada	Khaman	Amath	Forest Guard Quarter	20.297926	83.306341
348	Kalahandi North	Kesinga	Asurpada	Khaman	Amath	Boundary wall	20.297076	83.306486
349	Kalahandi North	kegaon	Daspur	Daspur	Daspur	Tube Well	19.965517	82.866373
350	Kalahandi North	Bhawanipatna	Bhawanipatna	Bhawanipatna	Suruli	Water Body	19.819517	83.087798
351	Kalahandi North	Bhawanipatna	Bhawanipatna	Bhawanipatna	Bhawanipatna	Seizureyard	19.915521	83.191961
352	Boudh	Boudh	Baghiapada	Malikpada	Birigoda	Culvert	20.619255	84.238408
353	Boudh	Boudh	Charichaka	Kharabhuin	Baisipada	Causeway	20.569053	84.515259
354	Boudh	Purunakatak	Harabhanga	Sankulei	Aragada RF C-7	Maintenance of Fireline	20.645814	84.548633
355	Boudh	Boudh	Charichaka	Kharabhuin	Adipadar	Bamboo Seed ball	20.549869	84.500606
356	Boudh	Boudh	Baghiapada	Jamkhal	Jamkhal RF C-9	Water Body	20.65988	84.259128
357	Boudh	Boudh	Baghiapada	Berdabari	Bankamundi RF C-9	WHS	20.679267	84.274022
358	Boudh	Boudh	Baghiapada	Berdabari	Bankamundi RF C-8	Elephant proof trench	20.709366	84.269131
359	Boudh	Boudh	Baghiapada	Baghiapada	Baghiapada	Forest Guard Quarter	20.724794	84.229377
360	Boudh	Madhapur	Adenigarh	Karadakotha	Adenigarh to Khuntapada	Forest Road	20.513352	84.462923
361	Athagarh	Khuntuni	Nidhipur	Brahmanabasta	Brahmanabasta	Water Body	20.531189	85.774155
362	Athagarh	Khuntuni	Khuntuni	Adal	Ranibandha RF	Water Body	20.59373	85.695064
363	Athagarh	Khuntuni	Khuntuni	Adal	Ranibandha RF	WHS	20.594526	85.695413
364	Athagarh	Khuntuni	Krusnapur	Mahalaxmi	Baniabandha RF	Renovation of Water Body	20.611901	85.731183
365	Athagarh	Khuntuni	Oranda	Nuapatna	Mancheswar to Nuadhia	Solar Fencing	20.51137	85.782873
366	Athagarh	Narsingpur East	Devabhain	Devabhain	Sermunda to Guptamanik	Forest Road	20.55066	85.173597
367	Athagarh	Narsingpur East	Devabhain	Devabhain	Devabhain RF C-15	Maintenance of Fireline	20.554824	85.177037
368	Angul	Talcher	Seepur	Bulajhar-1	Bulajhar RF	Solar Fencing	21.092385	85.193728
369	Angul	Talcher	Seepur	Bulajhar-1	Bulajhar RF	Elephant proof trench	21.103718	85.183474
370	Angul	Kaniha	Kaniha-1	Kumuda	Badakathia RF	Bamboo Seed ball	21.006669	84.984797
371	Angul	Kaniha	Rengali	Rengali	Kuluma	Cattle Proof Trench	21.254414	84.9793
372	Angul	Kaniha	Rengali	Rengali	Saleimada RF	Barbed Fencing	21.274776	85.006692
373	Angul	Angul	Karatpata	Karatpata -B	Madhapur RF	Solar Fencing	20.744016	85.000673
374	Angul	Angul	Karatpata	Karatpata -B	Krusnachakra PRF	Maintenance of Fireline	20.728693	84.961683
375	Angul	Chendipada	Chendipada 2	Kanloi	Chendipada	Forest Guard Quarter	21.09728	84.707106

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
376	Angul	Chendipada	Chendipada 2	Kanloi	Chendipada	Forester Quarter	21.097163	84.707095
377	Angul	Chendipada	Chendipada 1	Chendipada 2	Chendipada RF	Maintenance of Fireline	21.041038	84.866366
378	Angul	Chendipada	Chendipada 1	Chendipada 2	Chendipada RF	Plantation of Fruit & Fodder species around the Water Body	21.048302	84.88357
379	Angul	Chendipada	Rajharan	Durgapur	Durgapur RF	Grass Land	20.921962	84.924555
380	Angul	Jarpada	Antalia	Lembutaila	Lembutaila	Boundary wall	20.810026	84.839501
381	Angul	Jarpada	Antalia	Lembutaila	Lembutaila	Forest Road	20.809318	84.836424
382	Angul	Jarpada	Antalia	Kandha Koili	Ogi to Antalia	Culvert	20.795911	84.860238
383	Angul	Jarpada	Antalia	Kandha Koili	Ogi to Antalia	Causeway	20.799053	84.859242
384	Angul	Jarpada	Antalia	Lembutaila	Lembutaila RF C-5	Maintenance of Fireline	20.809002	84.8407
385	Angul	Bantala	Pampasar	Pampasar	Balanga RF C-2	Maintenance of Fireline	20.685283	84.955662
386	Angul	Bantala	Nuakhata	Nuakhata -1	Nuakhata to New Raigada	Forest Road	20.654317	85.065488
387	Angul	Bantala	Pampasar	Balanga	Jukab	Forest Guard Quarter	20.67089	84.96246
388	Angul	Bantala	Pampasar	Balanga	Jukab	Tube Well	20.670931	84.962487
389	Jeypore	Baipariguda	Mathapada	Mathapada	Mathapada to Gobindpali	Forest Road	18.732502	82.308573
390	Jeypore	Baipariguda	Mathapada	Mathapada	Mathapada to Gobindpali	Culvert	18.729037	82.308189
391	Jeypore	Baipariguda	Mathapada	Mathapada	Mathapada to Gobindpali	Causeway	18.732451	82.3087
392	Jeypore	Gupteswar	Ramagiri	Ramagiri	Ramagiri Nursery	Tube Well	18.776034	82.247381
393	Jeypore	Boriguma	Kathakata	Kathakata	Pokhanaguda	Water Body	19.119223	82.719134
394	Koraput	Lamataput	Lamataput	Lamataput	Lamataput	Range Office	18.625864	82.5906
395	Koraput	Balda	Balda	Balda	Nageswari	Plantation of Fruit & Fodder species around the Water Body	18.441846	82.664749
396	Koraput	Balda	Balda	Balda	Nageswari	Renovation of Water Body	18.44177	82.664741
397	Koraput	Balda	Balda	Balda	Nageswari hill Road	Causeway	18.732451	82.3087
398	Nayagarh	Daspalla	Takera	Takera	Takera forest office	Tube Well	20.393053	84.751418
399	Nayagarh	Daspalla	Daspalla	Daspala	Range Office	Fire Fighting Blower	20.325029	84.85189
400	Nayagarh	Nayagarh	Khedapada	Khadag Prasad	Khedapada Section office	Forest Guard Quarter	20.19185	85.114118
401	Nayagarh	Nayagarh	Khedapada	Joglapali	Joglapali Fg Quarter Boundary	Boundary Wall	20.199225	85.132894
402	Nayagarh	Mahipur	Mahipur	Gateri	Gateri Barakola Forest Road	Culvert	20.129883	84.923651
403	Nayagarh	Mahipur	Mahipur	Gateri	Lingibari Bajrakot forest road	Causeway	20.105805	84.990332

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404	Nayagarh	Mahipur	Mahitama	Kosalar	Kosalama	Forest Road	20.255218	85.031018
405	Nayagarh	Mahipur	Mahipur	Mahipur	Michelli Sampada Rf	Water Body	20.190443	84.983321
406	Nayagarh	Mahipur	Gumi	Dimiria	Near Village Kusumgadla	Plantation of Fruit & Fodder species arround the Water Body	20.188205	84.828953
407	Nayagarh	Mahipur	Mahitma	Kosalanga	Kosalanga	Watch Tower	20.255433	85.030896
408	Nayagarh	Daspalla	Sakeni	Sakeni	Gunthapaju	Guided the unguided well	20.259175	84.82281
409	Nayagarh	Panchida	Darpanarayanpur	Darpanarayanpur	Darpanarayanpur	Forester Quarter	20.0774367	85.231425
410	Jharsuguda	kolabira	siriapali	Siriapali	Badkhulia PRF, Buchamunda	Water Body	21.8199466	84.0986583
411	Jharsuguda	Bagdhi	Bagdhi	Bagdhi	Bhunra	Solar Fencing	21.964167	84.1379375
412	Jharsuguda	Bagdhi	Bagdhi	Kadobahal	Goyeolmora PRF	Solar Fencing	21.9641225	84.137968
413	Jharsuguda	Jharsuguda	Jharsuguda	Malda	Kukurjangha	Improvement of Bird habitant	21.808166	83.995453
414	Jharsuguda	Jharsuguda	Jharsuguda	Malda	Singhabagha	Improvement of Bird habitant	21.821088	83.969629
415	Jharsuguda	Jharsuguda	Jharsuguda	Jharsuguda	Jharsuguda range office side	Seizureyard	21.859037	84.044203
416	Jharsuguda	Jharsuguda	Katikela	Katikela	Katikela Rf	Maintenance of Water Body	21.79288	84.075729
417	Jharsuguda	Jharsuguda	Katikela	Katikela	Katikela Rf	Plantation of Fruit & Fodder species arround the Water Body	21.792572	84.075212
418	Jharsuguda	Belpahar	Bagmunda	Tangorpali	Rampaluga	Watch Tower	21.672673	83.741145
419	Jharsuguda	Belpahar	Kanakotara	Badimal	Badimal	Forest Guard Quarter	21.779699	83.518058
420	Jharsuguda	Belpahar	Bikampali	Kedamghat	Kedamghat	Maintenance of Fireline	21.795414	83.540186
421	Jharsuguda	B R nagar	Rajpur	Badjor	On the forest road andhra to badjor	Causeway	21.87566	83.867181
422	Jharsuguda	B R nagar	B R Nagar	Rajpur	Mahijor	Forest Guard Quarter	21.835416	83.84689
423	Jharsuguda	B R nagar	Rajpur	Badjor	Andhra to Badjor Forest Road	Culvert	21.87161	83.869833
424	Jharsuguda	Jharsuguda	Jharsuguda	Balijori	New DFO office campus boundary	Boundary wall	21.873829	84.00607
425	City Forest Bhubaneswar	Bhubaneswar	Khandagiri(west)	Mendabahal	Mendhasal RF	Maintenance of Fireline	20.27672	85.713375
426	City Forest Bhubaneswar	Phulnakhara	Phulnakhara	Phulnakhara	Bagalpur(Near panchayat office)	Boundary wall	20.270337	85.969971
427	City Forest Bhubaneswar	Phulnakhara	Gopalpur	Gopalpur	Side of range office	Forest Guard Quarter	20.437831	85.905498

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
428	Deogarh	Reamal	Taranga	Tranga	Permanent nursery campus at Kudajharan	Seizureyard	21.32589	84.65826
429	Deogarh	Pallahada	Pallahad	Pallahada	Forester quarter campus	Tube Well	21.43476	85.19825
430	Deogarh	Pallahada	Pallahada	Pallahada	Badhamunda	Community centre	21.41625	85.20504
431	Deogarh	Barkot	Kala	Saida	Katei	Elephant proof trench	21.50258	85.09526
432	Deogarh	Pallahada	Pallahada	Kishornagar	Malyagiri RF	Water Body	21.38136	85.22147
433	Deogarh	Barkot	Thianala	Sarwali	Sarwali to Autula	Forest Road	21.54232	85.1748
434	Deogarh	Barkot	Kala	Saida	Saida	Solar Light	21.5445	85.11666
435	Deogarh	Barkot	Barkot	Barkot	Campus of Barkot Range office, Barkot	Forest Guard Quarter	21.54532	84.98648
436	Deogarh	Barkot	Dantaribahal	Dantaribahal	Village- Daudikhoh	Culvert	21.56186	84.80063
437	Deogarh	Barkot	Dantaribahal	Dantaribahal	Dudhikhoh	Causeway	21.56197	84.79772
438	Deogarh	Deogarh	Deogarh	Deogarh	Hadamunda	Water Body	21.49932	84.64706
439	Deogarh	Deogarh	Deogarh	Kansara	Kansara	Forester quarter	21.44064	84.51066
440	Deogarh	Deogarh	Laimura	Ludhar	Ludhar	Plantation of Fruit & Fodder species around the Water Body	21.66861	84.59511
441	Deogarh	Deogarh	Teleibani	Teleibani	Teleibani	Maintenance of Fireline	21.5608632	84.6336123
442	Deogarh	Deogarh	Deogarh	Deogarh	Campus of Range office	Range Officer Residence	21.5327335	84.7103549
443	Deogarh	Deogarh	Laimura	Laimura	Laimura section office campus	Installation of VHF Tower	21.694274	84.670717
444	Deogarh	Pallahada	Pallahada	Pallahada	Range office	Boundary wall	21.4347	85.19899
445	Hirakud WL	Lakhanpur	Uttam	Gobindapur	Gobindapur	Tube Well	21.762234	83.611728
446	Hirakud WL	Lakhanpur	Jhagadabehera	Pathidunguri	Pathidunguri	Trap Camera	21.5603	83.62048
447	Hirakud WL	Lakhanpur	Jhagadabehera	Pathidunguri	Barakhandia chawk	Plantation of Fruit & Fodder species around the Water Body	21.56245	83.64348
448	Hirakud WL	Lakhanpur	Sambardhara	Mundakati	On the way from Barabanka picnic sport to village	Culvert	21.587916	83.576485
449	Hirakud WL	Lakhanpur	Sambardhara	Sambardhara	Sambardhara	Boundary wall	21.564035	83.511246
450	Hirakud WL	Kamgaon	Kamgaon	Junani	Junani	Forest Guard Quarter	21.492663	83.68876
451	Hirakud WL	Kamgaon	Dhudukusum	Pahadchhida	Pahadchhida	Causeway	21.482883	83.748739
452	Hirakud WL	Kamgaon	Dhudukusum	Pahadchhida	Pahadchhida	Forest Road	21.492502	83.723192
453	Hirakud WL	Kamgaon	Dhudukusum	Rengali	Rengali	Salt Lick	21.5057	83.767302
454	Hirakud WL	Kamgaon	Dhudukusum	Rengali	Campus of Range office	Installation of VHF Tower	21.500684	83.771074
455	Hirakud WL	Kamgaon	Dhudukusum	Rengali	Rengali	Fire Fighting Blower	21.500709	83.771075
456	Hirakud WL	Sambalpur	Sambalpur	Sambalpur	Sambalpur	Forester quarter	21.473522	83.990464
457	Bhadrak WL	Chandbali	Chandwali	Chandwali	Chandwali	Forester quarter	20.780228	86.727445

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
458	Bhadrak WL	Chandbali	Dhamara	Dhamara	Dhamara	Barbed Fencing	20.10629	83.78488
459	Bhadrak WL	Chandbali	Dhamara	Dhamara	Dhamara	Maintenance of Boundary area	20.10629	83.78488
460	Bhadrak WL	Basudevpur	Bedeipur	Bedeipur	Bedeipur	Forest Guard Quarter	20.79306	86.93587
461	Chilika WL	Tangi	Mukteswar	Mukteswar	Mangalodi	Forest Guard Quarter	19.918413	85.43659
462	Chilika WL	Tangi	Mukteswar	Mukteswar	Mangalodi Nature Camp	Tube Well	19.920064	85.431754
463	Chilika WL	Tangi	Soren	Sunakhala	Sunakhala Permanent Nursery	Boundary wall	19.821216	85.293557
464	Chilika WL	Tangi	Tangi	Tangi	Range office Campus	Range Officer Residence	19.929686	85.396687
465	Chilika WL	Balugaon	Parikud	Nalaban	Nalaban Santury	Invasive Weed Eradication	19.689442	85.295412
466	Chilika WL	Balugaon	Parikud	Nalaban	Nalaban Santury	Maintenance of Boundary area	19.689421	85.282708
467	Chilika WL	Rambha	Keshpur	Badaghati	On the way of watch Tower within forest Road	Causeway	19.588174	85.113655
468	Chilika WL	Rambha	Keshpur	Badaghati	NH to watch Tower	Forest Road	19.588057	85.113666
469	Chilika WL	Satapada	Arakhakuda	Arakhakuda	Arakhakuda village	Forester Quarter	19.717035	85.583499
470	Sundargarh	Sundargarh	Sundargarh	Podajalanga	Satparlia RF	Solar Light	22.09661	84.08674
471	Sundargarh	Sundargarh	Sundargarh	Podajalanga	Satparlia RF	Solar pipe water supply	22.09716	84.08874
472	Sundargarh	Sundargarh	Sundargarh	Podajalanga	Satparlia RF	Community Centre	22.09762	84.08913
473	Sundargarh	Sundargarh	Sundargarh	Podajalanga	Satparlia RF	Tube Well	22.09768	84.08906
474	Sundargarh	Ujalpur	Ujalpur	Ujalpur	Budabahal	Water Body	22.11709	83.93327
475	Sundargarh	Ujalpur	Ujalpur	Ujalpur	Budabahal	Plantation of Fruit & Fodder species around the Water Body	22.11717	83.93283
476	Sundargarh	Ujalpur	Sampatrapali	Rajpur	Karlaghati	Bamboo seed ball	22.20646	84.06935
477	Sundargarh	Hemgiri	Hemgiri	Hemgiri	Hemgiri to beheramunda	Forest Road	21.91897	83.68406
478	Sundargarh	Hemgiri	Hemgiri	Hemgiri	Inside of Garjanpahad in Manikmunda	Anti-Poaching Barrack	21.91694	83.67628
479	Sundargarh	Hemgiri	Rohini	Rohini	Rohini	Boundary wall	21.81903	83.69495
480	Sundargarh	Hemgiri	Rohini	Rohini	Rohini	Tube Well	21.81894	83.69498
481	Sundargarh	Lefripada	Gudia	Dhengergudi	Bhursidand	Forest Guard Quarter	22.23669	83.79413
482	Sundargarh	Gopalpur	Tihuria	Jamkani	Gopalpur to Jamkani Forest road	Culvert	22.11293	83.59872

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483	Sundargarh	Gopalpur	Tihuria	Jamkani	On the Jamkani Rf	Maintenance of Fireline	22.11334	82.59599
484	Sundargarh	Gopalpur	Tihuria	Jamkani	On the way of forest road	Causeway	22.10777	83.58432
485	Rourkela	Kuarmunda	Birda	Birkera	Birkera section office campus	Tube Well	22.12022	84.81767
486	Rourkela	Rajgangpur	Sonakhan	Buchupada	Silikudar	Solar fencing	22.15034	84.51103
487	Rourkela	Rajgangpur	Malidhi	Bandkhaman	Budhaam to Bandkhaman forest road	Culvert	22.07656	84.64974
488	Rourkela	Rajgangpur	Malidhi	Ludabasa	Rengalbeda to Kalodhi	Forest Road	22.11707	84.68307
489	Rourkela	Rajgangpur	Malidhi	Malidhi	Campus of Malidhi section office	Boundary wall	22.13493	84.62881
490	Rourkela	Banki	K.balang	K.balang	Inside the nursery of Luguda temporary nursery	Improvement of Bird habitant	22.04258	85.03487
491	Rourkela	Banki	K.balang	K.balang	Jharbeda Rf	Water Body	22.03517	84.00066
492	Rourkela	Banki	Dhanghar	Birtola	Dhanghar near waterbody	Grass Land	21.96508	84.901
493	Rourkela	Banki	Rajmunda	Birtola	Dhanghar near burutola	Renovation of water body	21.96429	84.90089
494	Rourkela	Rajgangpur	Sonakhan	Bukupada	Sonakhan to Silikudar solar fencing	Solar fencing	22.15832	84.57277
495	Rairakhol	Girish Chadrapur	Balikiari	Kholgarh	Kholgarh	Tube Well	21.20459	84.35817
496	Rairakhol	Girish Chadrapur	Balikiari	Kholgarh	Kholgarh	Forest Guard Quarter	21.20456	84.35815
497	Rairakhol	Girish Chadrapur	Balikiari	Balikiari	Balikiari	Guided the unguided well	21.20195	84.33148
498	Rairakhol	Girish Chadrapur	Balikiari	Balikiari	Charmal to balikiari Forest road	Culvert	21.20265	84.32896
499	Rairakhol	Girish Chadrapur	Luhabir	Jaresinga	Phulkusum to talab forest road	Causeway	21.271	84.30698
500	Rairakhol	Girish Chadrapur	Girischandrapur	Girischandrapur	Kholgarh RF	Maintenance of Fireline	21.28707	84.35536
501	Rairakhol	Charmal	Charmal	Charmal	Charmal	Range Office	21.08307	84.16087
502	Rairakhol	Badbahal	Kadaligarh	Tal	Kendumunda watchtower	Maintenance of Fruit bearing & Fodder species around Water Body	21.0237	84.30194
503	Rairakhol	Badbahal	Kadaligarh	Ambajhari	Rahan near village ambajhari	Water Body	20.93767	84.24503

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
504	Sambalpur	Town	Jampali	Jampali	Barahampur RF	Maintenance of Boundary area	21.39622	83.94692
505	Sambalpur	Dhama	Gayalsing	Gayalsing	Dijharan	Water Body	21.21826	83.99021
506	Sambalpur	Dhama	Kulgaon	Kulgaon	Kulgaon	Forest Road	21.19456	83.99421
507	Sambalpur	Dhama	Tablei	Tablei	Tablei	Maintenance of Fireline	21.1573249	83.9741281
508	Sambalpur	Dhama	Lorasara	Lorasara	Lorasara	Forest Guard Quarter	21.18229	83.91052
509	Sambalpur	Dhama	Lorasara	Lorasara	FRH boundarywall at Lorasara FRH	Boundary wall	21.18299	83.91158
510	Sambalpur	Sadar	Jhankarpali	Baduapali	Amtunguri to jhankarpali forest road	Culvert	21.33745	84.05352
511	Sambalpur	Padiabahal	Padiabahal	Ladladi	Ladladi	Maintenance of Fruit bearing & Fodder species around Water Body	21.37543	84.20782
512	Sambalpur	Padiabahal	Chhamunda	Chhamunda	Chambda to Jamtal forest road	Causeway	21.3333	84.16675
513	Sambalpur	Rengali	Gumlei	Gumlei	Jharghat to Badpali RF	Bamboo seed ball	21.59387	84.13224
514	Sambalpur	Rengali	Sardhapali	Sardhapali	Sardhapali	Forester Quarter	21.74081	84.13845
515	Sambalpur	Sadar	Jujomura	Jujomura	Jujomura range office campus	Tube Well	21.23991	84.13801
516	Satkosia WL	Purunakot	Baghamunda	Baghamunda	Baghamunda	Meadow Development	20.694854	84.73963
517	Satkosia WL	Purunakot	Baghamunda	Baghamunda	Baghamunda	Plantation of Fruit & Fodder species around the Water Body	20.695001	84.753787
518	Satkosia WL	Purunakot	Purunakot	Purunakot	Purunakot	Invasive Weed Eradication	20.662523	84.807553
519	Satkosia WL	Purunakot	Purunakot	Purunakot	BadDamaka	Bamboo seed ball	20.662551	84.807597
520	Satkosia WL	Purunakot	Purunakot	Chatke(A)	Inside Chatkei campus of Forest guard quater	Tube Well	20.634303	84.880974
521	Satkosia WL	Purunakot	Purunakot	Chatke(B)	Hadibaselu	Excavation of elephant proof trench	20.634344	84.881075
522	Satkosia WL	Purunakot	Purunakot	Chatke(B)	Bhurkundi village	Forest Road	20.618842	84.91902
523	Satkosia WL	Purunakot	Toka	Tuluka(D)	Tuluka village	Solar fencing	20.605926	84.952663
524	Satkosia WL	Purunakot	Tuluka	Tuluka(N)	Tuluka Forest guard quarter boundarywall	Boundary wall	20.603975	84.958411
525	Satkosia WL	Jhilinda	Katrang	Katrang	Katrang	Forest Guard Quarter	20.573841	84.84566
526	Satkosia WL	Tikarpada	Tikarpada	Tikarpada	Tikarpada Eco park	Zoo Management	20.61321	84.79162
527	Satkosia WL	Tikarpada	Tikarpada	Tikarpada	Tikarpada	Maintenance of Fireline	20.635805	84.78172

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
528	Satkosia WL	Tikarpada	Tikarpada	Tikarpada-A	Tikarpada	Salt Lick	20.594174	84.842522
529	Satkosia WL	Tikarpada	Tikarpada	Tikarpada-A	Tikarpada	Culvert	20.594174	84.842522
530	Satkosia WL	Tikarpada	Tikarpada	Tikarpada-A	Tikarpada	Anti-Poaching Barrack	20.6226133	84.797055
531	Bargarh	Bhatli	Samardara	Samardara	Santhara	Maintenance of Fireline	21.592998	83.535443
532	Bargarh	Bhatli	Dechuan	Junani	Junani, Boundary of FG Guard qtr.	Boundary wall	21.616769	83.572088
533	Bargarh	Bhatli	Samardara	Gangei	Gangei, in the campus of FG Qtr.	Tube Well	21.572509	83.49064
534	Bargarh	Ghess	Sohela	Sargunapali	Jharei	Maintenance of Fruit bearing & Fodder species around Water Body	21.233391	83.256735
535	Bargarh	Bhatli	Duari	Pandritarei	Jalmunda to Dwari Forest Road (SDBR RF)	Forest Road	21.507136	83.459511
536	Bargarh	Bhatli	Samardhara	Bhatli	Samardhara	Forest Guard quarter	21.563806	83.511386
537	Malkangiri	Chitrakunda	Chitrakunda	Chitrakunda	Chitrakunda (Pujariiguda)	Forester quarter	18.109214	82.103343
538	Malkangiri	Balimela	San Nathapur	San Nathpur	Dudumaguda (on the way of Pilakusumi to Podakkhal)	Tube Well	18.113767	832.112269
539	Malkangiri	Motu	Motu	Murliiguda	Kadimatela RF, Near to State highway	Causeway	18.317125	82.12385
540	Malkangiri	Malkangiri	Motu	Murliiguda	Near state highway, Kadimatela RF	Maintenance of Fireline	17.867261	81.493249
541	Malkangiri	Motu	MV79	Manyamkanda	MV 79(close to SH Motu to Malkangiri)	Forest Guard Quarter	17.986084	81.649873
542	Malkangiri	Malkangiri	Kurkunda	Kurkunda	Boundary wall of Kurkunda Section office	Boundary wall	18.284931	81.979261
543	Malkangiri	Malkangiri	Malkangiri	Malkangiri	Goiparbat RL	Bear Cave	18.381691	81.893841
544	Malkangiri	Malkangiri	Padmagiri	Jharapali	Jharapali	Maintenance of Water Body	18.433665	81.919714
545	Malkangiri	Malkangiri	Malkangiri	Jharpali	Sindrimal PRF	Plantation of Fruit & Fodder species around the Water Body	18.433693	81.919628
546	Nawarangpur	Nabarangpur	Nabarangpur	Taragam	Charakaban Range office Boundary	Boundary wall	19.269446	82.538235
547	Nawarangpur	Dabugaon	Dabugam	Sarguli	In between Parsuguda to	Culvert	19.523331	82.282026

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
548	Nawarangpur	Dabugaon	Maldapur	Charmula	Jamguda forest Road Charmula (Gorgorel RF)	Bear Cave	19.487008	82.551993
549	Nawarangpur	Kodinga	K. Gumuda	Kusumi	In between of Jhakundapur to malbeda	Causeway	19.417348	82.212807
550	Nawarangpur	Umarkot	Singsari	Singsari	Singsari central Nursery campus	Forest Guard Quarter	19.503922	82.164368
551	Nawarangpur	Umarkot	Tohara	Tohara	Tohara Section office Campus	Forester Quarter	19.802698	82.228745
552	Nawarangpur	Kodinga	Atigaon	Kusumi	Atigaon FG Quarter	Tube Well	19.38328	82.266837
553	Balasure WL	Jaleswar	Udayapur	Udayapur	Udayapur see shore	Forest Guard Quarter	21.61491	87.484075
554	Balasure WL	Jaleswar	Baddiha	Sukjodi	Sukjodi	Tube Well	21.931555	87.156074
555	Balasure WL	Sora	Khuntapatna	Khuntapatna	Khuntapatana	Forester Quarter	21.353409	86.625048
556	Balasure WL	Sora	Khuntapatna	Khuntapatna	Khuntapatana	Fire Fighting Blower	21.353409	86.625048
557	Balasure WL	Sora	Khuntapatna	Dantur	Balimunduli to champeswar	Forest Road	21.363648	86.581992
558	Balasure WL	Sora	Oupada	Agriapada	Agriapada	Water Body	21.357288	86.570774
559	Balasure WL	Sora	Oupada	Agriapada	Agriapada	Plantation of Fruit & Fodder species around the Water Body	21.57297	86.570811
560	Balasure WL	Sora	Oupada	Agriapada	Kuldiha Century	Maintenance of Fireline	21.354009	86.543904
561	Balasure WL	Kuldiha	Kupari	Kupari	Kupari Central Nursery	Boundary wall	21.268373	86.413263
562	Balasure WL	Sora	Kupari	Paikpada	Mainsadali (Dehurisahi)	Maintenance of Water Body	21.341078	86.44478
563	Balasure WL	Sora	Oupada	Oupada	Oupada range office Campus	Range Officer Residence	21.326634	86.505984
564	Balasure WL	Kuldiha	Jharanghati	Kaimahudi	Kaimagudi	Maintenance of Boundary area	21.491437	86.57411
565	Balasure WL	Kuldiha	Jharanghati	Kaimahudi	Jharaghati to Purunapani forest Road	Causeway	21.461307	86.570727
566	Balasure WL	Kuldiha	Jharanghati	Kaimahudi	Ghusuria Nala	Culvert	21.439994	86.569602
567	Balasure WL	Kuldiha	Kuldiha	Kuldiha	Near to Kuldiha Section office	Salt Lick	21.428235	86.648395
568	Balasure WL	Kuldiha	Panchalingeswar	Tenda	Tenda	Invasive Weed Eradication	21.454048	86.698156
569	Balasure WL	Chandipur	Balasure	Balasure	Division office	Purchasing of Drone & its assosarise	21.469846	86.884325

Sl No.	Division	Range	Section	Beat	Location/Site	Type of Assets	Latitude	Longitude
570	Balasure WL	Chandipur	Chandipur	Chandipur	Chandipur Guest house	Solar Light	21.451313	867.040143
571	Puri WL	Konark	Konark	Konark	Manguleswar	Maintenance of Fruit bearing & Fodder species around Water Body	19.882576	86.08632
572	Puri WL	Konark	Konark	Konark	Manguleswar FS-1	Meadow Development	19.883363	86.08661
573	Puri WL	Konark	Konark	Konark	Range office, Konark	Trap Camera	19.889249	86.090766
574	Puri WL	Balukhand	Balukhand	Balukhand	Chidananda Ashram gat to Sea beach	Forest Road	19.812781	85.879938
575	Puri WL	Brahmagiri	Moto	Kathuaredi	Near to Moto section office	Floating Jetty with Speed boat	19.751808	85.678233
576	Puri WL	Brahmagiri	Harchandi	Kathuali	Palanka VSS area to Moto VSS, Narsingpatna	Maintenance of Fireline	19.746116	85.678364
577	Puri WL	Balukhand	Balukhand	Balukhand	Balukhand Road side	Meadow Development	19.827716	85.874906
578	Baliguda	Kotagarh	Lassery	Supamaha	Pabangaon	Causeway	19.736202	83.678993
579	Baliguda	Kotagarh	Lassery	Supamaha	Bataguda	Culvert	19.740978	83.681253
580	Baliguda	Kotagarh	Lassery	Supamaha	Jharihati	Forest Guard Quarter	19.748653	83.69553
581	Baliguda	Tumudibandha	Kurtamgarh	Kurtamgarh	Batabadi	Water Body	20.116143	83.61206
582	Baliguda	Tumudibandha	Tumudibandha	Kurtamgarh	Batabadi	Forest Road	19.94250	83.68722
583	Baliguda	Tumudibandha	Tumudibandha	Maliguda	Batabadi	Forester Quarter	19.92611	83.61111

Bamboo Plantation:

SL. No.	Division	Range	Section	Beat	Name of Site	Type of Plantation	Latitude	Longitude
1	Athamallik	Dhandatopa	Dhandatopa	Hatasimili	Hatidhara RF, Comp. No.-10	Bamboo Plantaion	20.751142	84.679287
2	Athamallik	Dhandatopa	Dhandatopa	Hatasimili	Hatidhara RF, Comp. No.-10	Bamboo Plantaion (2nd Year Maintenance)	20.764824	84.667559
3	Dhenkanal	Hindol	Hindol	Karnapur	Karnapur	Bamboo Plantation (3rd Year Maintenance)	20.6551	85.16844
4	Kharlar	Komna	Komna	Kamkeda	Bahangarbasa	Bamboo Plantation (2nd Year Maintenance)	20.560878	82.692769
5	Subarnapur	Sonepur	Kumbharmunda	Kumbharmunda	Polebandha	Bamboo Plantation (3rd Year Maintenance)	20.58531	83.66796
6	Bonai	Kuliposh	Daleisara	Daleisara	Daleisara	Bamboo Plantation (3rd Year Maintenance)	20.683517	85.039676
7	Bamra WL	Badarama	Gaudapalli	Goudapalli	Gudguda PRF	Bamboo Plantation (3rd Year Maintenance)	21.468704	84.212538
8	Balangir	Lathor	Lathor	Mahanilaha	Mahanilaha	Bamboo Plantation	20.573045	82.821226
9	Rayagada	K.Singpur	K.Singpur	Bijenagar	Pandarapada	Bamboo Plantation (3rd Year Maintenance)	19.47069	83.26072
10	Phulbani	Phiringia	Gochhapada	Gochhapada	Bamboo P lantation Bailikia	Bamboo P lantation	20.477507	83.975321
11	Phulbani	Phiringia	Phiringia	Phiringia	Bamboo P lantation Krantibali	Bamboo P lantation	20.351146	84.109519
12	Phulbani	Phubani	Khajuripada	Dutipada	Bamboo P lantation Dutimundi	Bamboo P lantation	20.445665	84.352433
13	Kalahandi North	M.Rampur	M.Rampur	Goudakela	Bamboo P lantation Taparanga	Bamboo P lantation	20.173974	83.572009
14	Kalahandi South	Junagarh	Junagarh	Rajpur	Bamboo P lantation Jharabandha	Bamboo P lantation	19.751048	82.952731

SL. No.	Division	Range	Section	Beat	Name of Site	Type of Plantation	Latitude	Longitude
15	Athagarh	Khuntuni	Nidhipur	Nidhipur	Bamboo Plantation Brahmanabasta	Bamboo Plantaion	20.524636	85.744888
16	Angul	Angul	Purunagarh	Purunagarh North	Bamboo P lantation Badandasahi	Bamboo Plantaion	20.774263	84.982046
17	Angul	Jarpada	Balipata	Basantapur	Bamboo Plantation Machaketa	Bamboo Plantaion	21.052072	84.831118
18	Jeypore	Gupteswar	Ramgiri	Majhiguda	Bamboo Plantation Majhiguda	Bamboo Plantaion	18.778082	82.245988
19	Balasure WL	Kuldiha	Panchalingeswar	Kuldiha	Chalaka	Bamboo P lantaion	21.455507	86.703802
20	Balasure WL	Nilgiri	Nilgiri	Dhobasila	Dhobasila (2nd year maintenance)	Bamboo P lantaion (2nd year maintenance)	21.4944419	86.784319
21	Balasure WL	Jaleswar	Baradiha	Sukjodi	Uppertota	Bamboo P lantaion (2nd year maintenance)	21.884352	87.179485
22	Nayagarh	Khandapada	Singapada	Kaijhara	Guriabari	Bamboo P lantaion (2nd year maintenance)	20.34387	85.092797
23	Rairakhol	Charmal	Bansajal	Gadgadbahal	Sagmalia	Bamboo P lantaion	21.06049	84.15369
24	Sambalpur	Padiabahal	Chhamunda	Chhamunda	Jamdhari (Bamboo 400)	Bamboo P lantaion	21.30366	84.1523
25	Sambalpur	Dhama	Dhama	Badmal	Deogaon	Bamboo P lantaion (3rd year maintenance)	21.24798	83.99963
26	Deogarh	Deogarh	Kansara	Soda	Gurlia (3rd year maintenance)	Bamboo P lantaion (3rd year maintenance)	21.48024	84.47511
27	Rourkela	Banki	Rajamunda	Birtola	Deodhar (Bamboo Plantation 400)	Bamboo P lantaion maintenance)	21.96459	84.8763
28	Sundargah	Hemgiri	Daghora	Lamaibahal	Budeikani (2nd year maintenance)	Bamboo P lantaion (2nd year maintenance)	21.85137	83.64106
29	Jharsuguda	Kolabira	Kolabira	Dhobenbud	Jamchuan (OBDP)	Bamboo P lantaion	21.79049	84.27722
30	Jharsuguda	Kolabira	Lariapali	Lariapali	Lariapali (3rd year maintenance, OBDP)	Bamboo P lantaion (3rd year maintenance)	21.790527	84.276897
31	Baragarh	Ghess	Diptipur	Jamkher	Mohanpali (3rd year maintenance 1600)	Bamboo P lantaion (3rd year maintenance)	21.092797	83.063866
32	Baragarh	Paikmal	Paikmal	Paikmal	Gandapali (2nd year maintenance)	Bamboo P lantaion (2nd year maintenance)	21.066357	82.921322

SL. No.	Division	Range	Section	Beat	Name of Site	Type of Plantation	Latitude	Longitude
33	Malkangiri	Malkangiri	Padmagiri	Padmagiri	Jhileriguda (2nd year maintenance)	Bamboo Plantaion (2nd year maintenance)	18.475356	81.891489
34	Malkangiri	Chitrakunda	Gunthawada	Gunthawada	Majhiguda	Bamboo Plantaion	18.080429	82.062135
35	Nabarangpur	Umarkot	Karka	murtuma	Murtuma (2nd year Bamboo plantation)	Bamboo Plantaion (2nd year maintenance)	19.752035	82.159358
36	Berhampur	Samantiapalli	Turubudi	Duttiasahi	Baniabasa	Bamboo plantation	19.099722	84.384444
37	Ghumusar North	Tarsingi	Gayaganda	Gayaganda	Adibasi colony	Bamboo plantation	20.1869	84.734236
38	Ghumusar North	Mujagada	Mujagada	Langalakhola	Langalakhola	Bamboo plantation	20.010675	84.457349
39	Ghumusar South	Badagada	Goudagotha	Goudagotha	Gumakhala	Bamboo plantation	19.671738	84.326611
40	Ghumusar South	Aska	Aska	Digi	Padmapalli	Bamboo plantation	19.732834	84.59099
41	Sunabeda WL	Komana WL	Chereichuan	Chereichuan	Dabri	Bamboo plantation	20.496465	82.547669
42	Sunabeda WL	Nuapada WL	Katingpani WL	Katingpani WL	Godhus	Bamboo plantation	20.665715	82.434674
43	Paralakhemundi	Mahendra	Garabandha I	Garabandha II	S.M.Peta	Bamboo plantation	18.796711	84.241378
44	Paralakhemundi	Mahendra	Garabandha	Kinchilingi II	Satabhauni Bamboo plantation	Bamboo plantation	18.90728	84.310355
45	Baliguda	Kotagada	Srirampur	Ora	Srirampur	bamboo plantation	19.755571	83.878833
46	Baliguda	Belghar	Belghar	Belghar	Sanjuakola	Bamboo plantation	19.929955	83.614418
47	Baliguda	Baliguda	Khamankhol	Anagul	Bainsakheljore	Bamboo plantation	20.384244	83.683658

SSO Bamboo:

SL. No	Division	Range	Section	Beat	Name of Site	Type of Plantation	Latitude	Longitude
1	Rairkakhol	Badmal	Badmal	Sagjor	Sagjor	Regeneration of Degreded Bamboo Forest	21.12592	83.99114
2	Debagarh	Debagarh	Kansara	Kansar	Bhangamunda	Regeneration of Degreded Bamboo Forest	21.41019	84.52546

SL. No	Division	Range	Section	Beat	Name of Site	Type of Plantation	Latitude	Longitude
3	Sambalpur	Dhama	Tablei	Tablei-I	Tablei	Regeneration of Degraded Bamboo Forest	21.16639	83.96136
4	Jharsuguda	Belpahad	Bhikimpali	Kadamghat	Baunsenpali	Regeneration of Degraded Bamboo Forest	21.78849	83.54724
5	Sundargarh	Hemgiri	Kodbahal	Jhulengarh	Garjanpahad	Regeneration of Degraded Bamboo Forest	21.99724	83.69518
6	Nayagarh	Daspalla	Pakharigochha	Bhogabari	Budhapadar (Central RF compartment-II)	Regeneration of Degraded Bamboo Forest	20.31686	84.75367
7	Baragarh	Padmapur	Jagdaiapur	Putka	Nuapada-Loharkata	Regeneration of Degraded Bamboo Forest	21.13583	82.97704
8	Malkangiri	Chitrakunda	Dankari	Chilkaimamudi	Ganmentpada	Regeneration of Degraded Bamboo Forest	18.0407	81.9307
9	Berhampur	Samantiapalli	Samantiapalli	Haripur	Haripur 'D' Block	Regeneration of Degraded Bamboo Forest	19.09637	84.47691
10	Ghumusar North	Gallery	Badangi	Badangi	Gopadar	Regeneration of Degraded Bamboo Forest	20.15888	84.6437
11	Ghumusar North	Central	Bhanjanagar	Dumakumpa	Kailamba	Regeneration of Degraded Bamboo Forest	19.89443	84.49195
12	Ghumusar South	Sorada	Gadalbadi (S)	Adipanka	Adipanka	Regeneration of Degraded Bamboo Forest	19.7959	84.28267
13	Paralakhemundi	Ramagiri	Mahendragada	Sialliati	Duranga	Regeneration of Degraded Bamboo Forest	19.20166	84.37273
14	Boudh	Boudh	Baghiapada	Jamkhol	SSO Bamboo Jamkhal	Regeneration of Degraded Bamboo Forest	20.62186	84.19819
15	Boudh	Purunakatak	Harabhanga	Sankulei	SSO Bamboo Araguda	Regeneration of Degraded Bamboo Forest	20.64413	84.54867
16	Kalahandi North	Narla	Kamarda	Kamarda	SSO Bamboo Pongel	Regeneration of Degraded Bamboo Forest	20.00432	83.47174
17	Kalahandi South	Junagarh	Junagarh	Banamalipur	SSO Bamboo Ghana	Regeneration of Degraded Bamboo Forest	19.86933	82.99232
18	Athagarh	Badamba	Badamba	Aranda	SSO Bamboo Haladiaseni	Regeneration of Degraded Bamboo Forest	20.47685	85.31596

SL. No	Division	Range	Section	Beat	Name of Site	Type of Plantation	Latitude	Longitude
19	Angul	Jarpada	Jarpada	Jarada	SSO Bamboo Katada	Regeneration of Degraded Bamboo Forest	20.88118	84.8547
20	Jeypore	Gupteswar	Gupteswar	Ratakbandi	SSO Bamboo Dhandrakhal	Regeneration of Degraded Bamboo Forest	18.76716	82.20525
21	Koraput	Similiguda	Sunki	Bangariguda	SSO Bamboo Bangariguda	Regeneration of Degraded Bamboo Forest	18.42371	83.03681
22	Balangir	Lathor	Lathor	Jhalialit	Chandili RF	Regeneration of Degraded Bamboo Forest	20.69826	82.77089
23	Athamalik	Dhandatopa	Ambadamunda	Bhuasuni Nali	Taleipather RF	Regeneration of Degraded Bamboo Forest	20.79079	84.58164
24	Dhenkanal	Hindol	Rasol	Rasol	Lahada RF Comp-8	Regeneration of Degraded Bamboo Forest	20.62982	85.31763
25	Khariar	Khariar	Samaheswar	Dharamsagar	Dharamsagar	Regeneration of Degraded Bamboo Forest	20.40215	82.68686
26	Bonai	Jarda	Kansar	Kansar	Katakeal	Regeneration of Degraded Bamboo Forest	21.79122	84.63213
27	Rayagada	Rayagada	Gumma	Gumma	Sirisapadu	Regeneration of Degraded Bamboo Forest	19.24382	83.33493
28	Subarnapur	Ulunda	Sindho	S. Patrapali	Singhasana RF	Regeneration of Degraded Bamboo Forest	21.16112	83.90423
29	Bamra WL	Jamankira	Bhojpur	Siridi	Prabhasuni RF, Comp.-32	Regeneration of Degraded Bamboo Forest	21.6331	84.44533

Nursery:

Sl. No.	Division	Range	Section	Beat	Name of the Nursery	Latitude	Longitude
1	Cuttack	Dalijoda	Chandikhoh	Chandikhoh	Mahavinayak Permanent Nursery	20.71189	86.087735
2	Athagarh	Athagarh	Rajnagar	Rajnagar	Boudabanakhndi Central Nursery	20.496227	85.660863
3	Phulbani	Phulbani	Phulbani	Phulbani	Mega Nursery	20.470253	84.258905
4	Phulbani	Phiringia	Phiringia	Phiringia	Central nursery	20.398589	84.053078
5	Kalahandi North	Kegaon	Kegaon	Kegaon	Central nursery	20.103606	82.88814
6	Angul	Angul	Purunagarh	Purunagarh South	Kulasingha Mega Nursery	20.773127	84.979339
7	Angul	Bantala	Khenda	Pokatunga	Permanent Nursery	20.742863	85.063028
8	Koraput	Similiguda	Sunki	Sunki	Sunki Temporary Nursery	18.499219	83.049505

Sl. No.	Division	Range	Section	Beat	Name of the Nurseries	Latitude	Longitude
9	Koraput	Koraput	Koraput	Koraput -1	Central nursery, Koraput	18.823504	82.68187
10	Koraput	Lamatapat	Lamatapat	Lamatapat	Central nursery, Lamatapat	18.630452	82.587404
11	Kalahandi South	Junagarh	Dumurbahal	Jaring	Central nursery, Jaring	19.892325	83.010555
12	Jeypure	Boriguma	Boriguma	Boriguma	Central nursery, Boriguma	19.056725	82.535769
13	Boudh	Madhapur	Madhapur	Madhapur	Permanent Nursery, Madhapur	20.449468	84.504037
14	Boudh	Purunakatak	Kusanga	Kusanga	Paidabhuiin Temporary Nursery	20.587026	84.670977
15	Keonjhar WL	Andapur	Gayalmunda	Gayalmunda	Temporary Nursery, Gayalmunda	21.36938	86.09835
16	Keonjhar WL	Brahmanipal	Daitry	Talapada	Temporary Nursery, Talapada	21.125357	85.797635
17	Keonjhar	Champua	Champua	Champua	Temporary Nursery, Godhuli	21.895788	85.577271
18	Keonjhar	Keonjhar	Palaspanga	Kampadi	Mega Nursery, Padampur	21.722647	85.581765
19	Bamra WL Division	Jamankira	Bhojpur	Siridi	Permanent Nursery, Siridi	21.634263	84.446812
20	Bamra WL Division	Badrama	Badrama	Gantab	Temporary Nursery, Gantab	21.47987	84.2994
21	Athamalik	Dhandatopa	Dhandatopa	Dhandatopa	Permanent Nursery, Dhandatopa	20.798759	84.597514
22	Athamalik	Handapa	Charikhaman	Hingirda	Temporary Nursery, Hingirda	21.00673	84.73208
23	Karanjia	Thakurmunda	Kendujiani	Kendujiani	Permanent Nursery, Khuntakata	21.627943	86.102791
24	Dhenkanal	Dhenkanal	Sadar	Kunjakata	Central Nursery, Dhenkanal	20.637073	85.615656
25	Bonai	Sole	Soleguda	Sole	Permanent Nursery, Thakurpali	22.010687	84.610351
26	Rairangpur	Badampahar	Hatapada	Hatapada	Central Nursery, Badampahar	20.17557	86.09287
27	Subarnapur	Birmaharajpur	Durdura	Durdura	Central Nursery, Durdura	20.9114	84.21765
28	Rayagada	K.Singpur	K.Singpur	K.Singpur	Permanent Nursery, K.Singpur	19.50906	83.314587
29	Baripada	Deuli	Deuli	Deuli	Temporary Nursery, Mahabilla	22.004349	86.904576
30	Balangir	Deogaon	Deogaon	Deogaon	Temporary Nursery, Deogaon	20.55411	83.417723
31	Khariar	Sinapali	Patialpada	Karlapani	Central Nursery, Sardhapur	20.097733	82.687532
32	Baragarh	Bhatli	Bhatli	Samardara	Pipalmunda Permanent Nursery	21.436112	83.571203
33	Chilika WL	Satapada	Arakhakuda	Manikpatna	Arakhakuda Temporary Nursery	19.676538	85.534279
34	Rourkela	Banki	Rajamunda	Rajamunda	Rajamunda Temporary Nursery	21.86939	84.92766
35	Sundargarh	Ujalpur	Ujalpur	Ujalpur	Ujalpur Central Nursery		
36	Bhadrakh WL	Chandbali	Chandbali	Chandbali	Temporari Nursery, Patuli		
37	Deogarh	Barkot	Thianal	Thianal	Gursang Permanent Nursery		
38	Deogarh	Reamal	Reamal	Reamal	Khudjharan Permanent Nursery		
39	Jharsuguda	BR Nagar	BR Nagar	BR Nagar	Brajraj Nagar Permanent Nursery	21.856905	83.919218
40	Jharsuguda	Belpahad	Kanaktora	Badimal	Badimal Permanent Nursery	21.779356	83.517914
41	Nayagarh	Daspalla	Daspalla	Patharapunjia	Kuanria Permanent Nursery	20.343472	84.827885
42	Rairakhol	Charmal	Charmal	Charmal	Charmal Permanent Nursery		
43	CT Division	Bhubaneswar	Khandagiri East	Khandagiri	Central Nursery		
44	Sambalpur	Sadar	Basiapada	Basiapada	Basiapada Permanent Nursery		
45	Chandaka WL	Dampada	Dampada	Dampada	Permanent Nursery, Dampada	20.390261	85.623768
46	Chandaka WL	Haldia	Minchinpatna	Minchinpatna	Karadapalli, Permanent Nursery	20.267013	85.644617
47	Khorda	Khorda	Khorda	Jariput	Ketakjhara Permanent Nursery		
48	Khorda	Ranapur	Karadapala	Bhetabara	Bhetabara Permanent Nursery	20.006202	85.267417
49	Rajnagar WL	Mahakalpada WL	Jambu	Jambu	Temporary Nursery, Jambu	20.429833	86.724851
50	Mahanadi WL	Banigochha East	Dhipisahi	Dhipisahi	Temporary Nursery, Dhipisahi	20.506774	84.806826

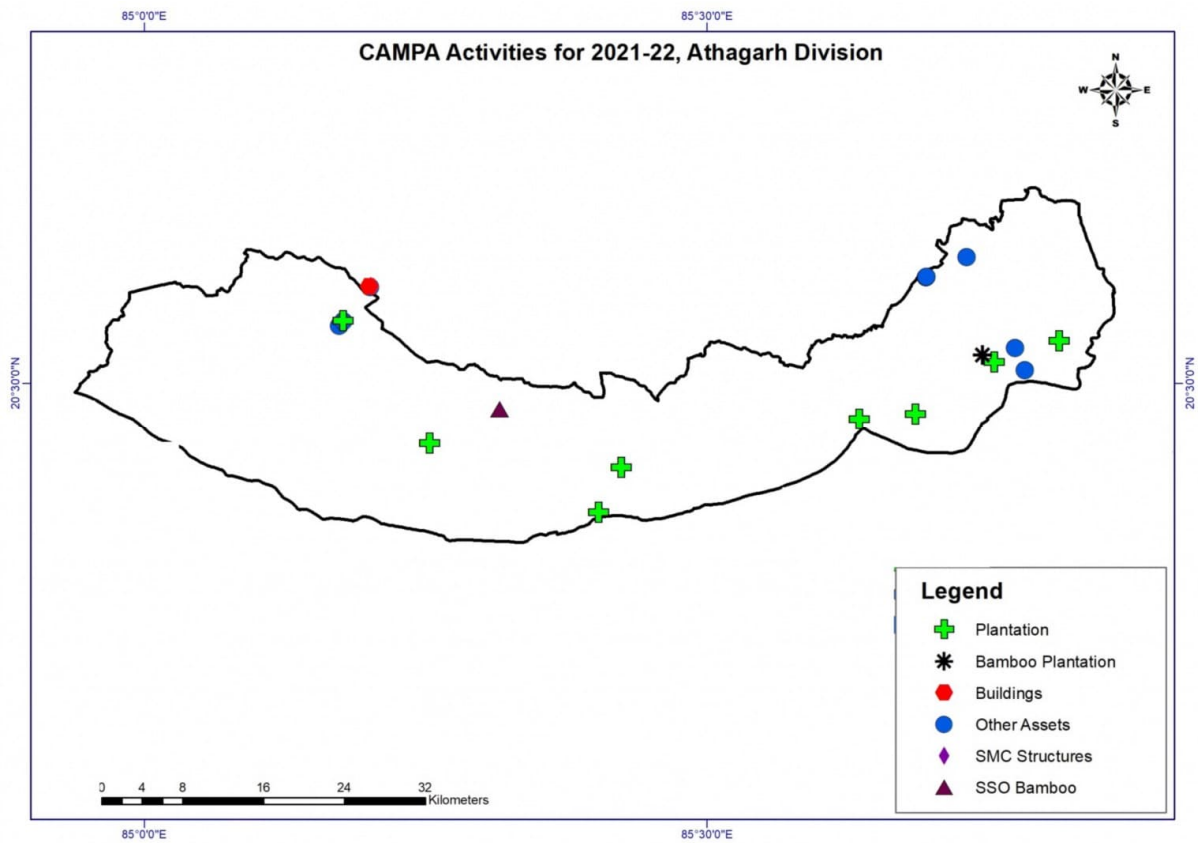
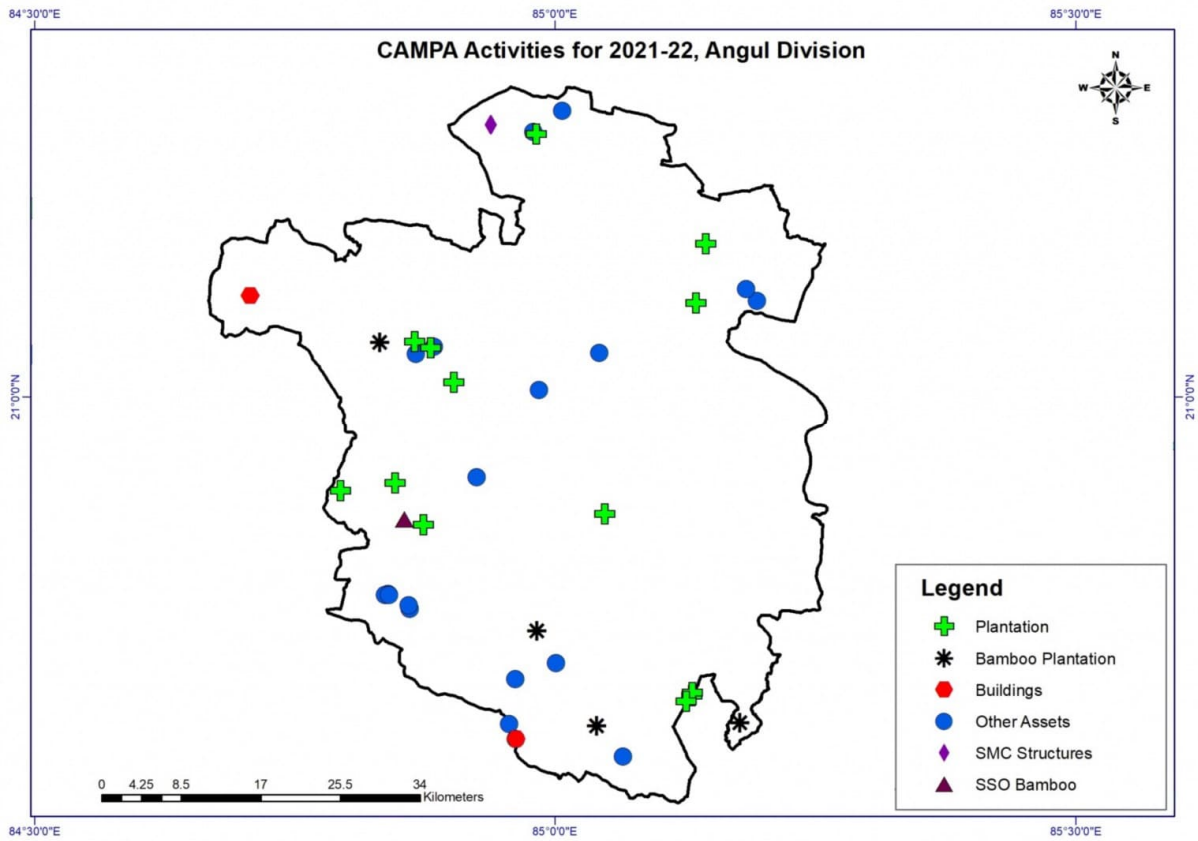
Sl. No.	Division	Range	Section	Beat	Name of the Nursery	Latitude	Longitude
51	Berhampur	Berhampur	Chatrapur	New Boxipalli	Casurena Nursery, New Boxipalli	19.15003	84.53197
52	Berhampur	Berhampur	Tamana	Khandalabandha	Permanent Nursery, Amunia	19.225957	84.664402
53	Paralakhemundi	Ramagiri	Ramagiri	Ramagiri	Permanent Nursery, Subalada	19.074194	84.271384
54	Paralakhemundi	Debagiri	Guma	Ambajhari	Temporary AJY Nursery, Talakhlabada	18.877971	84.024534

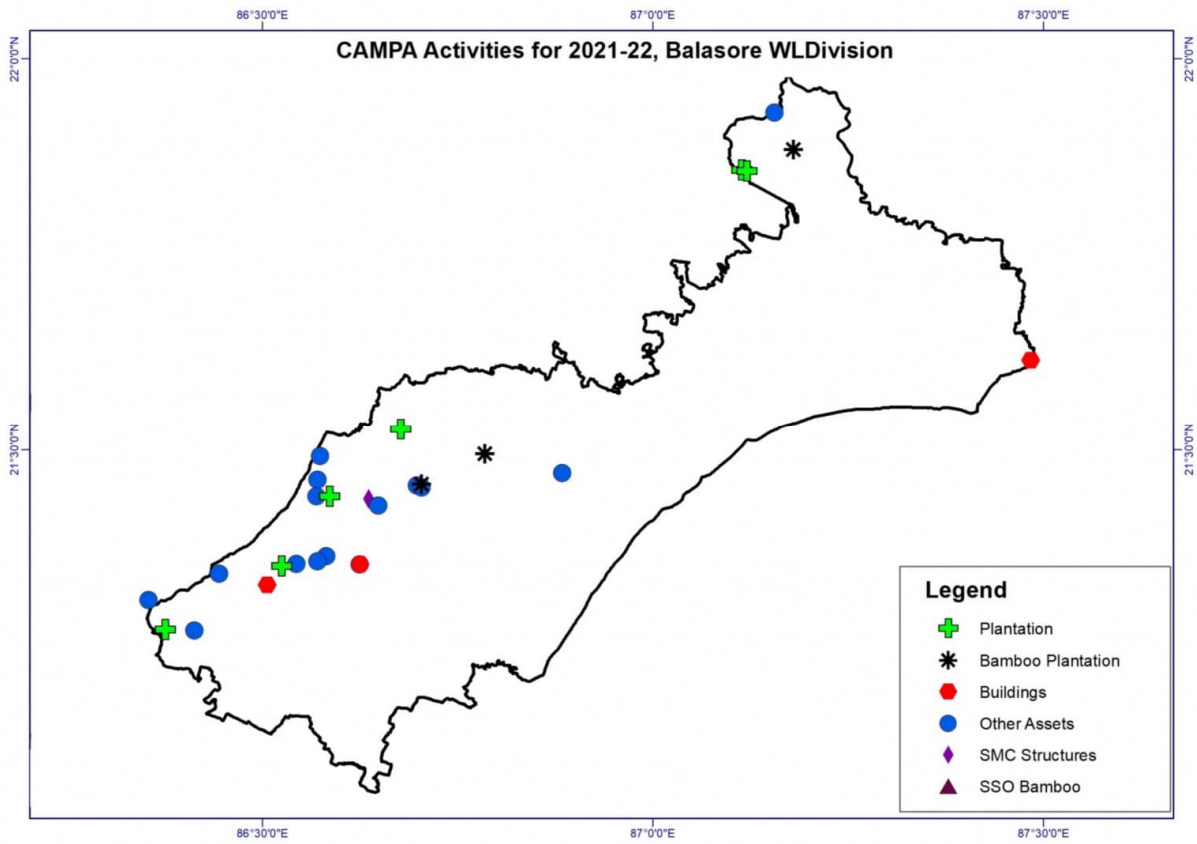
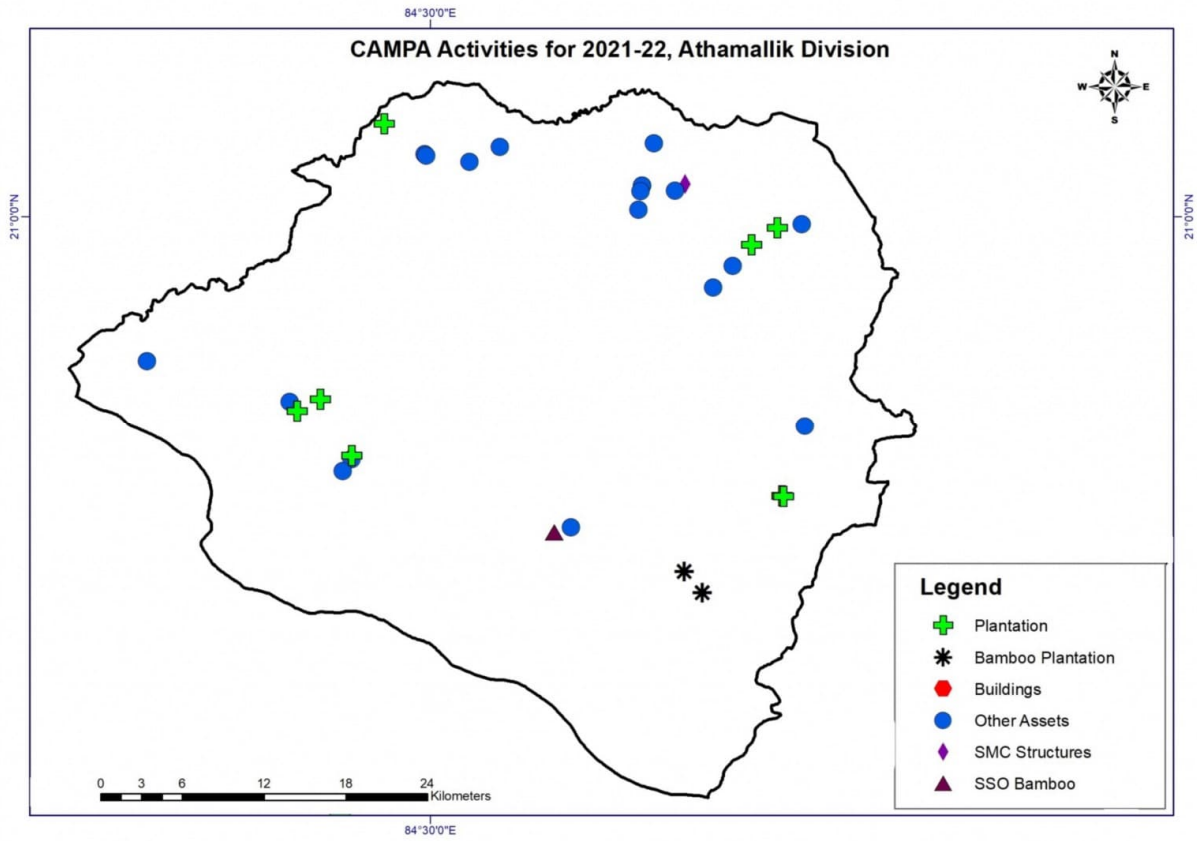
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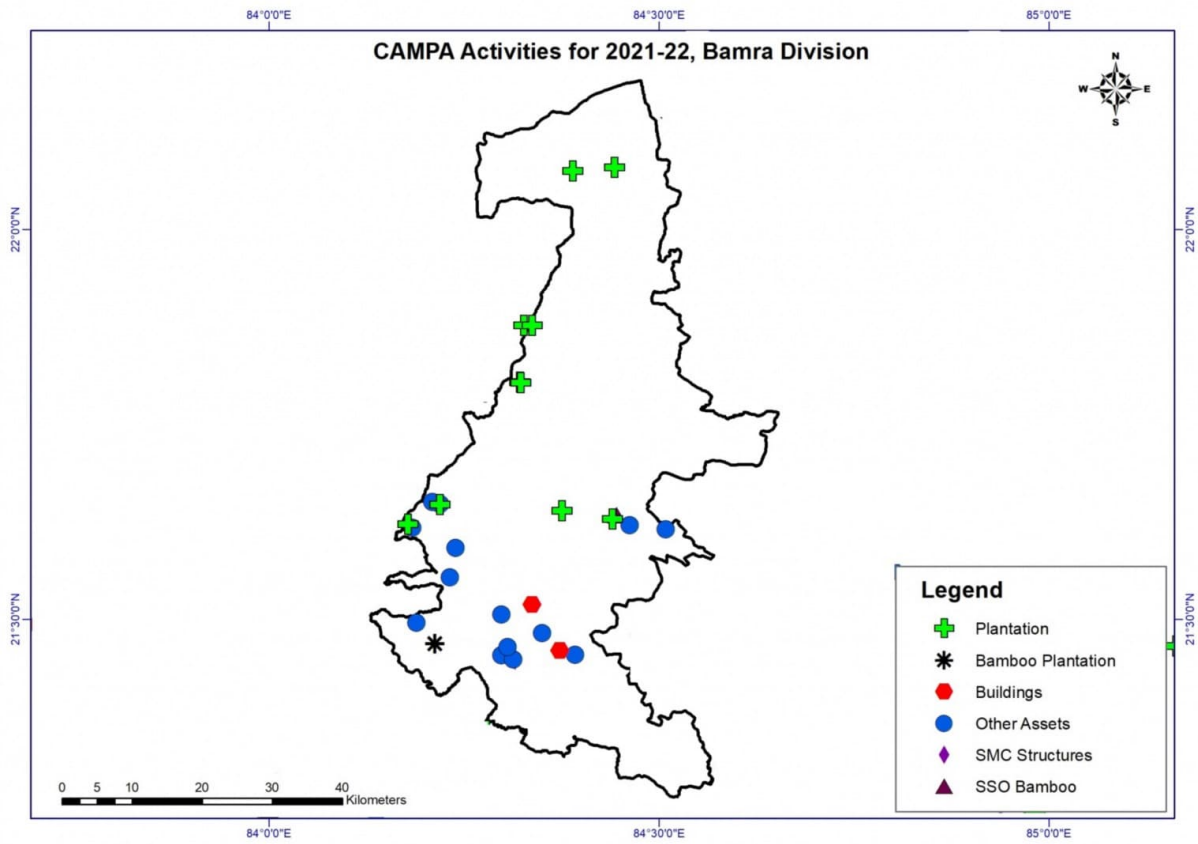
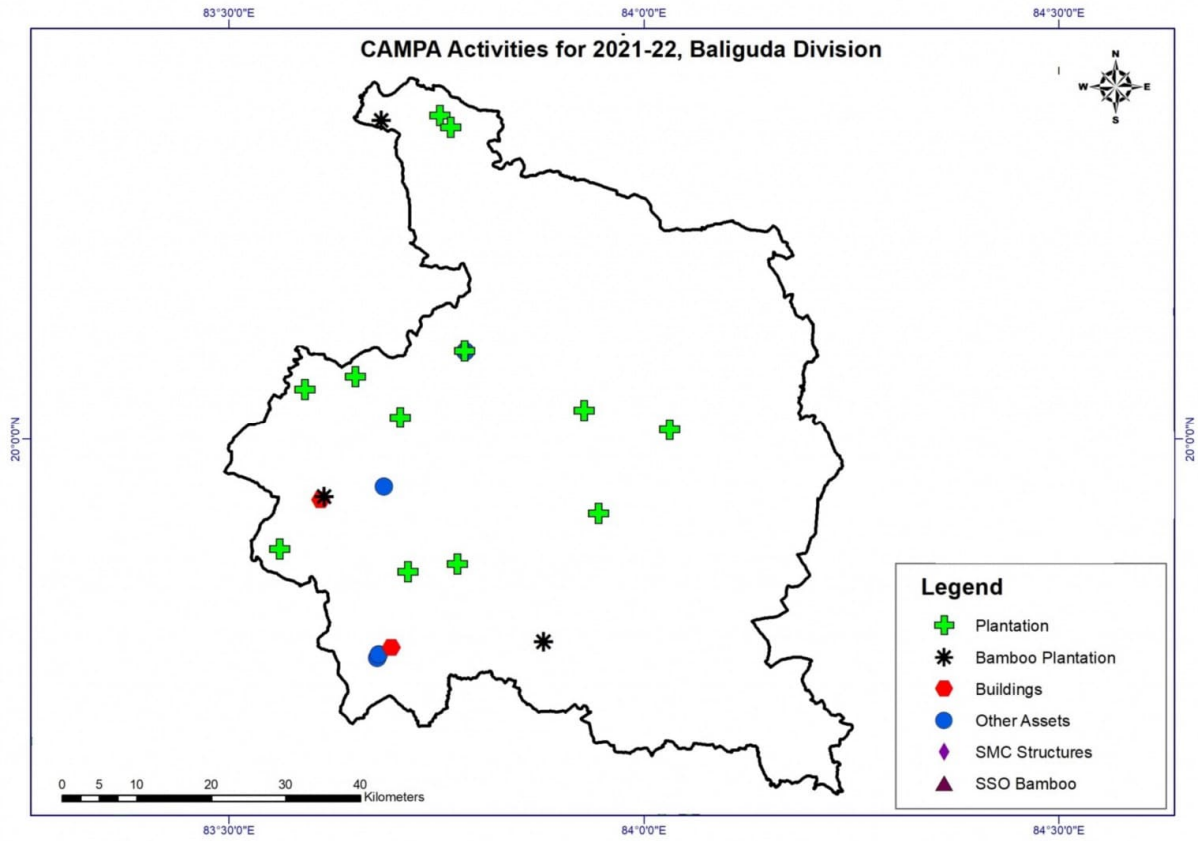
SL. No	Division	Range	Section	Beat	Location	Latitude	Longitude
1	Bamra WL	Badrama	Badarama	Kutab	Sukhानी	21.447343	84.315415
2	Athamallik	Handapa	Urkula	Takaba	Comp.37	21.021156	84.668068
3	Dhenkanal	Hindol	Hindol	Hindol	Kandhara RF	20.585328	85.201138
4	Khariar	Komna	Komna	Komkeda	Tandel PRF	20.575151	82.6917
5	Khariar	Komna	Komna	Komkeda	Tandel PRF	20.575298	82.691312
6	Khariar	Komna	Komna	Komkeda	Tandel PRF	20.575449	82.691261
7	Khariar	Komna	Komna	Komkeda	Tandel PRF	20.5721	82.6879
8	Rayagada	Muniguda	Bisam Cuttack	Sahada	Sikobandha	19.561934	83.5876
9	Rayagada	Muniguda	Bisam Cuttack	Sahada	Sikobandha	19.562566	83.585904
10	Rayagada	Muniguda	Bisam Cuttack	Sahada	Sikobandha	19.562095	83.585649
11	Bargarh	Ghess	Melchamunda	Sanimal	Sanimal	22.270790	83.233095
12	Chilika wl	Rambha	Keshpur	Badghati	Badghati	19.5597756	85.1025857
13	Balasore WL	Kuldiha	Kuldiha	Kuldiha	Kuldiha	21.436272	86.636153
14	Rourkela	Rajgangpur	Rajgangpur	Alanda	Alanda	22.24392	84.54894
15	Rourkela	Banki	Rajamunda	Birtola	Birtola	21.9545	84.88195
16	Debagarh	Debagarh	Laimura	Laimura	Laimura	21.7335702	84.6712647
17	Sambalpur	Dharma	Kolgaon	Anlajharan	Anlajharan	21.1658	84.02573
18	Malkangiri	Malkangiri	MV17	MV17	MV17	18.354015	81.787214
19	Rourkela	Rajgangpur	Sonakhan	Buchukpada	Buchukpada	22.15034	84.51103
20	Ghumusar North	Central	Lathipada	Bardhangidi	Bardhangidi	19.760662	84.503978
21	Ghumusar North	Mujagada	Rambha	Rambha	Rambha	20.090748	84.494829
22	Ghumusar South	Sorada	Gadalbadi	Minajodi	Minajodi	19.790868	84.26311
23	Khorda	Ranapur	Betuli	Betuli 1	Betuli 1	19.94345	85.144544
24	Khorda	Ranapur	Betuli	Betuli 1	Betuli 1	19.943973	85.143909
25	Khorda	Balugaon	Dhomundi	Sillypada 1	Sillypada 1	19.893834	85.130106
26	Koraput	Similiguda	Sunki	Sunki-1	Tangini DPF	18.50213	83.03496

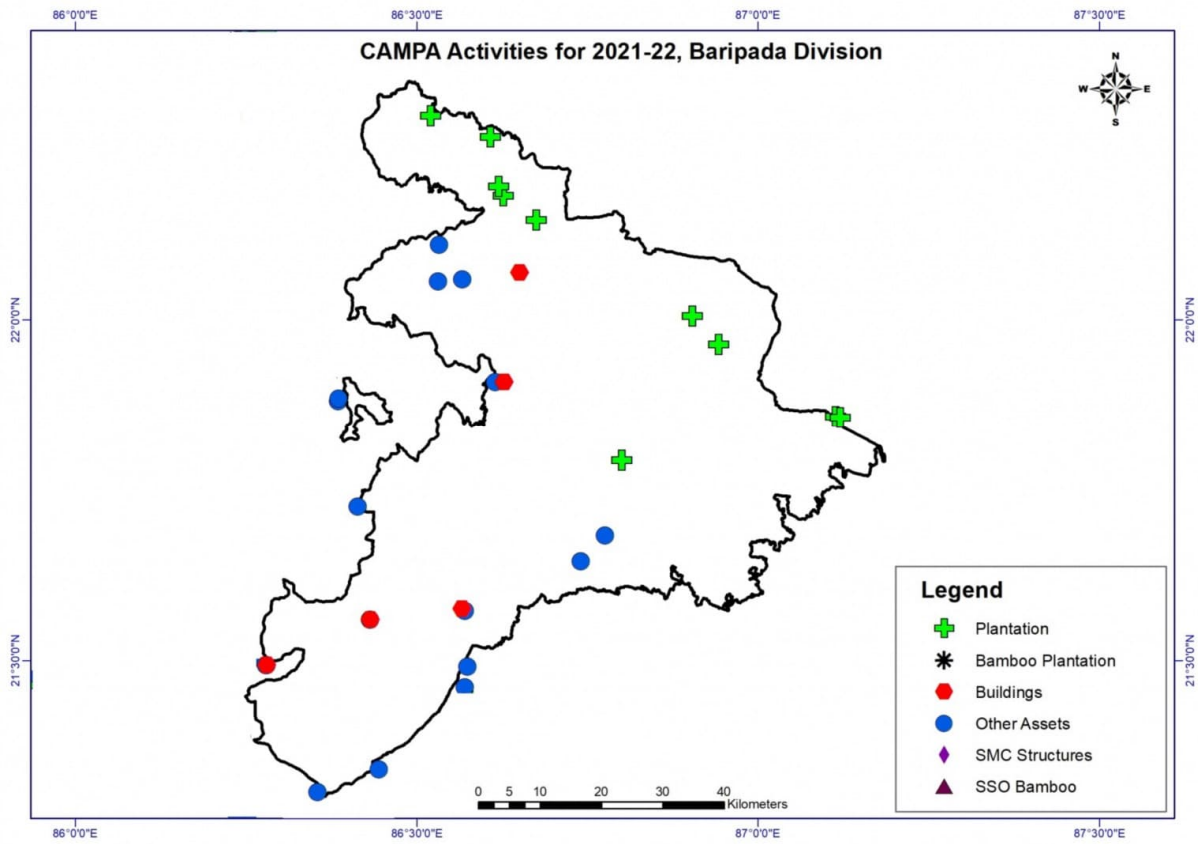
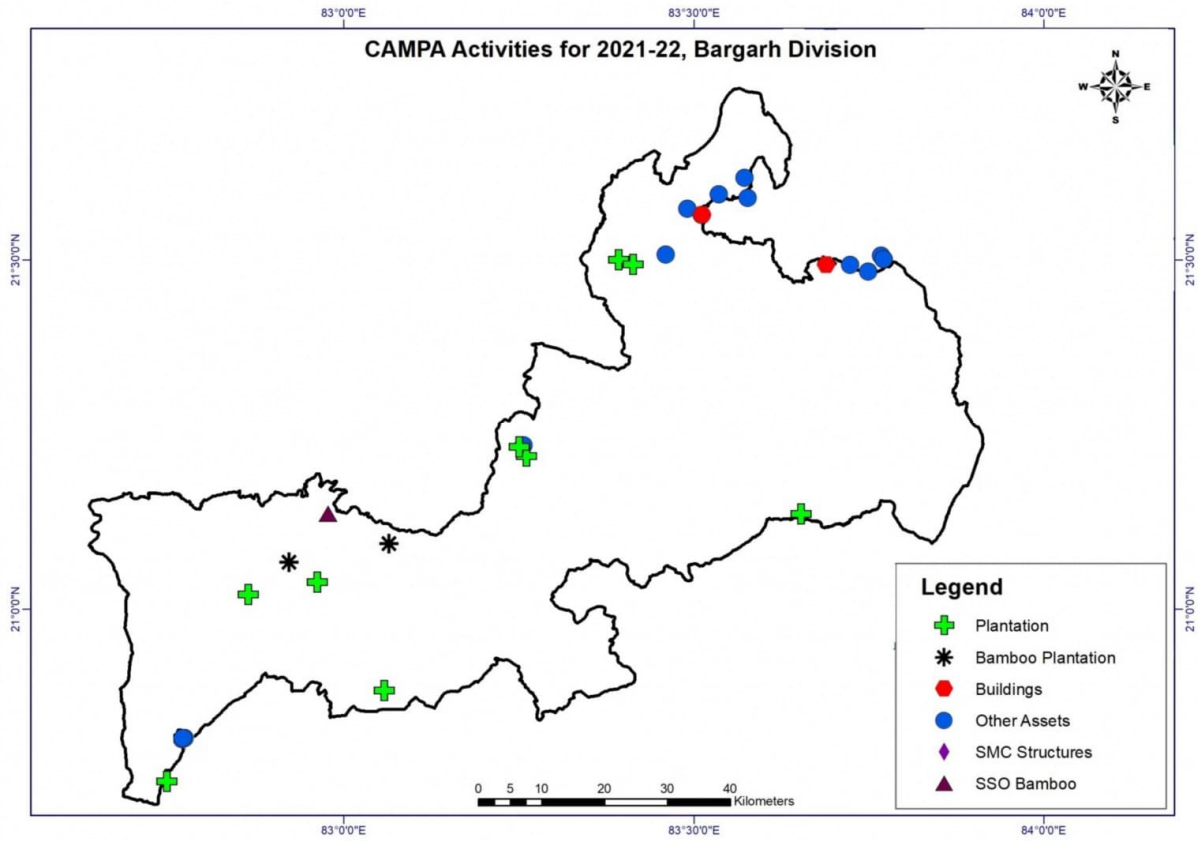
SL. No	Division	Range	Section	Beat	Location	Latitude	Longitude
27	Jeypore	Boriguma	Bisingpur	Bisingpur	Bisingpur PRF	19.035669	82.699629
28	Angul	Kaniha	Rengali	Balipasi	Sankarakhol RF	21.261031	84.937764
29	Angul	Kaniha	Rengali	Balipasi	Sankarakhol RF	21.260994	84.938302
30	Kalhandi North	Kegaon	Kegaon	Kegaon	Kumkote RF	20.102621	82.918163
31	Keonjhar WL	Brahmanipal	Daitary	Talapada	Talapada	21.138726	85.791085

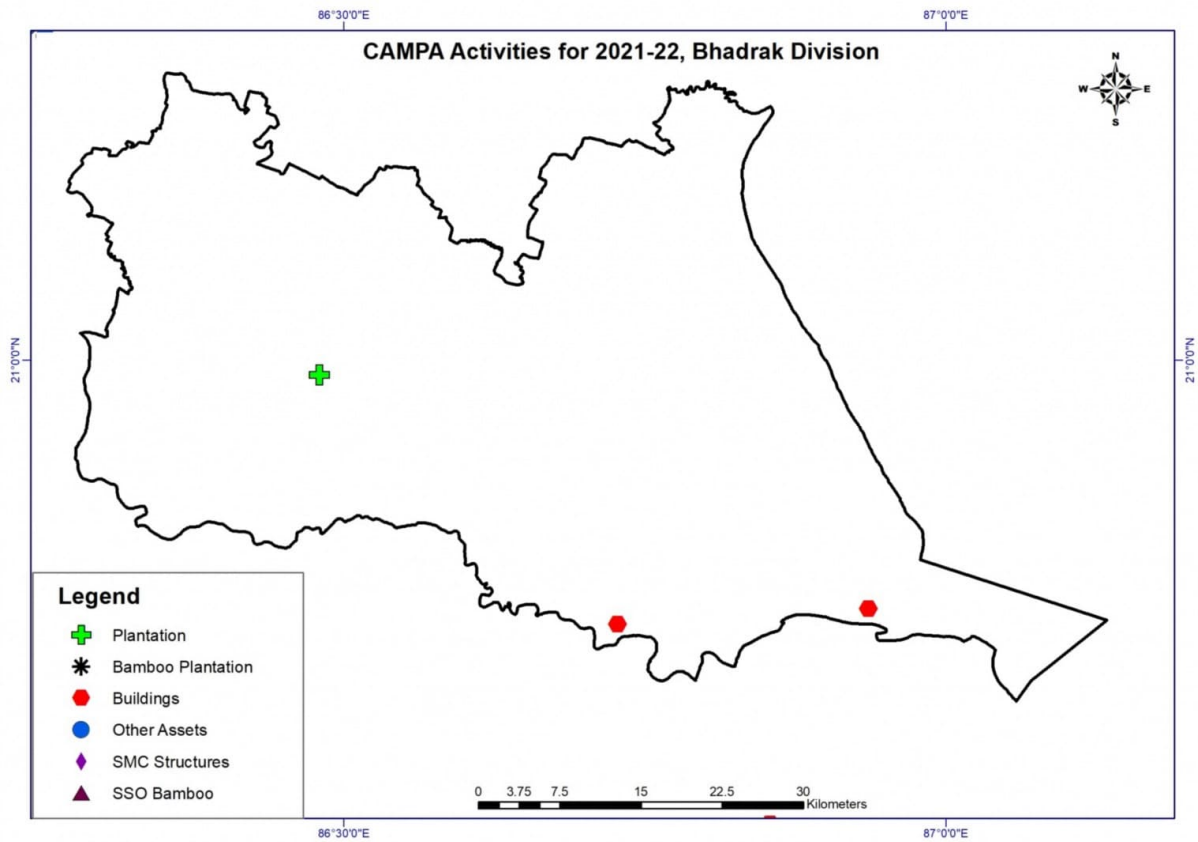
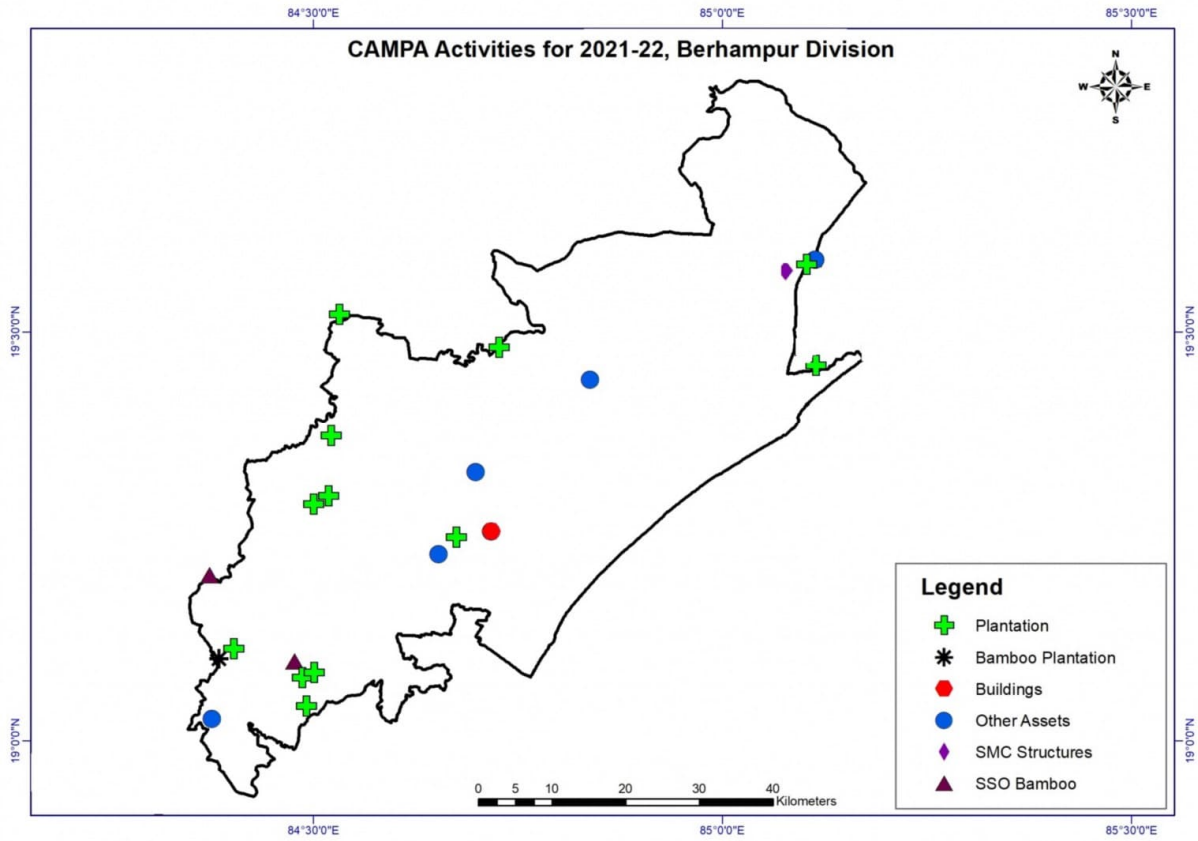
Annexure III: GIS Map for **Division Wise Activities**

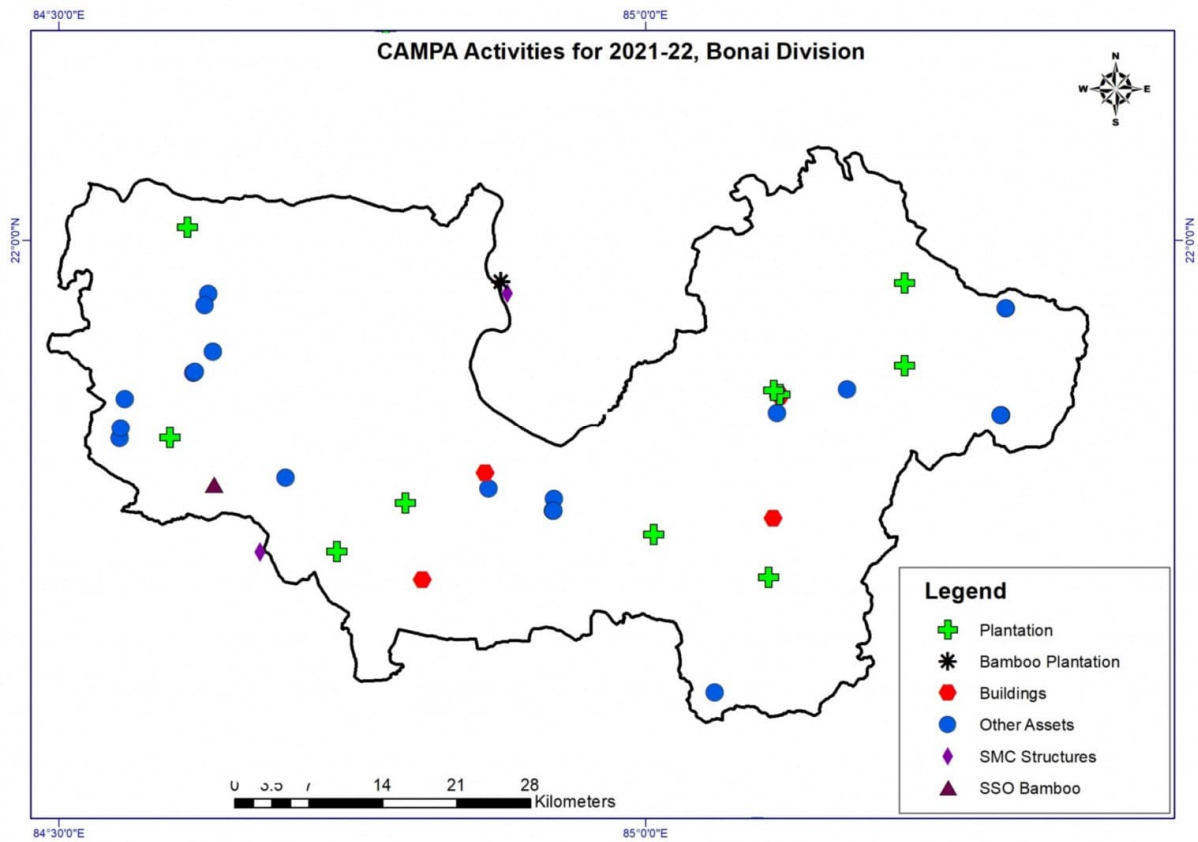
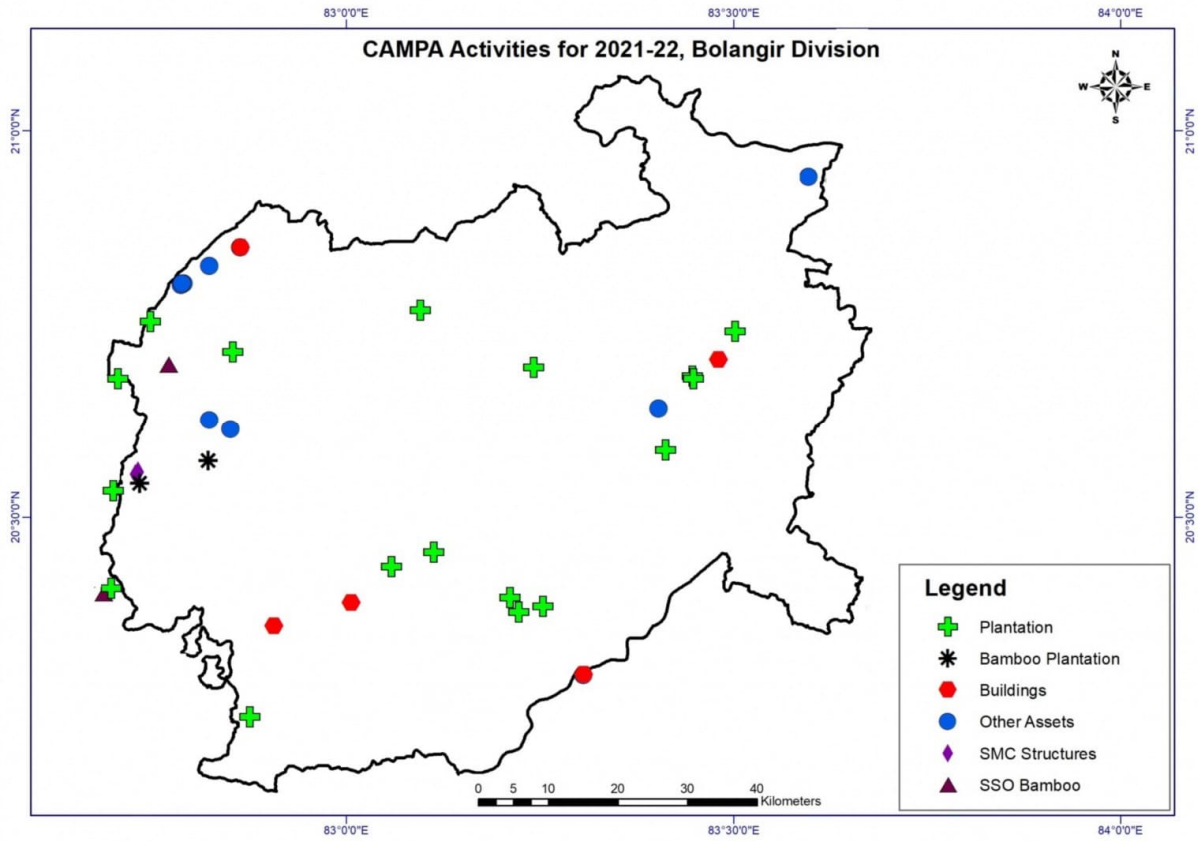


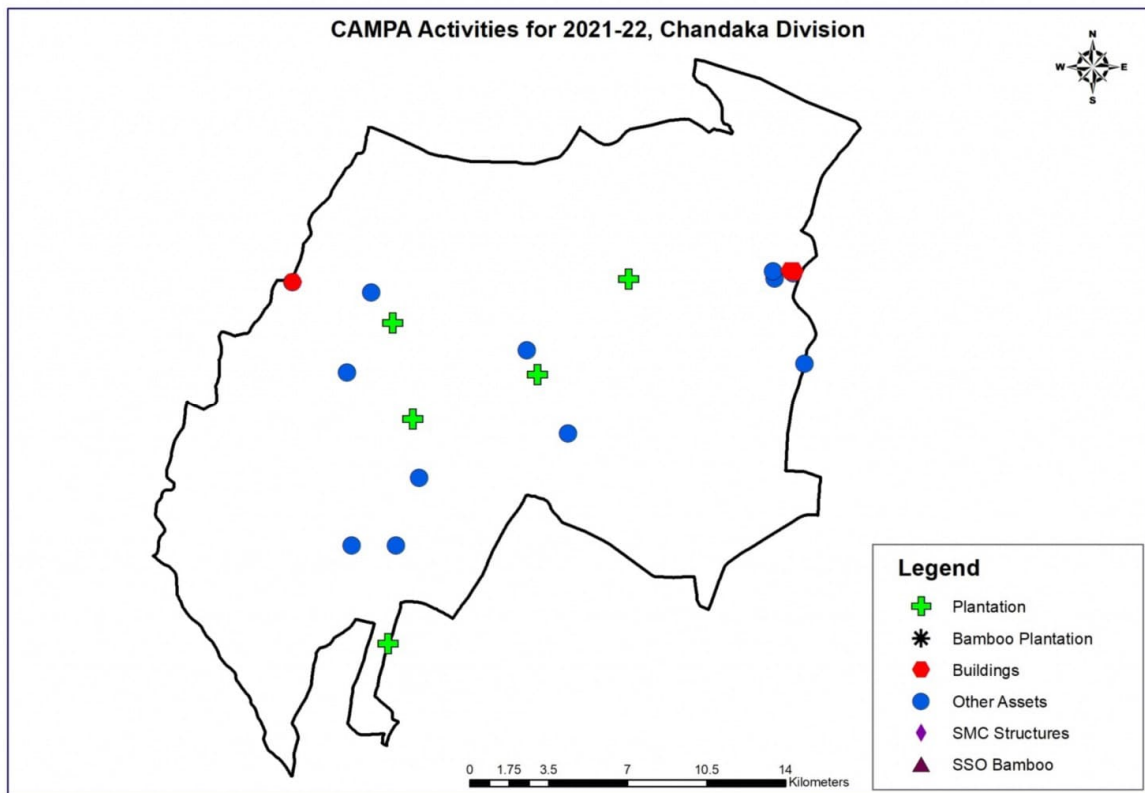
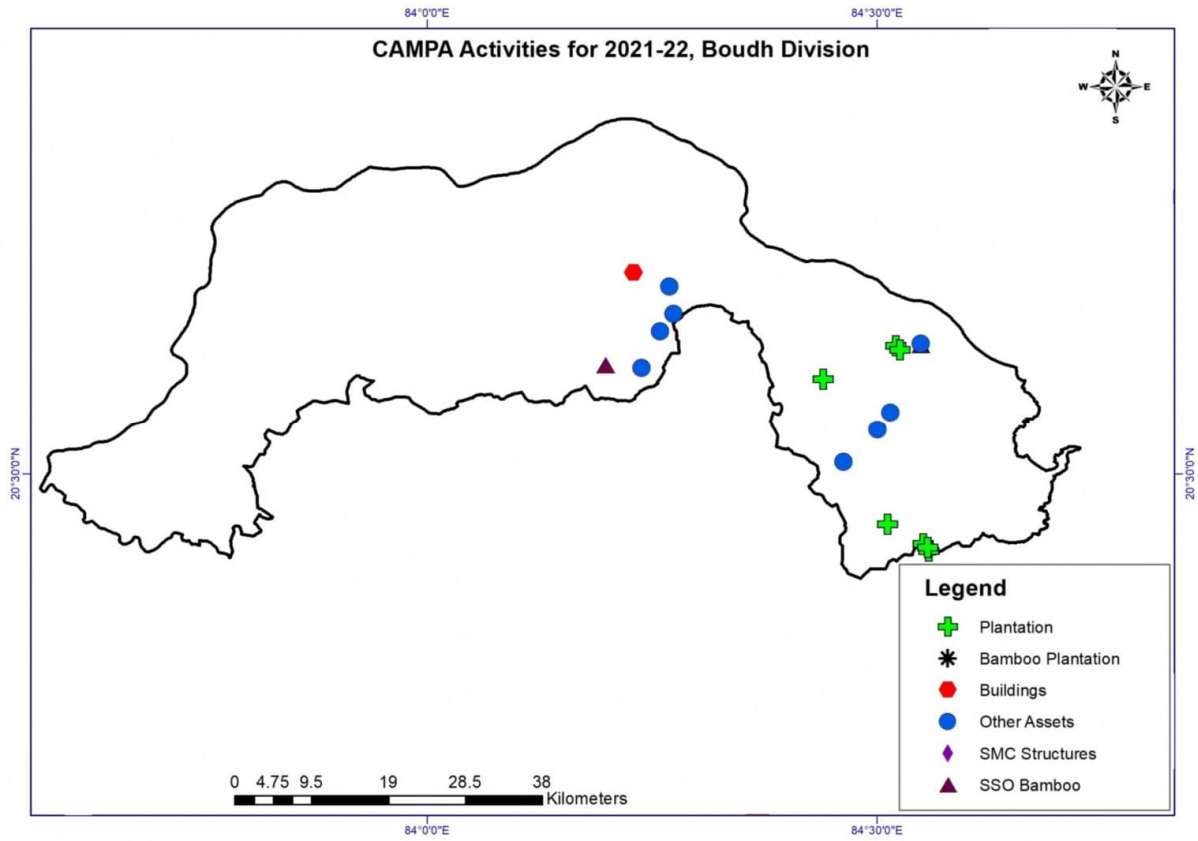


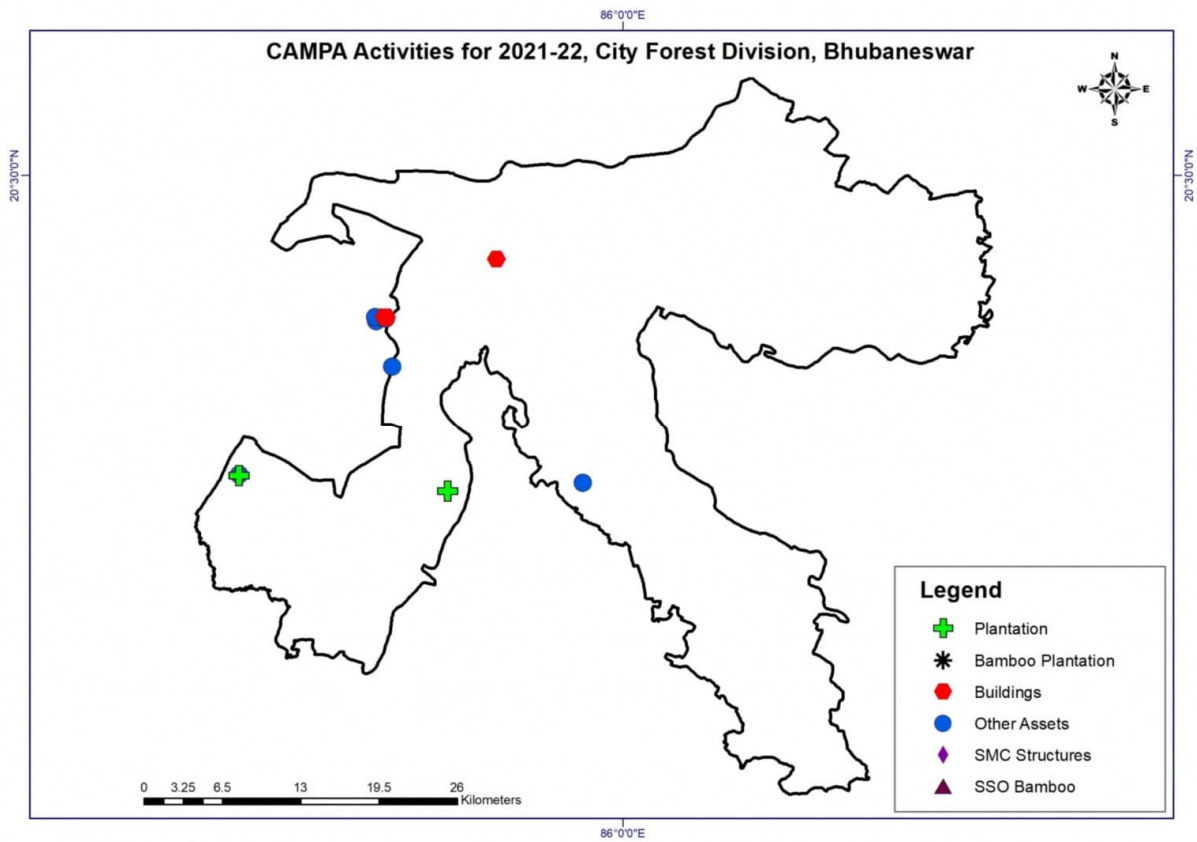
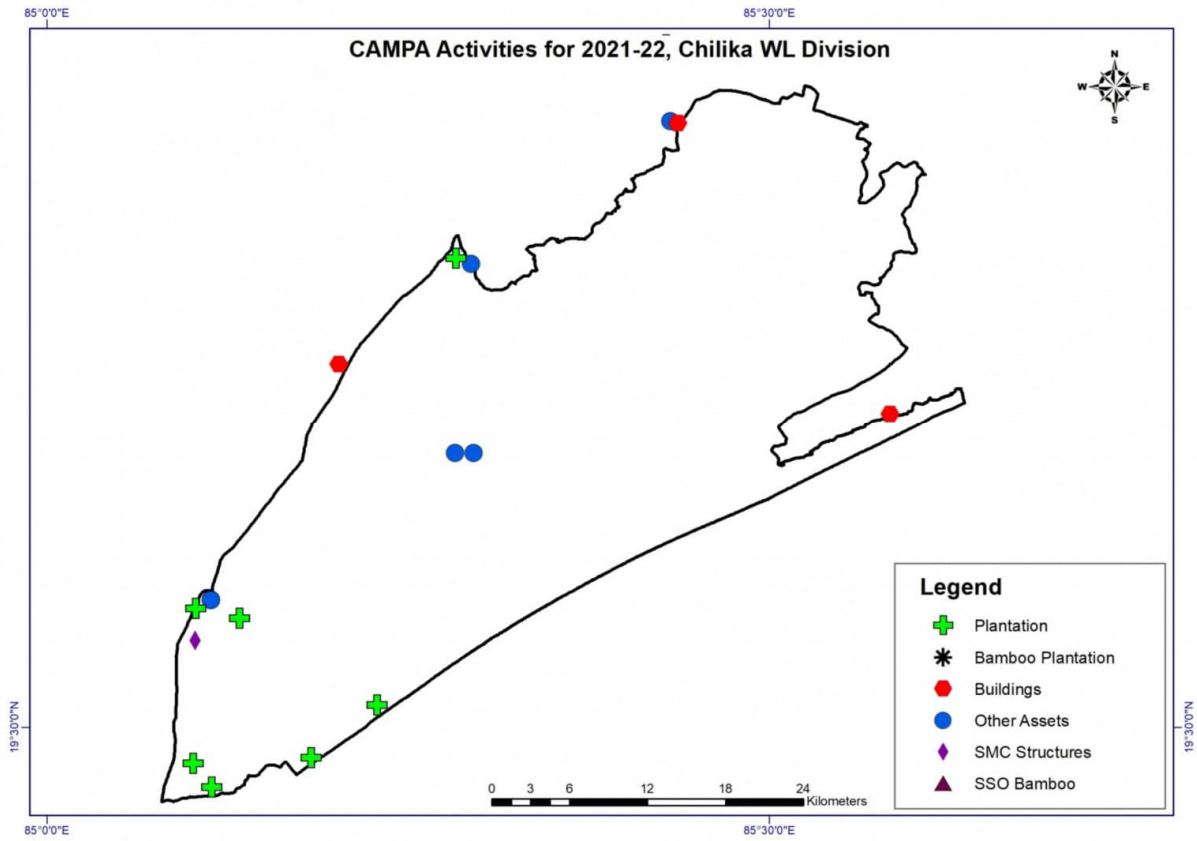


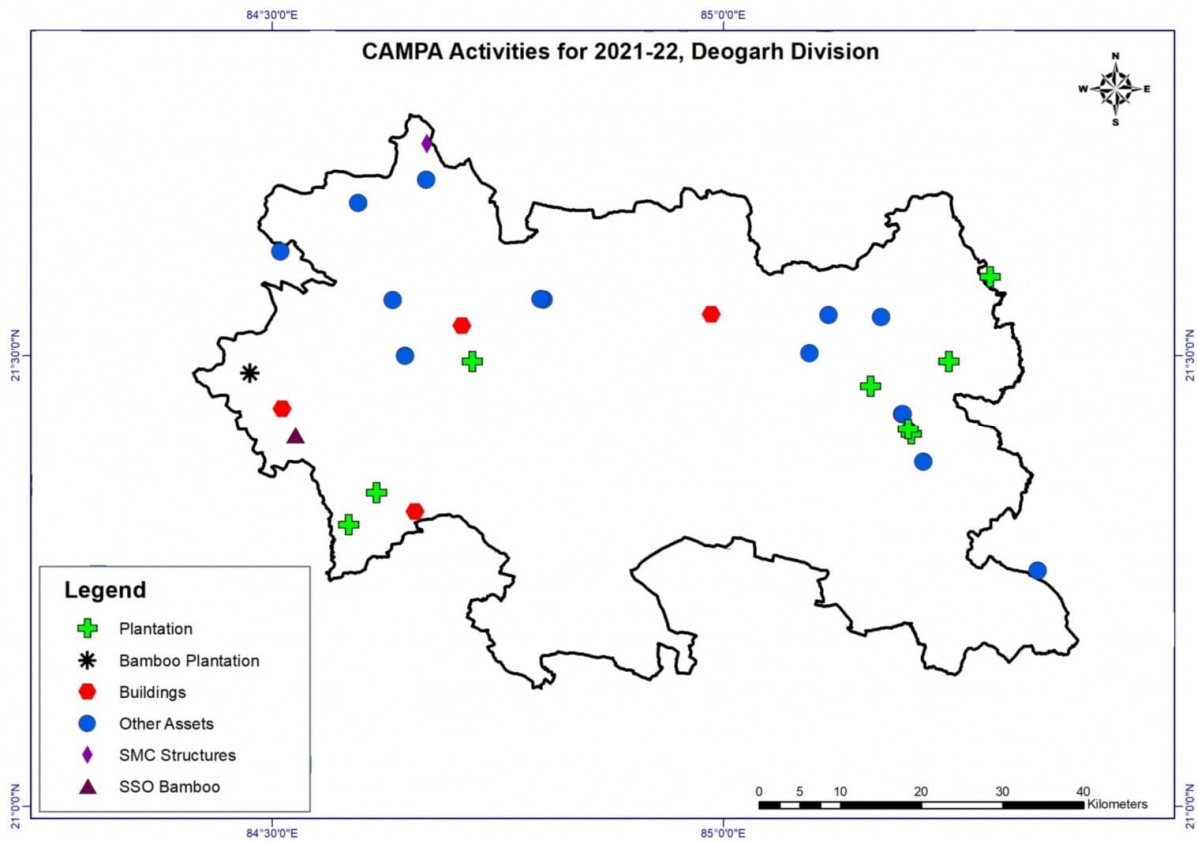
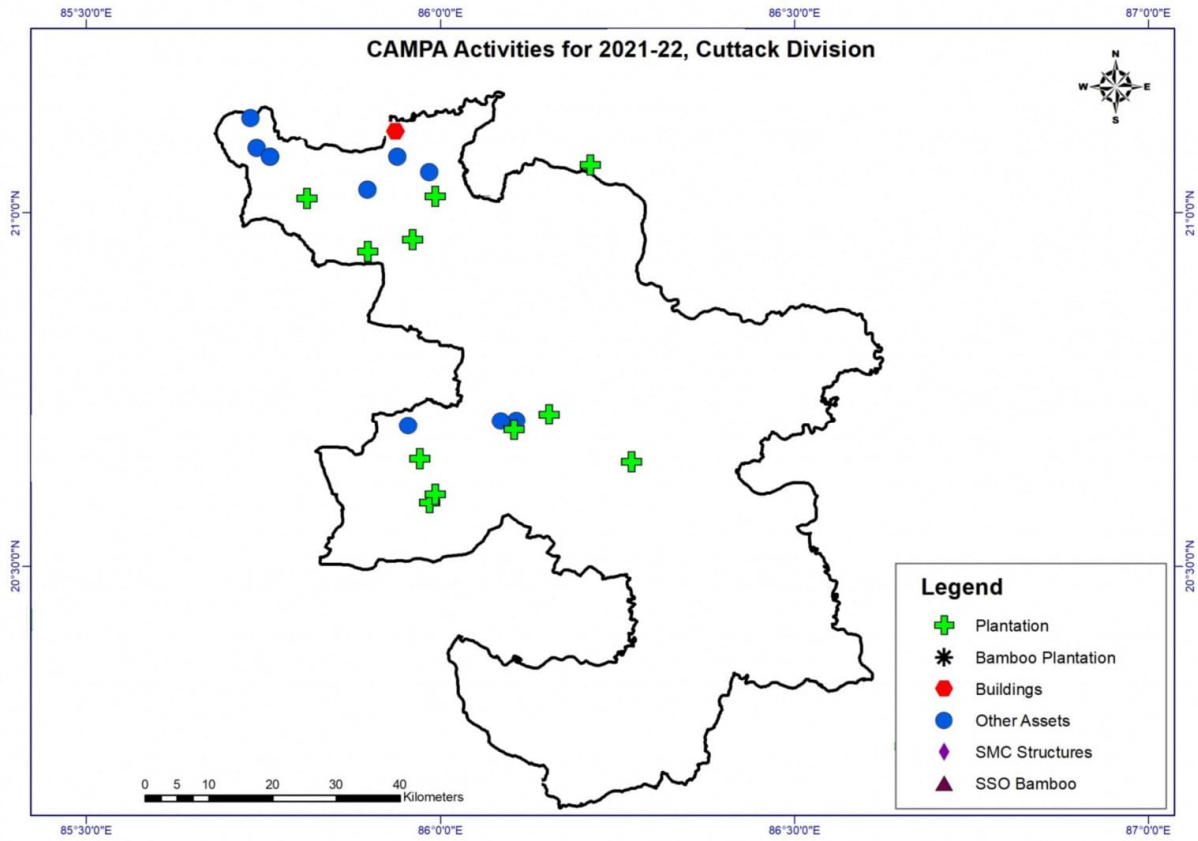


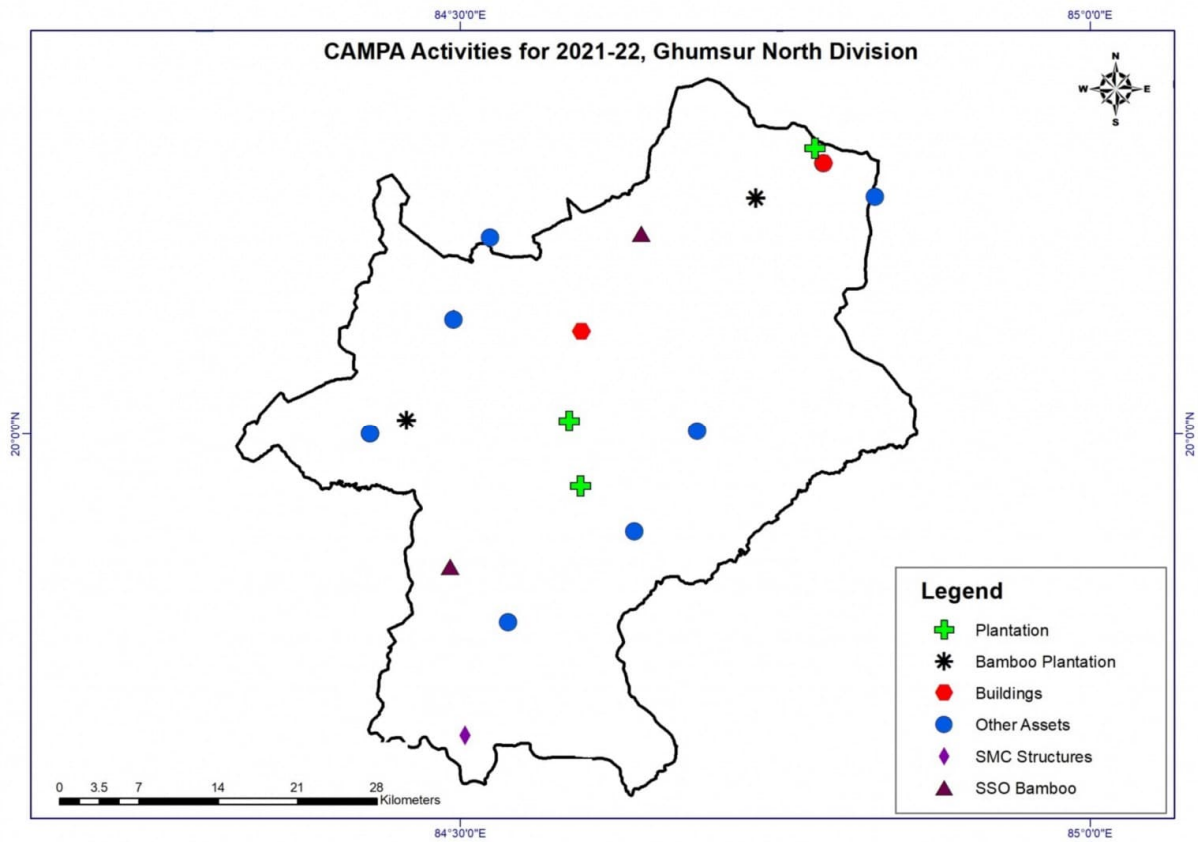
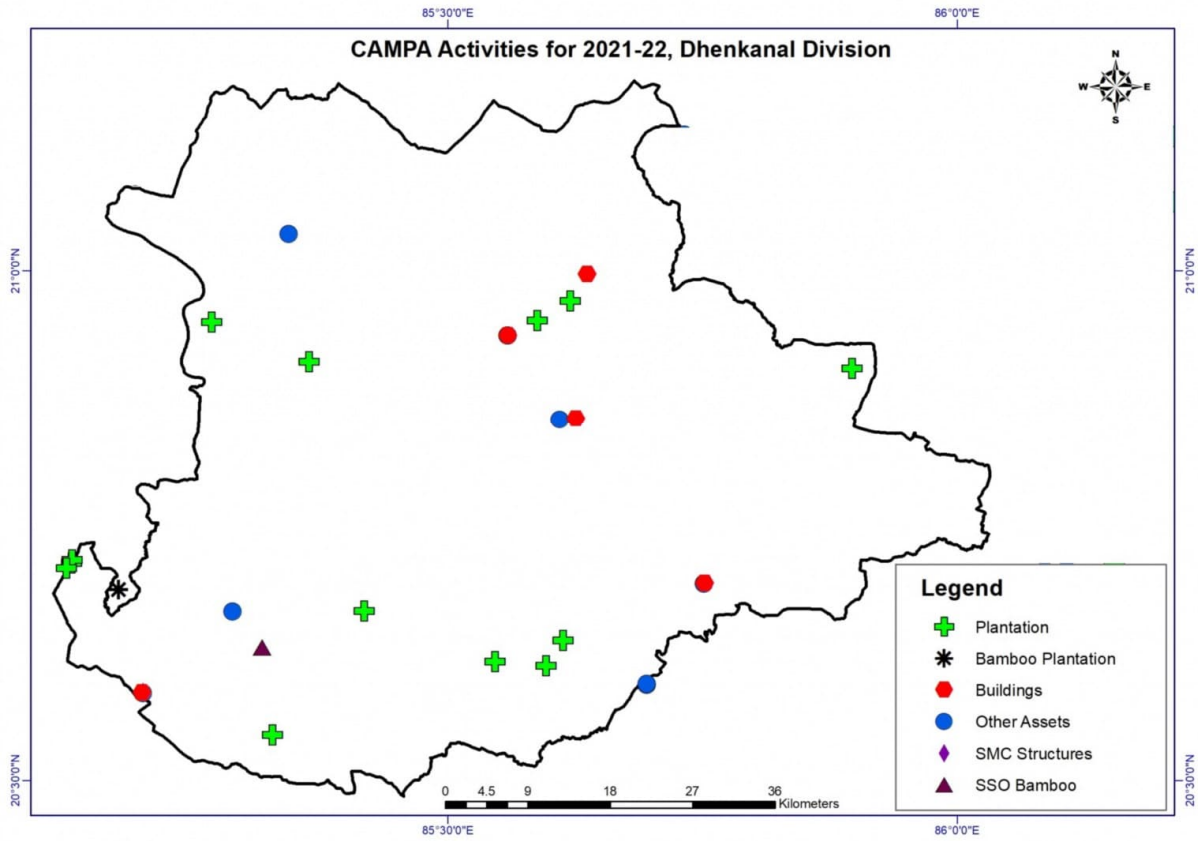


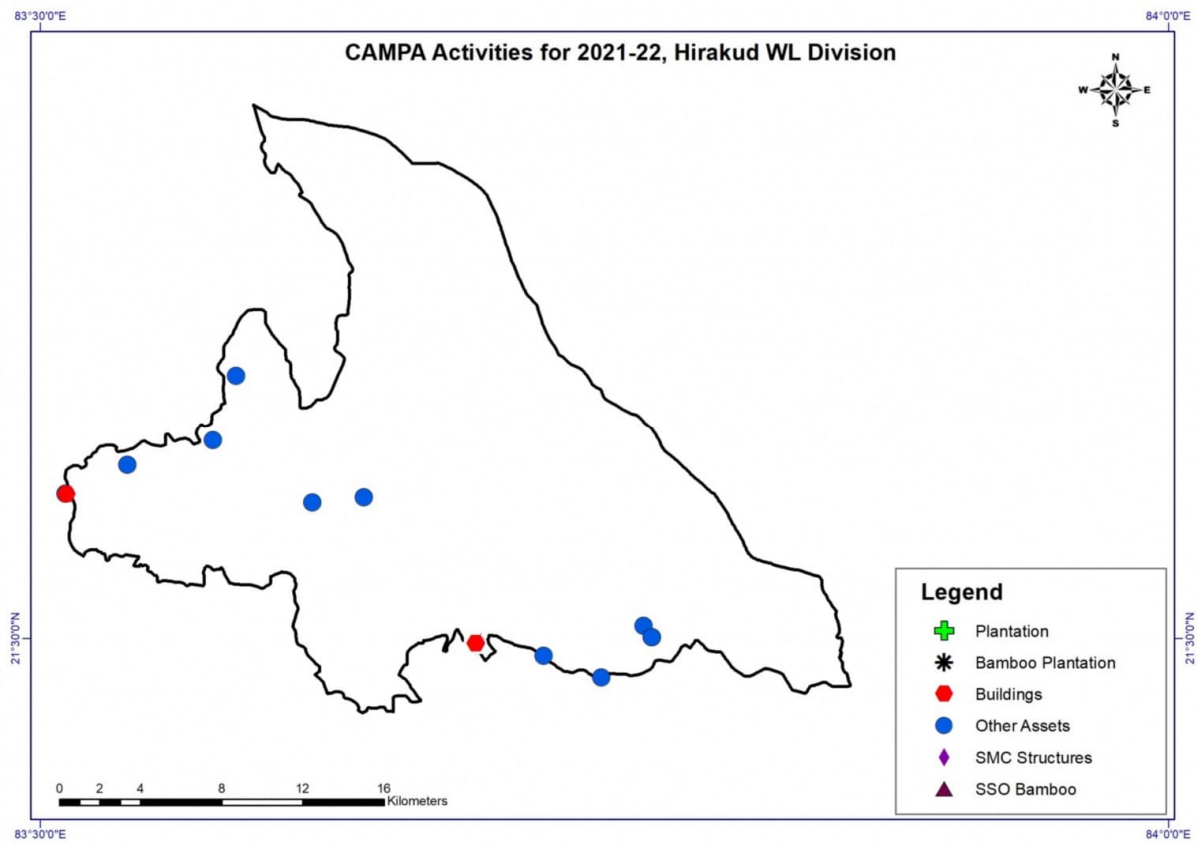
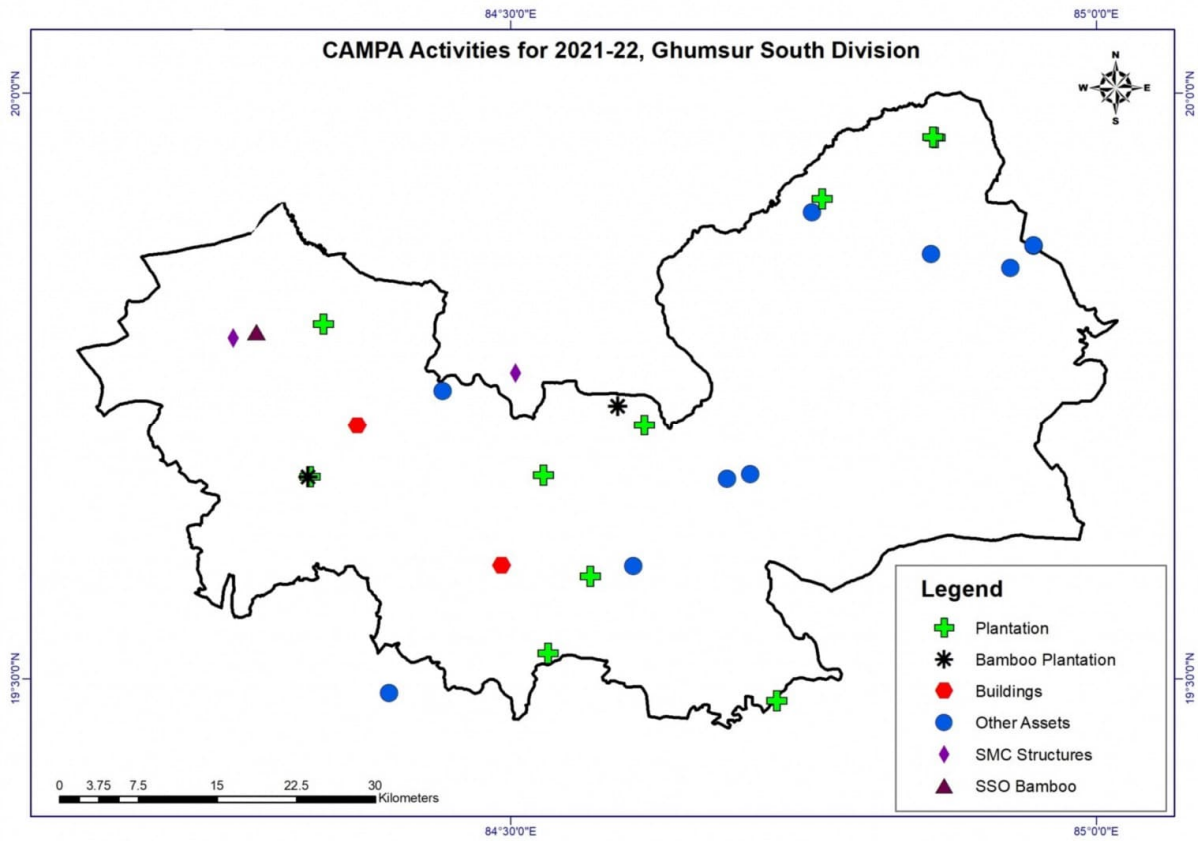


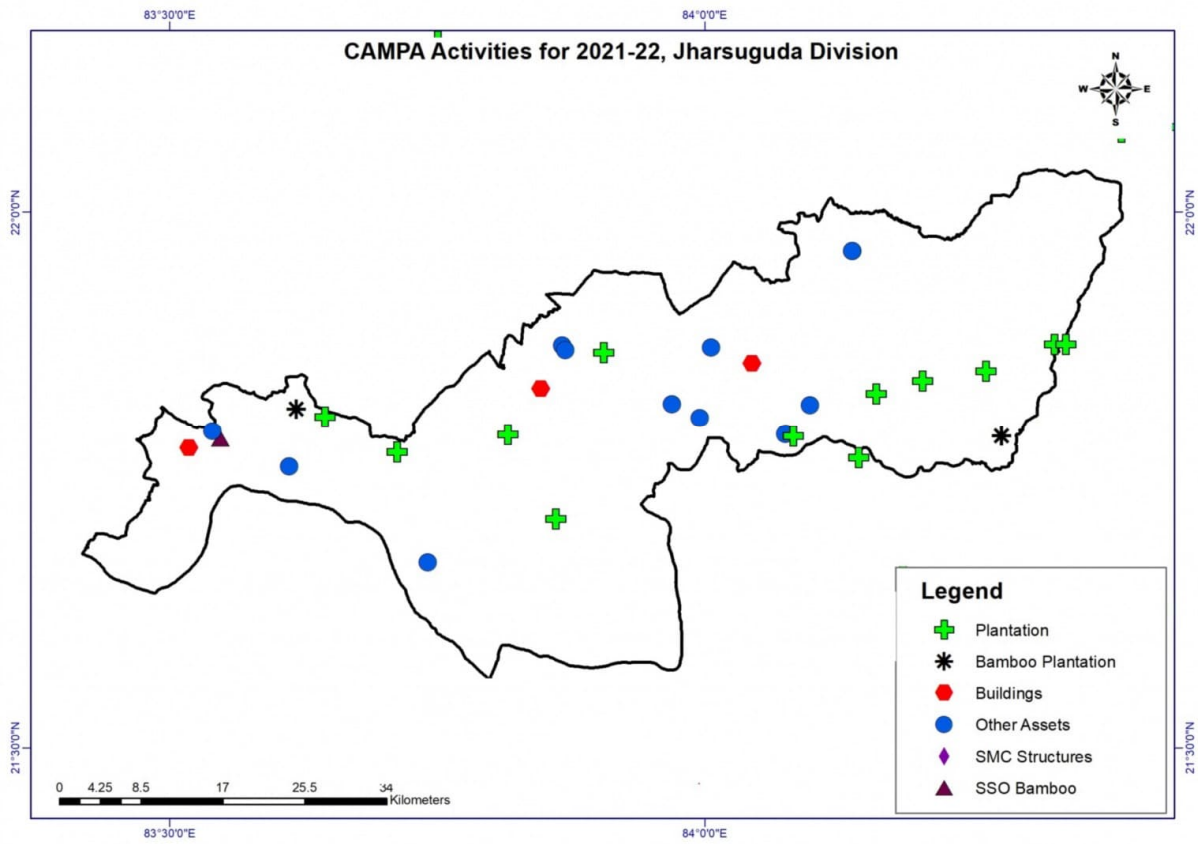
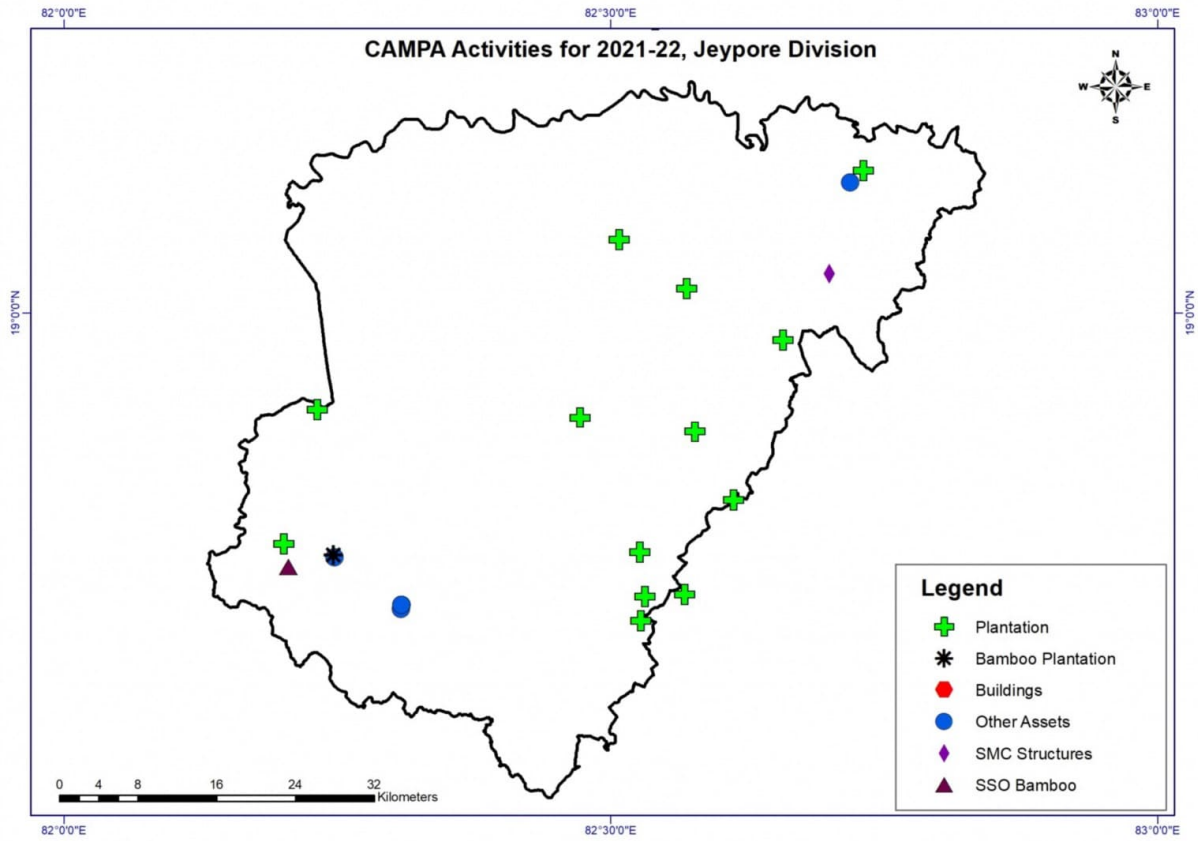


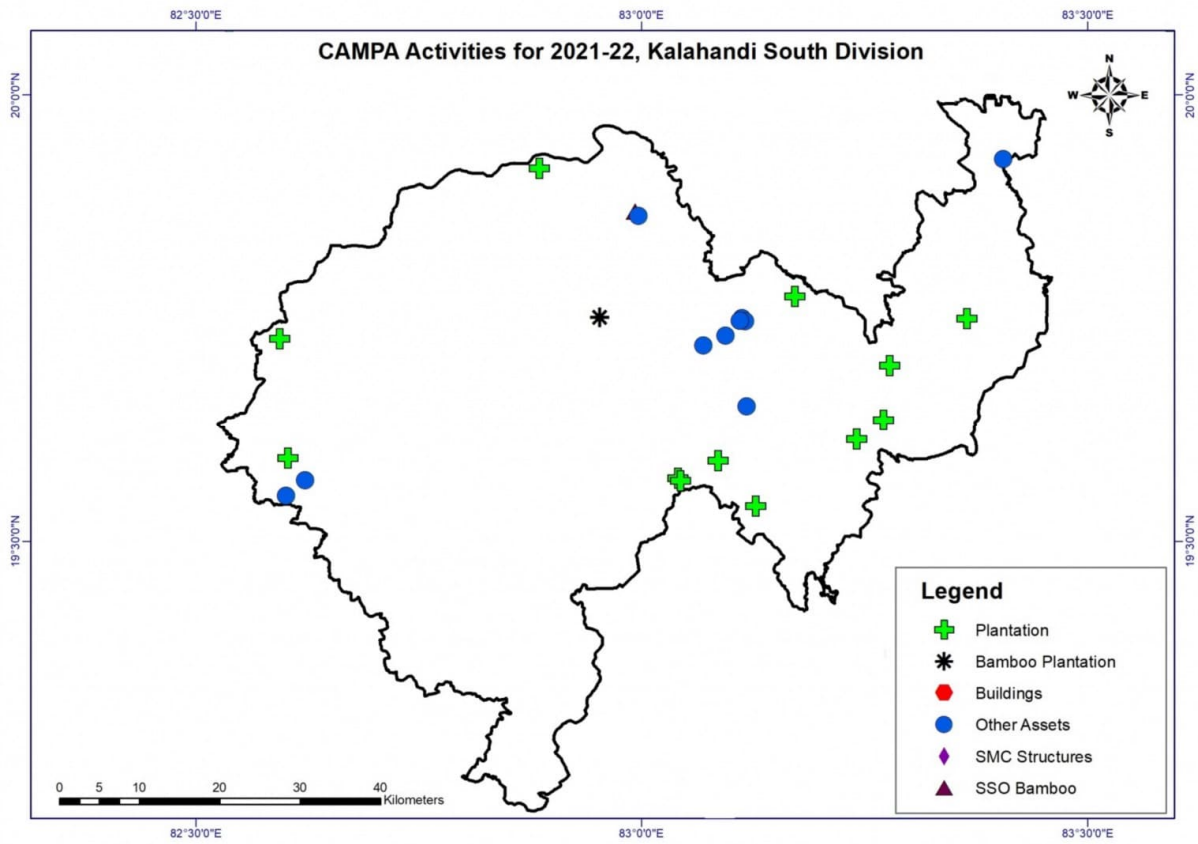
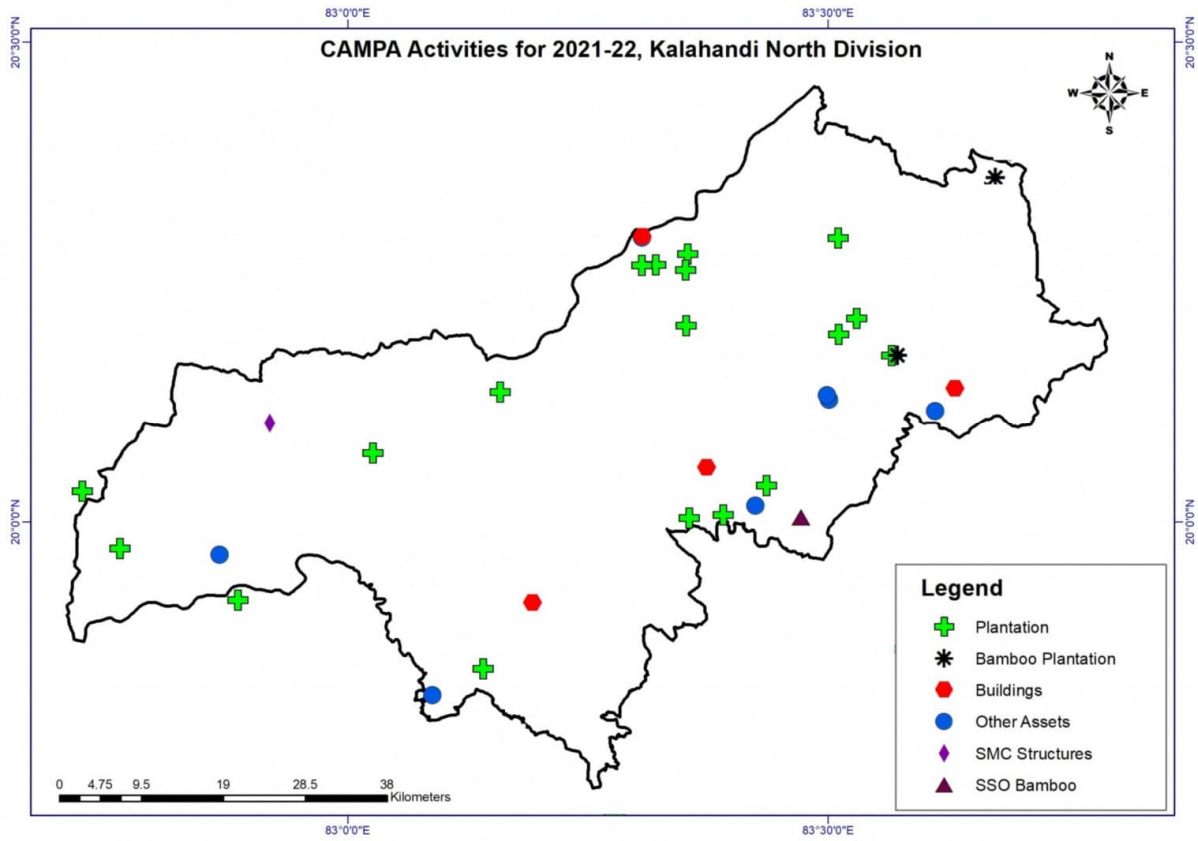


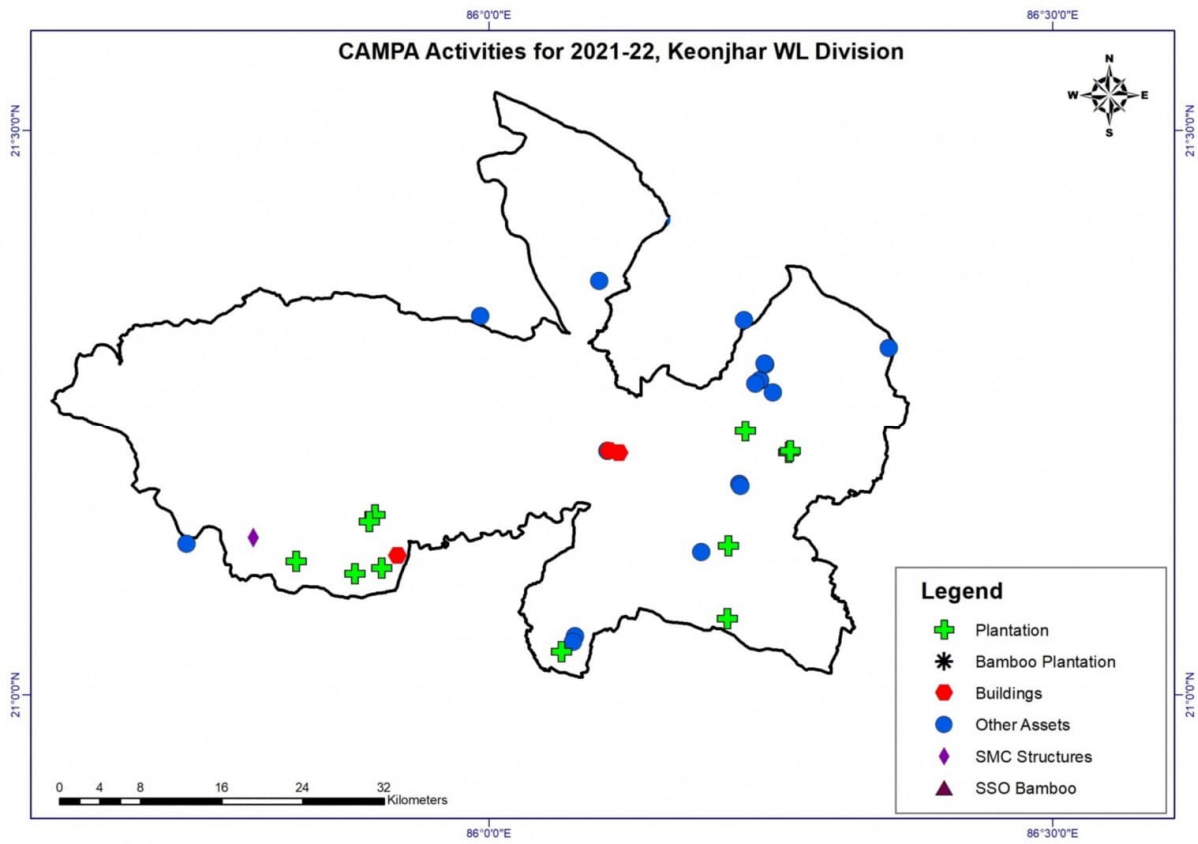
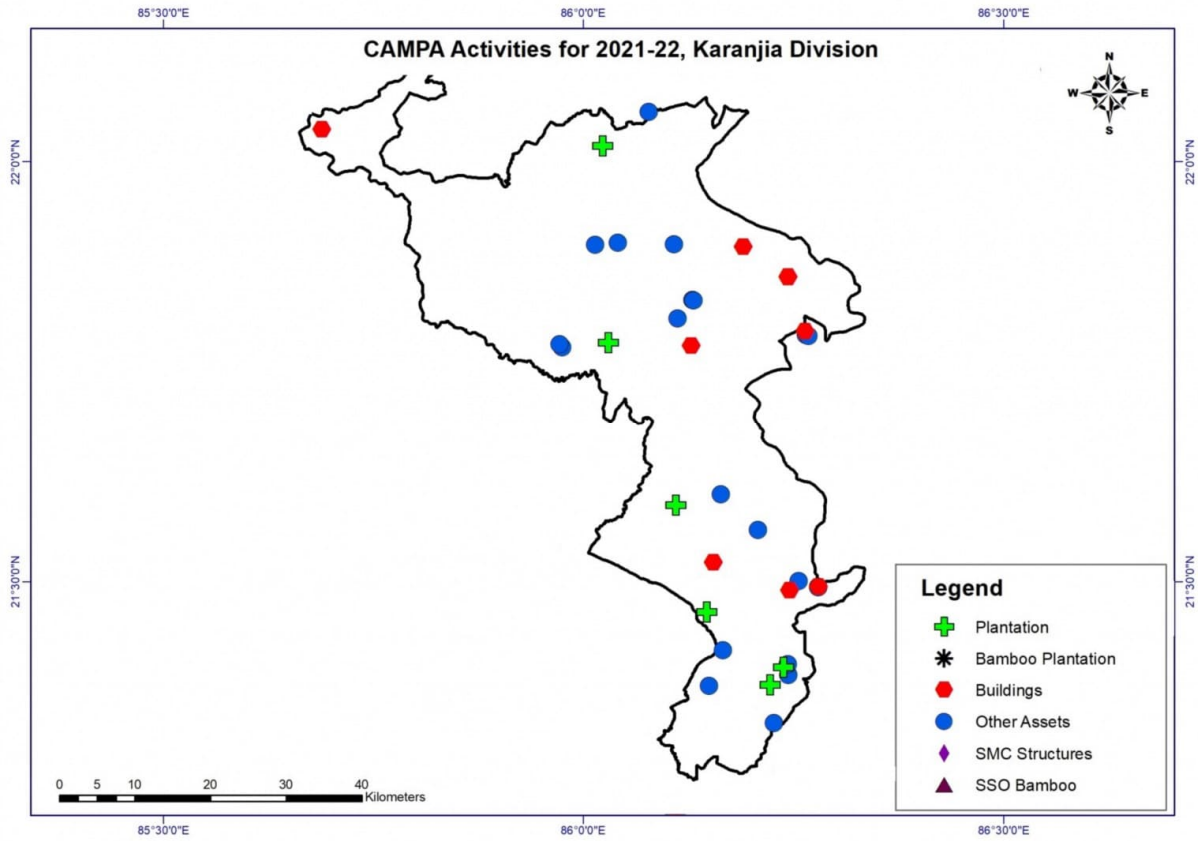


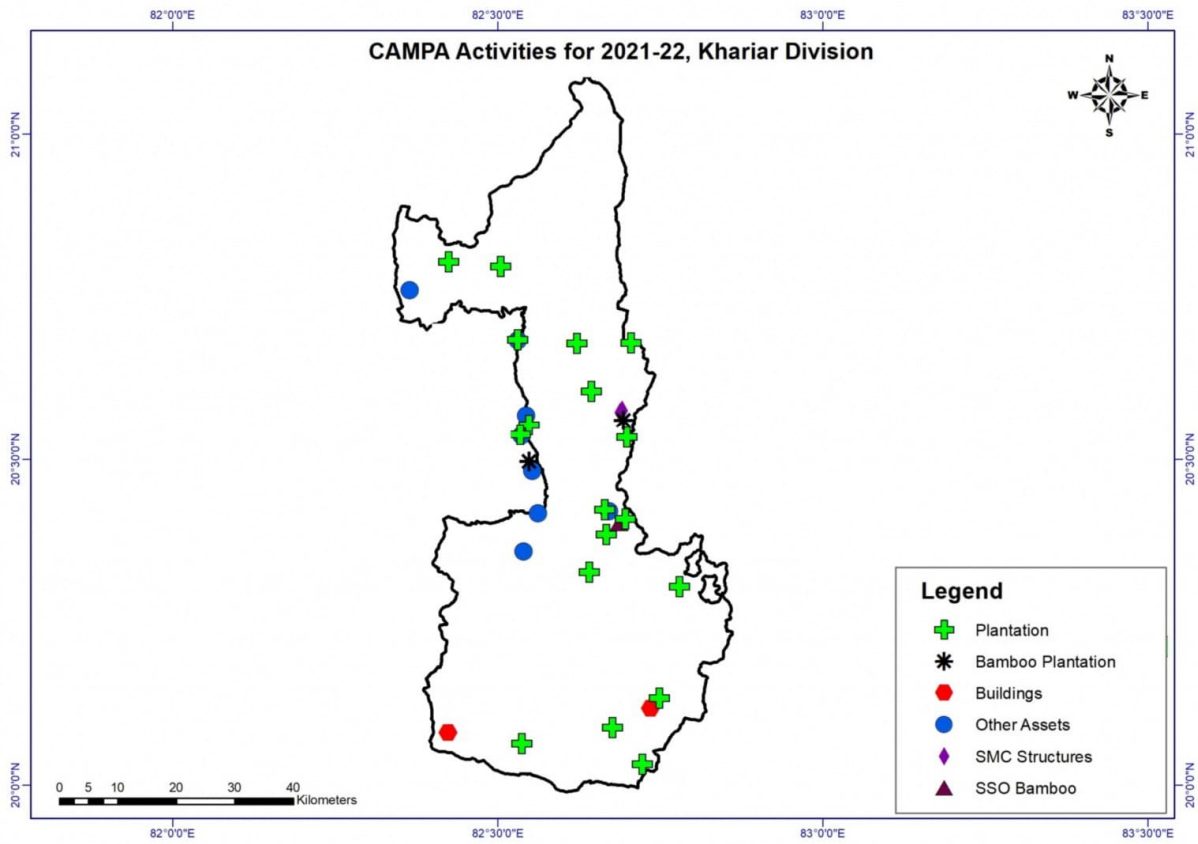
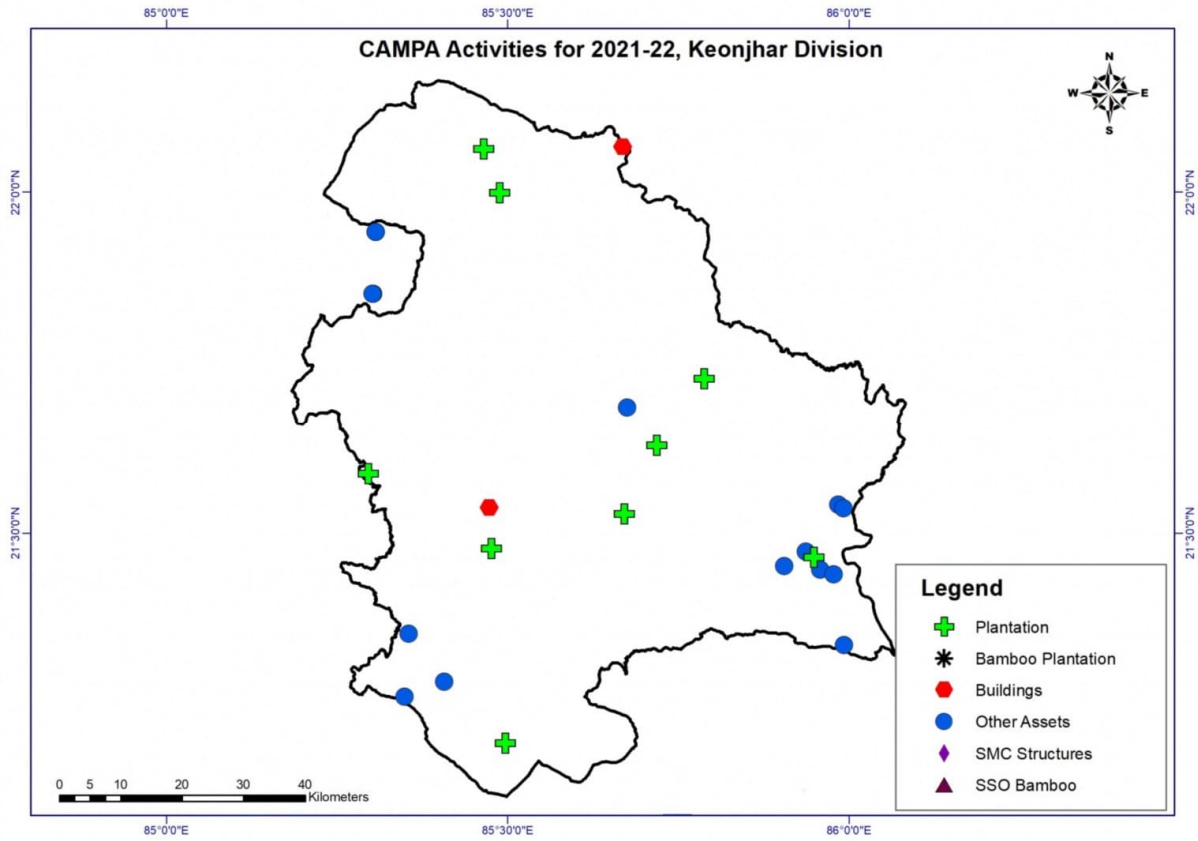


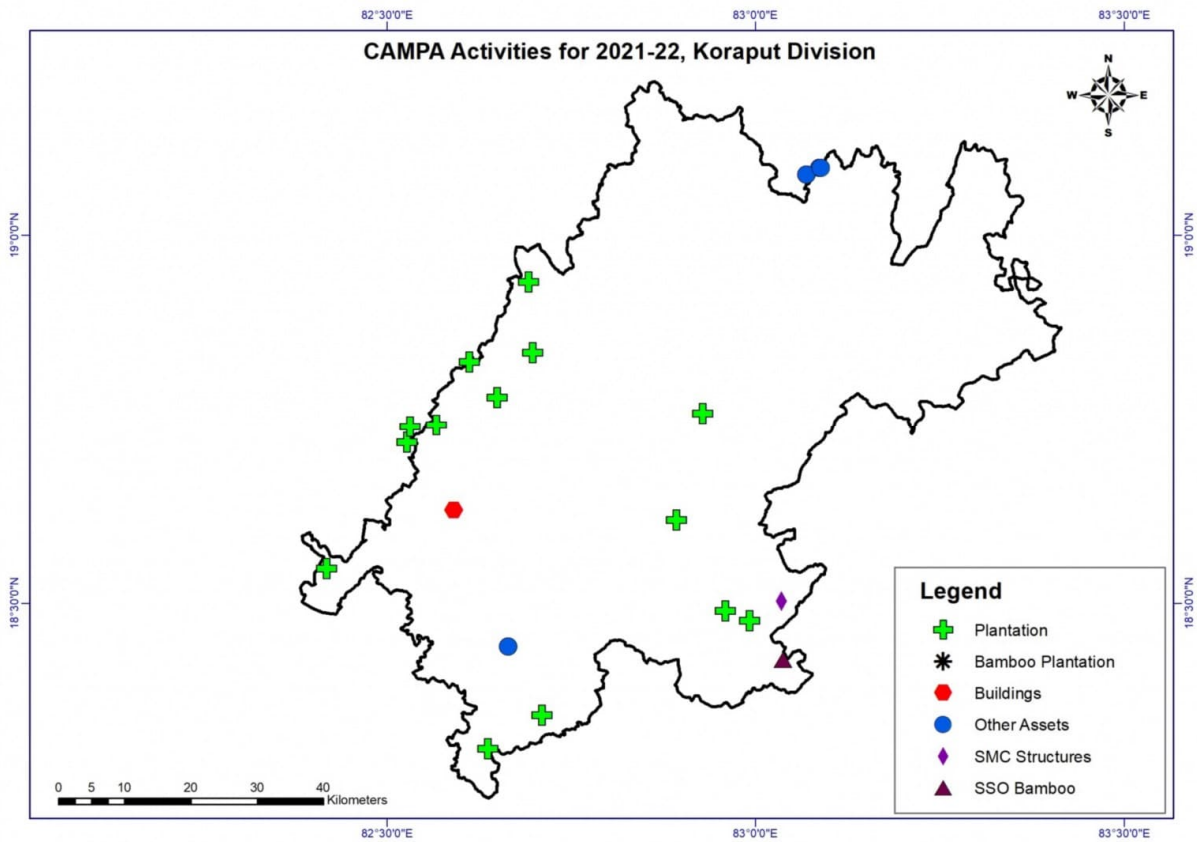
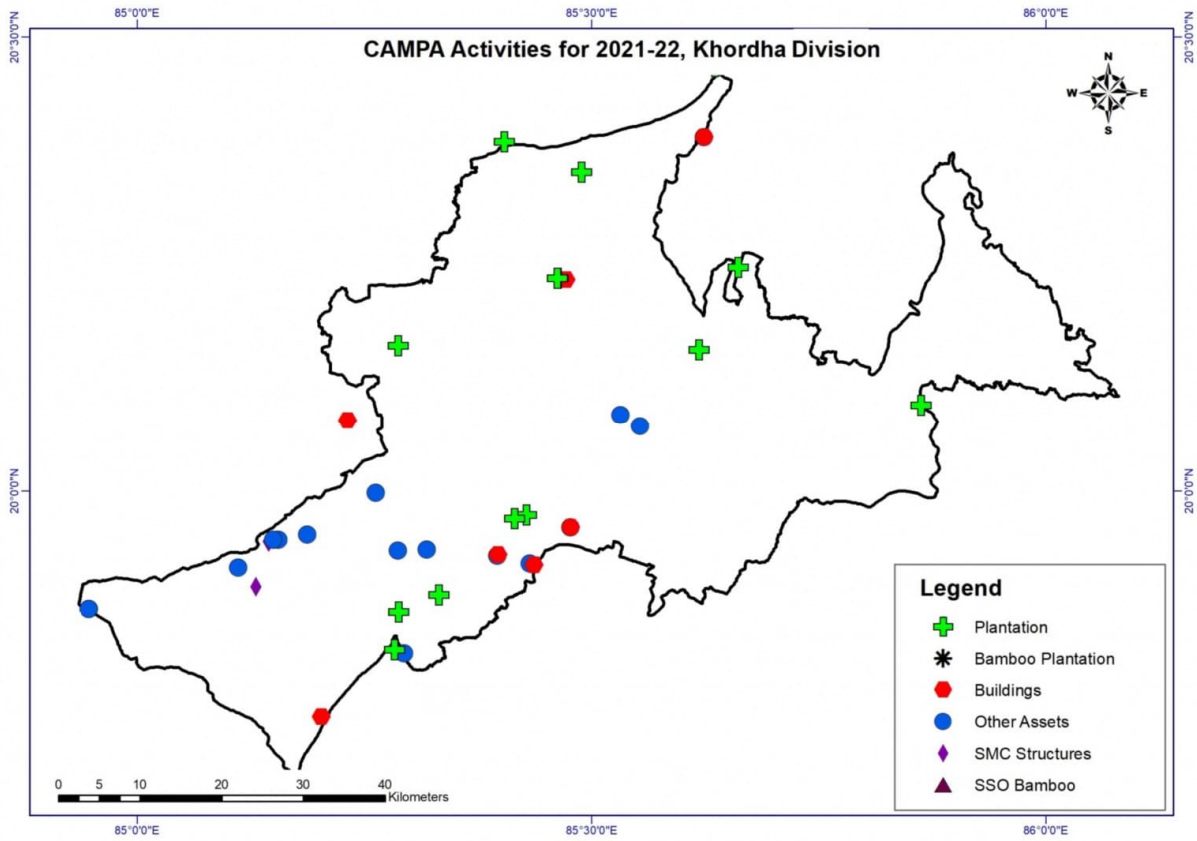


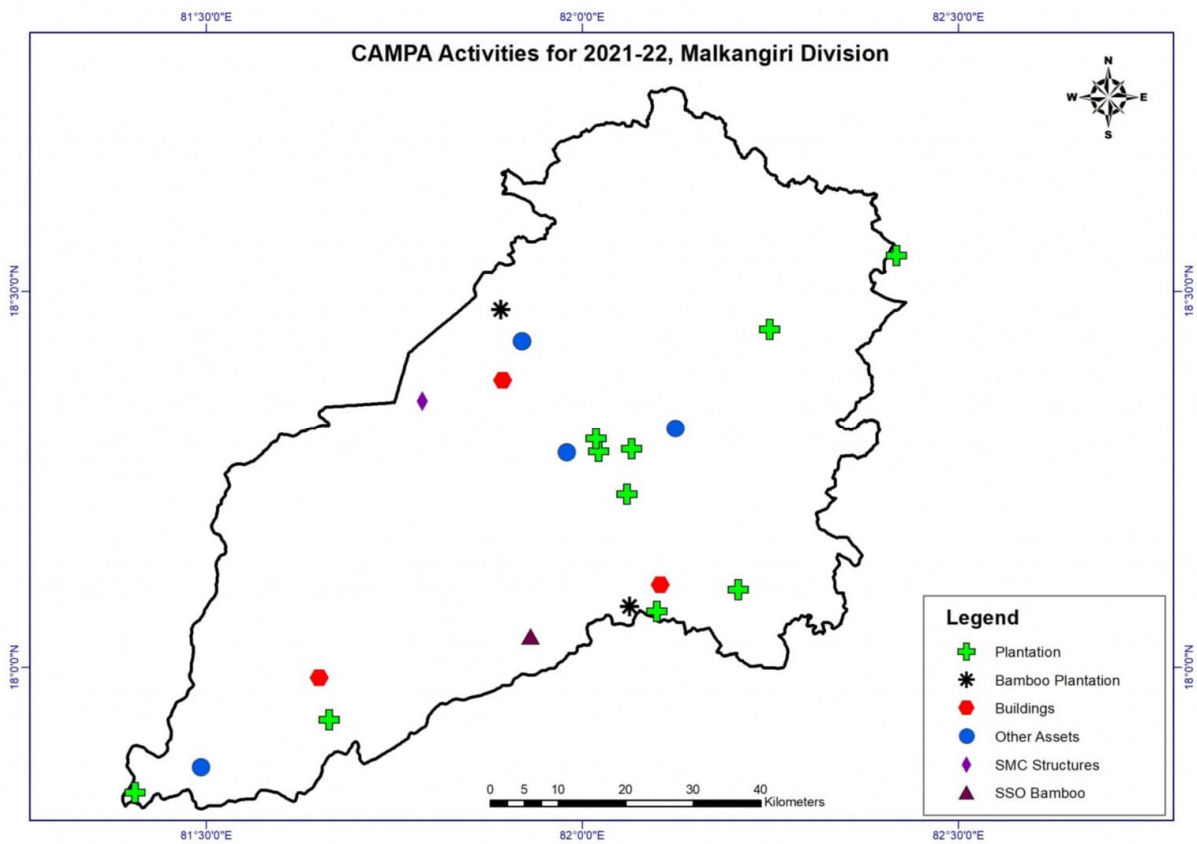
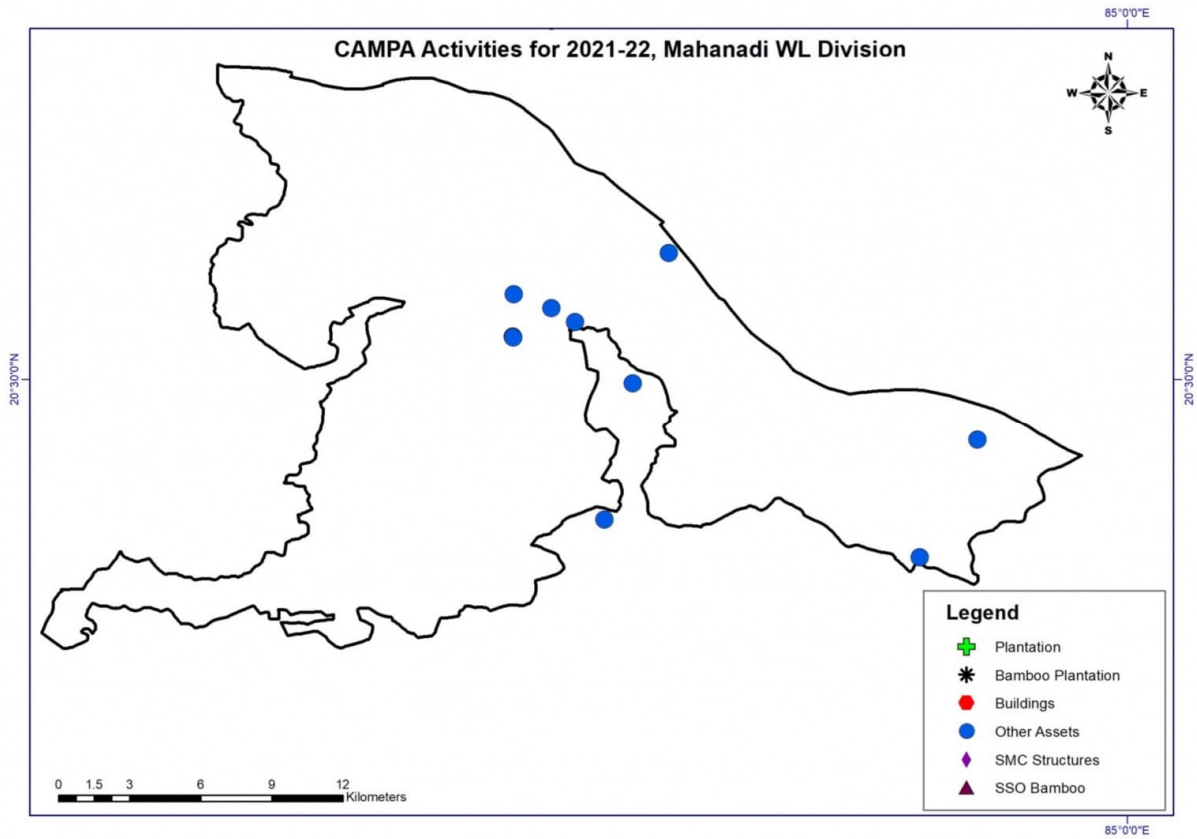


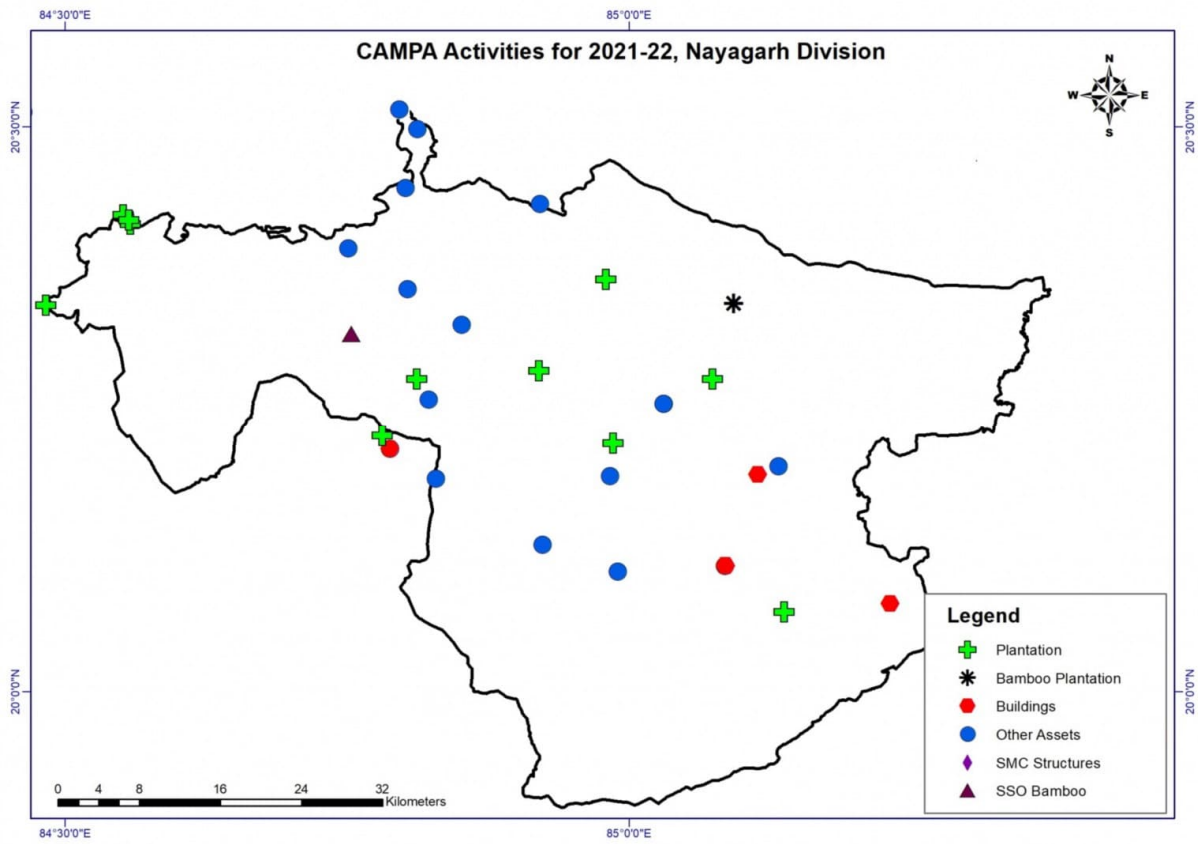
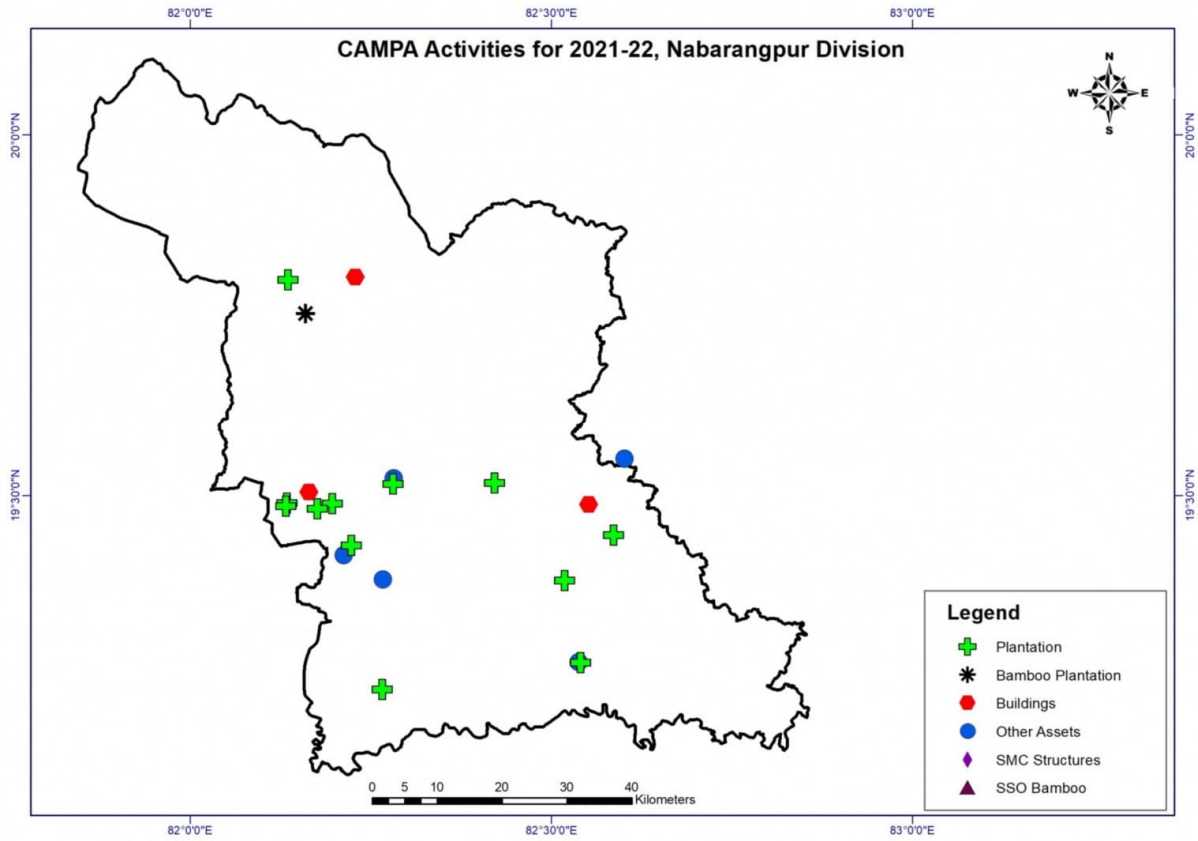


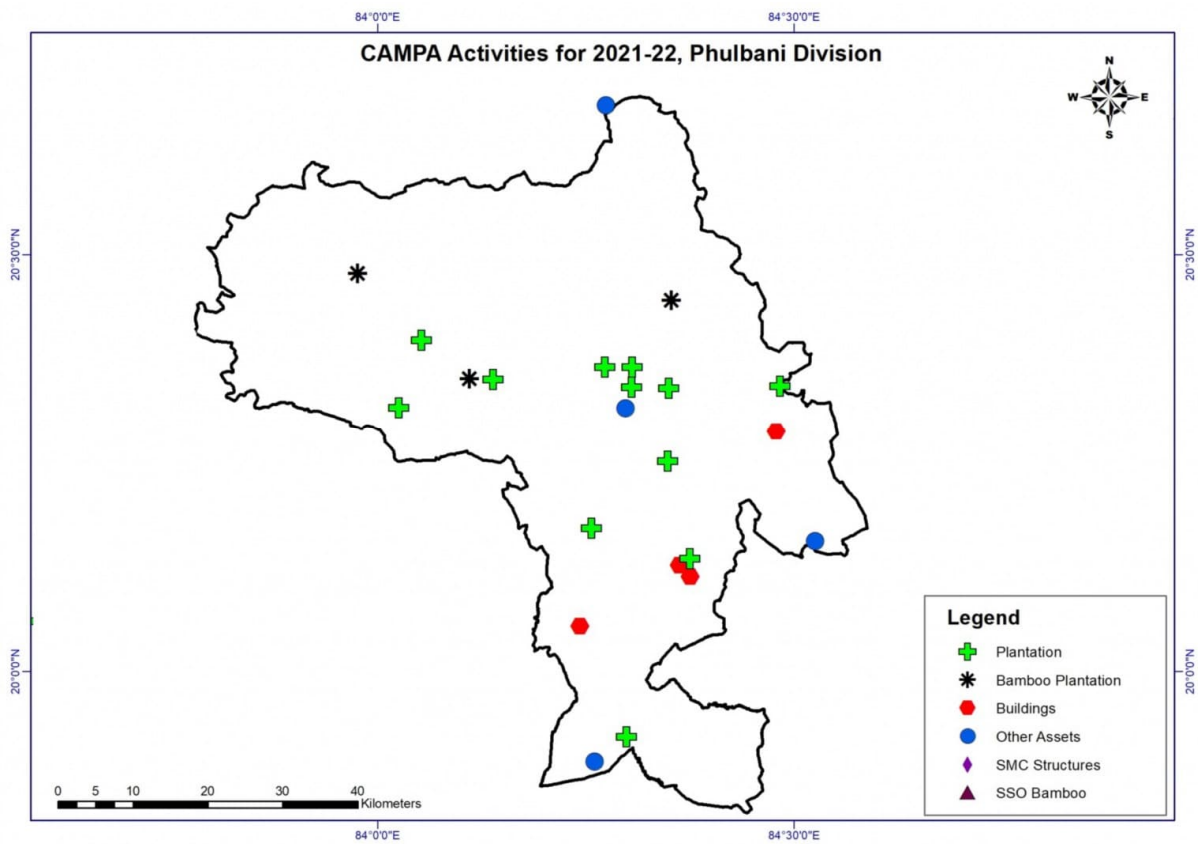
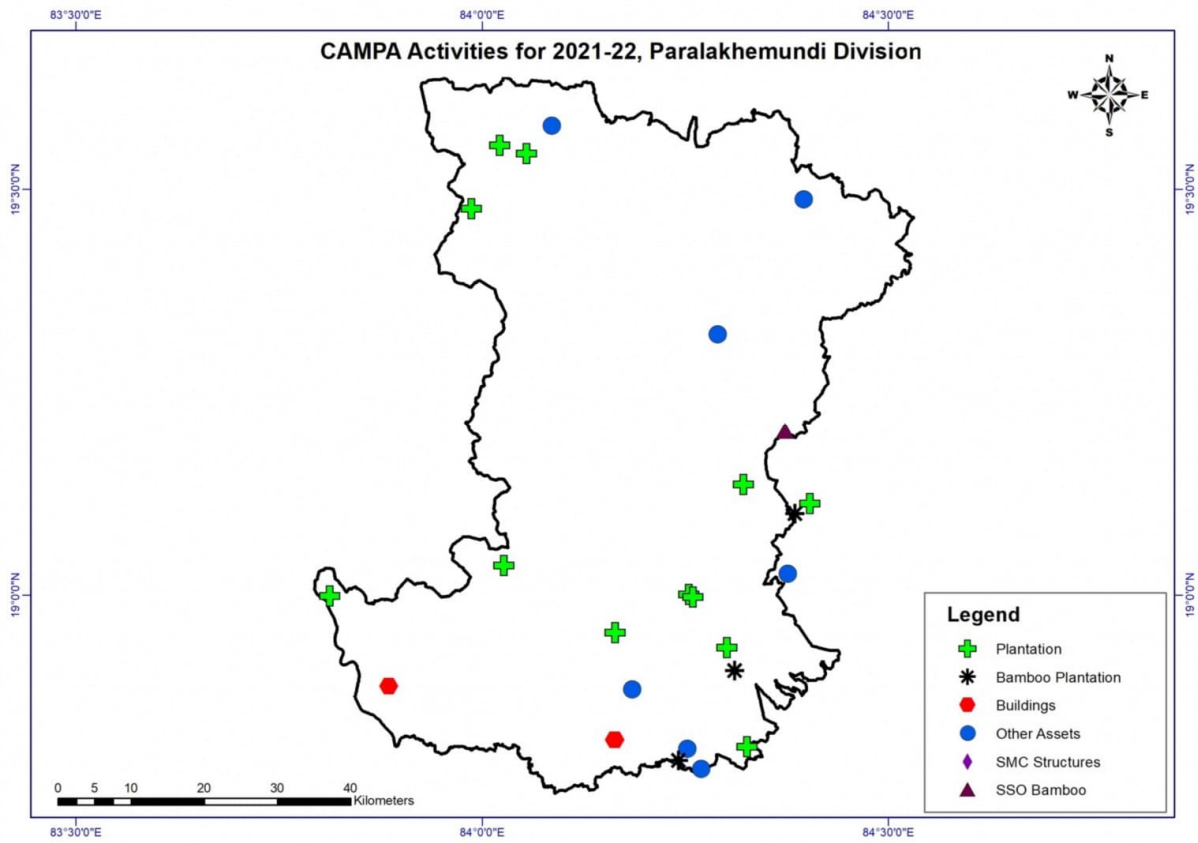


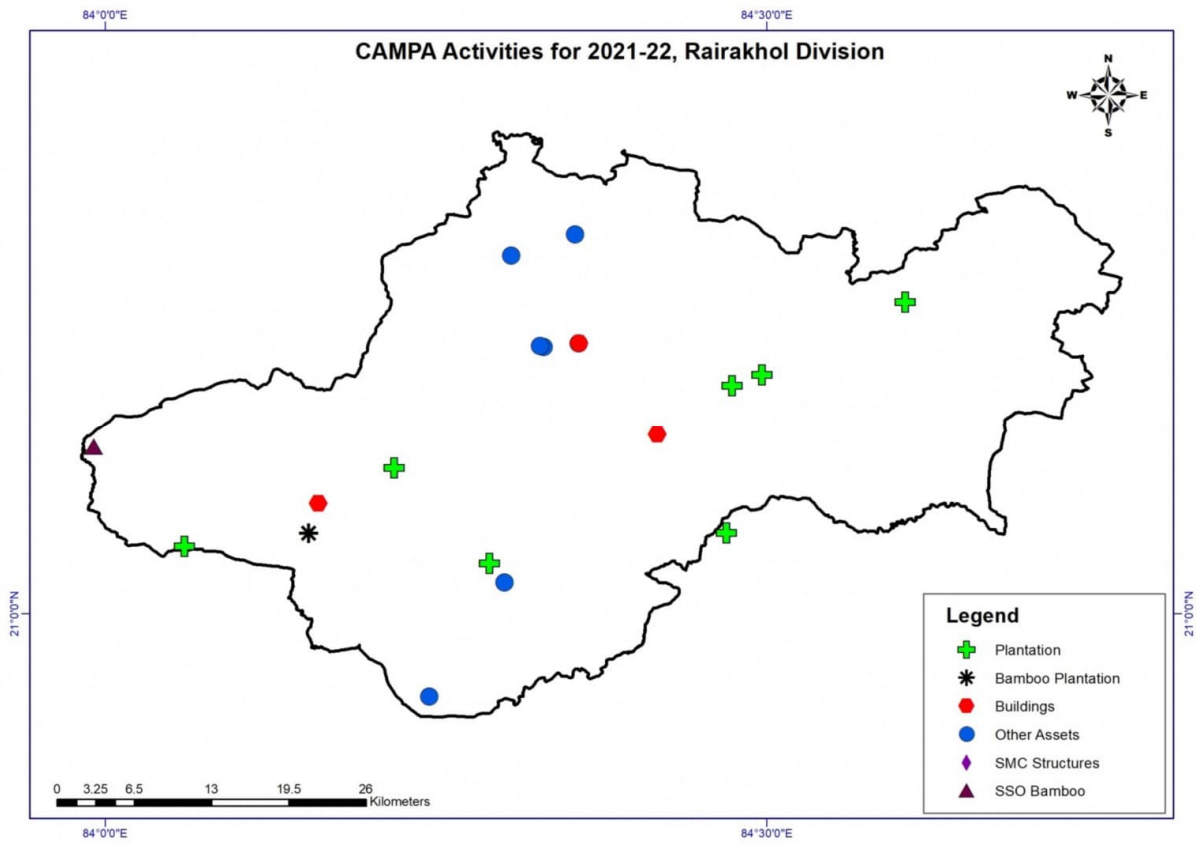
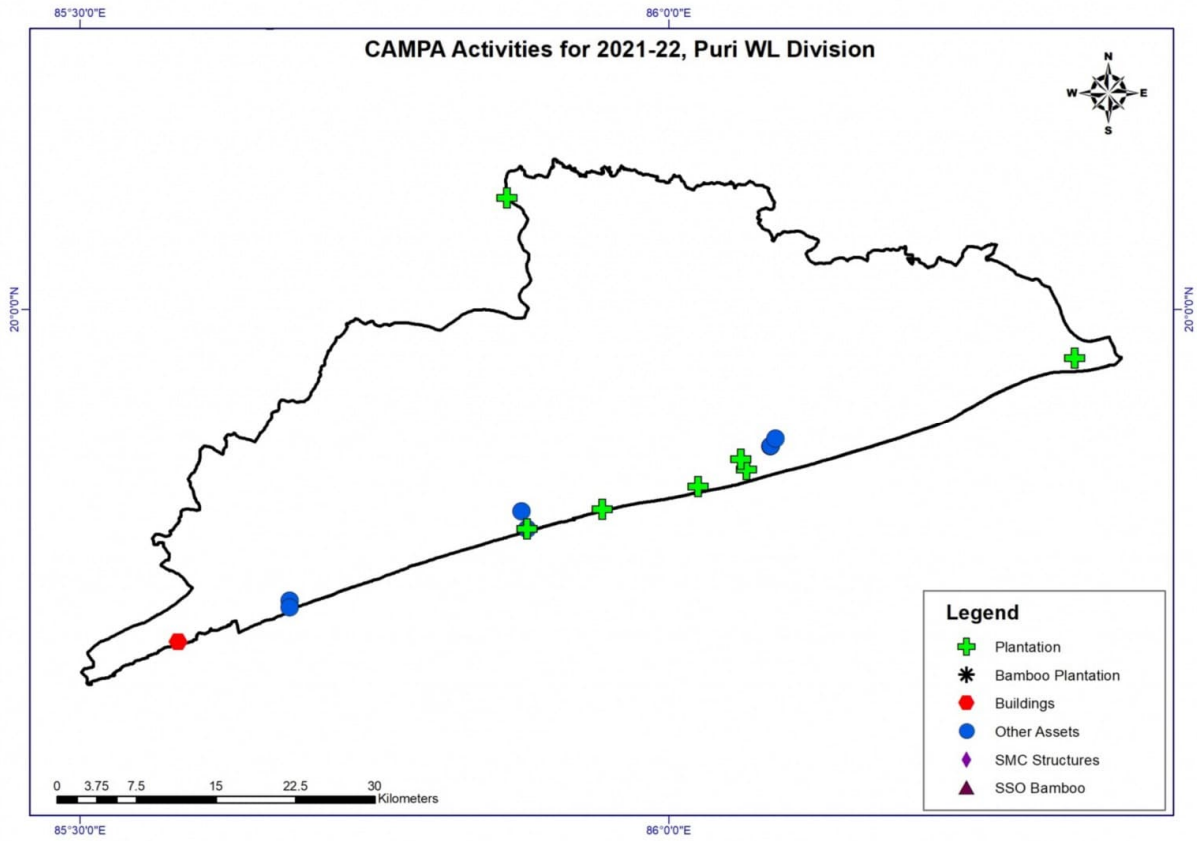


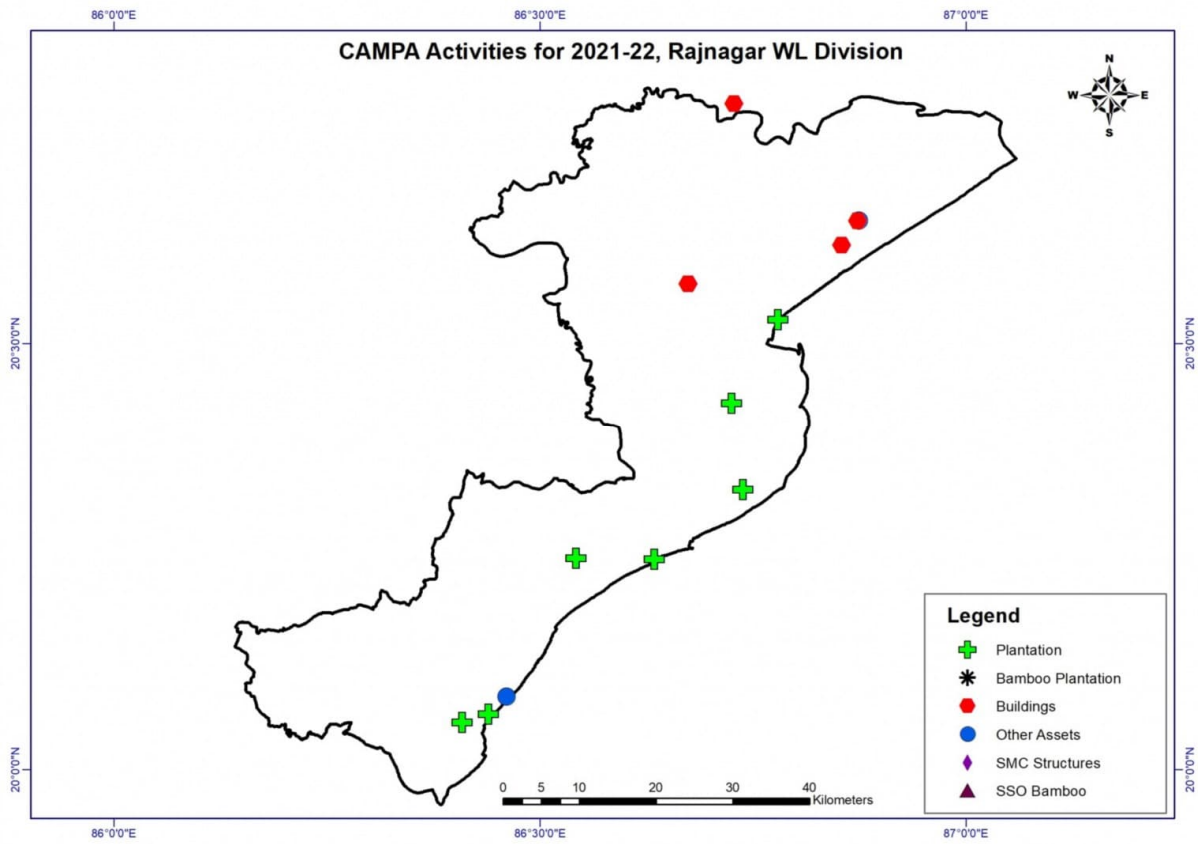
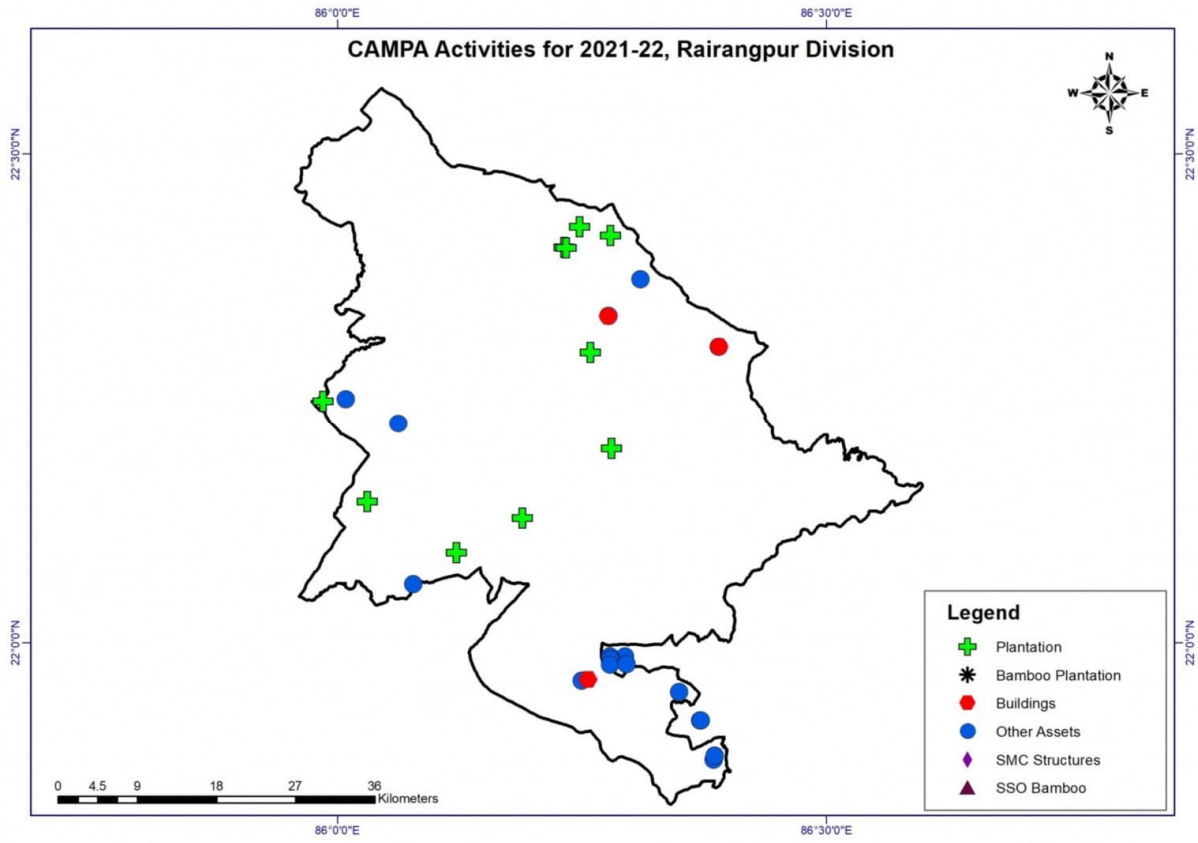


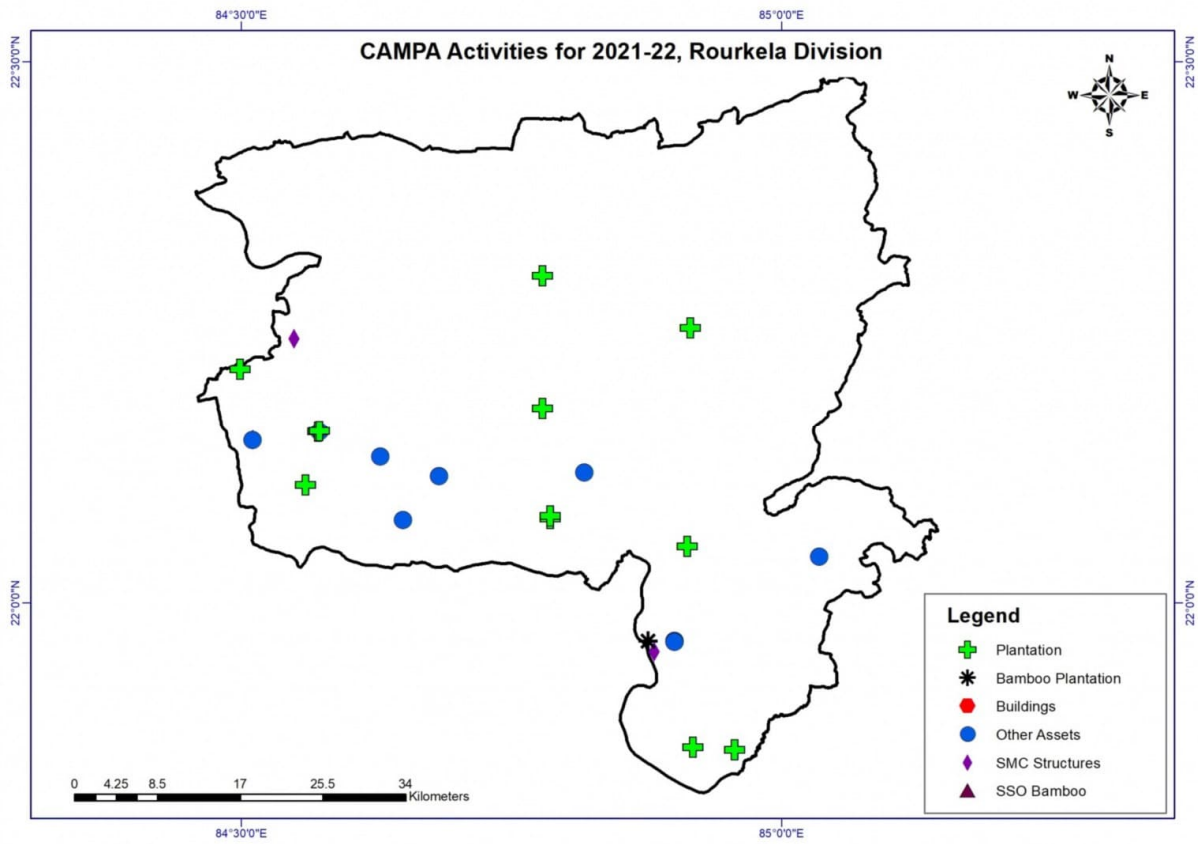
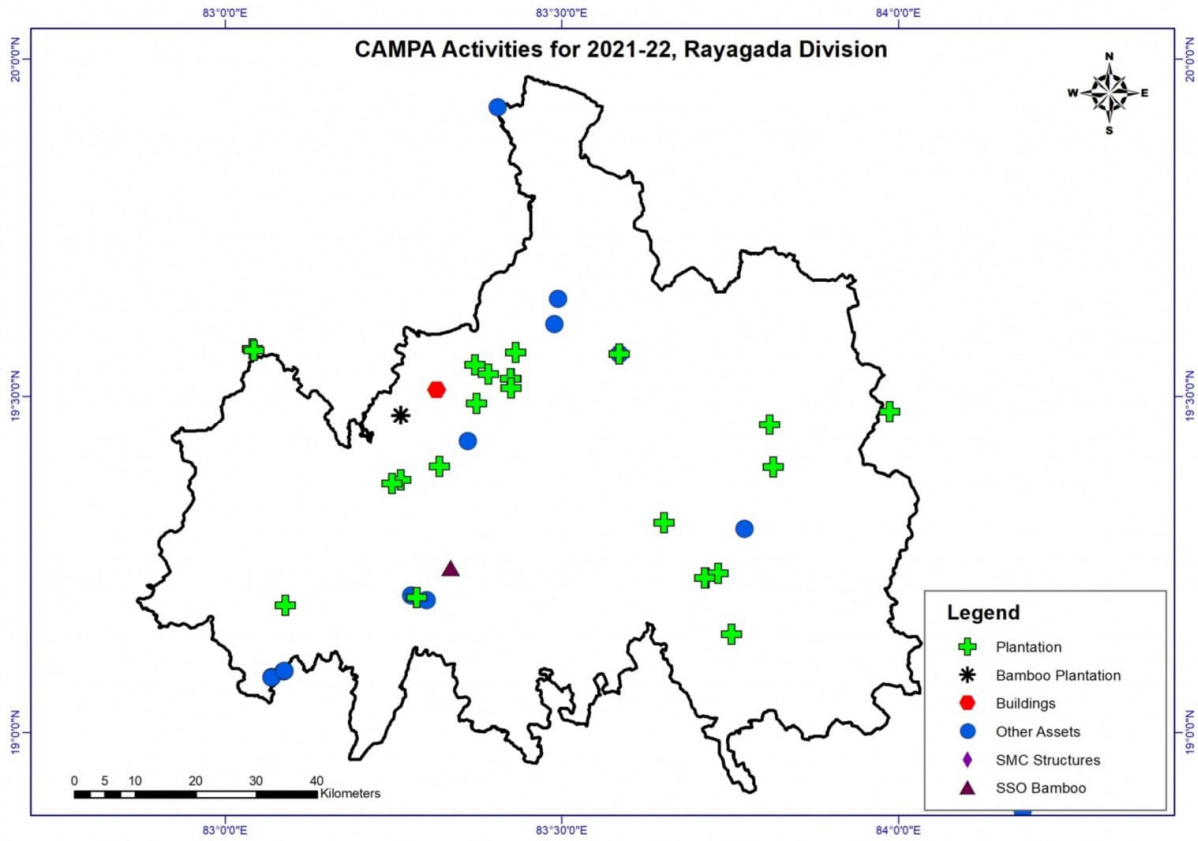


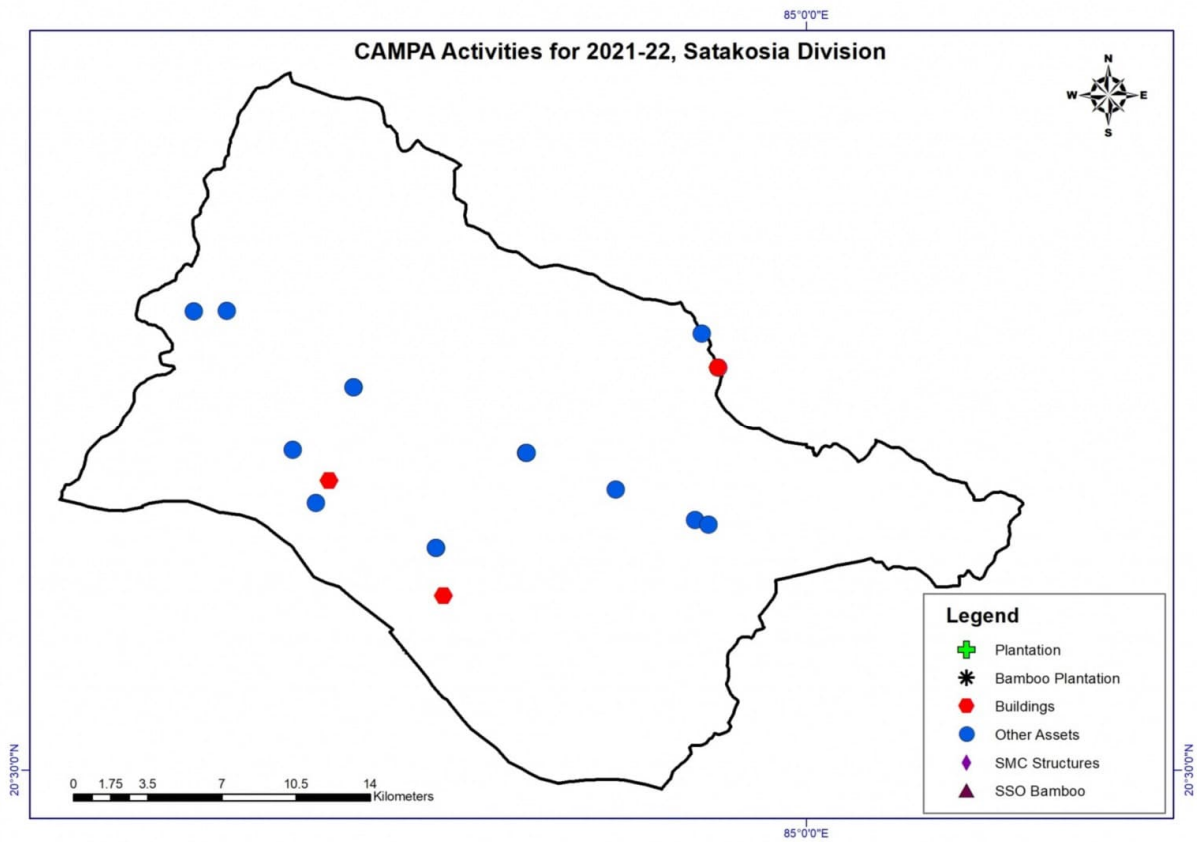
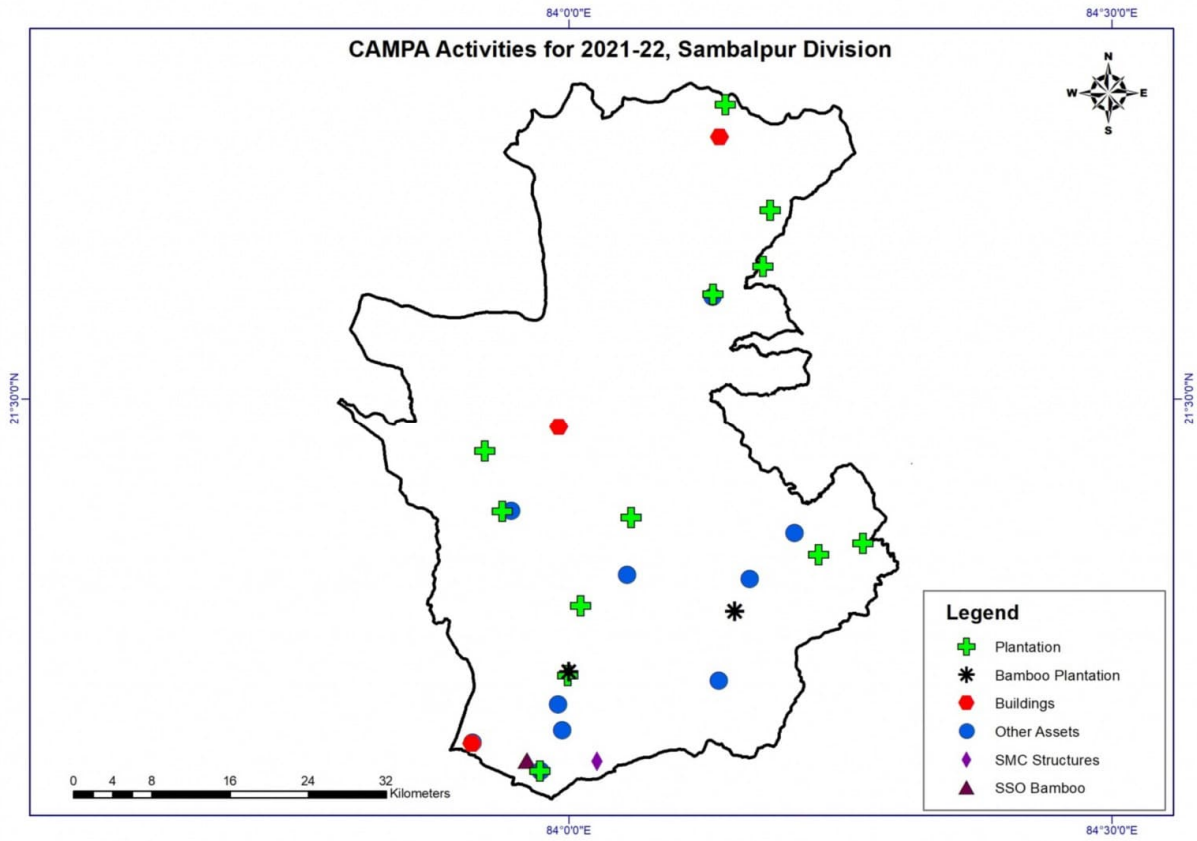


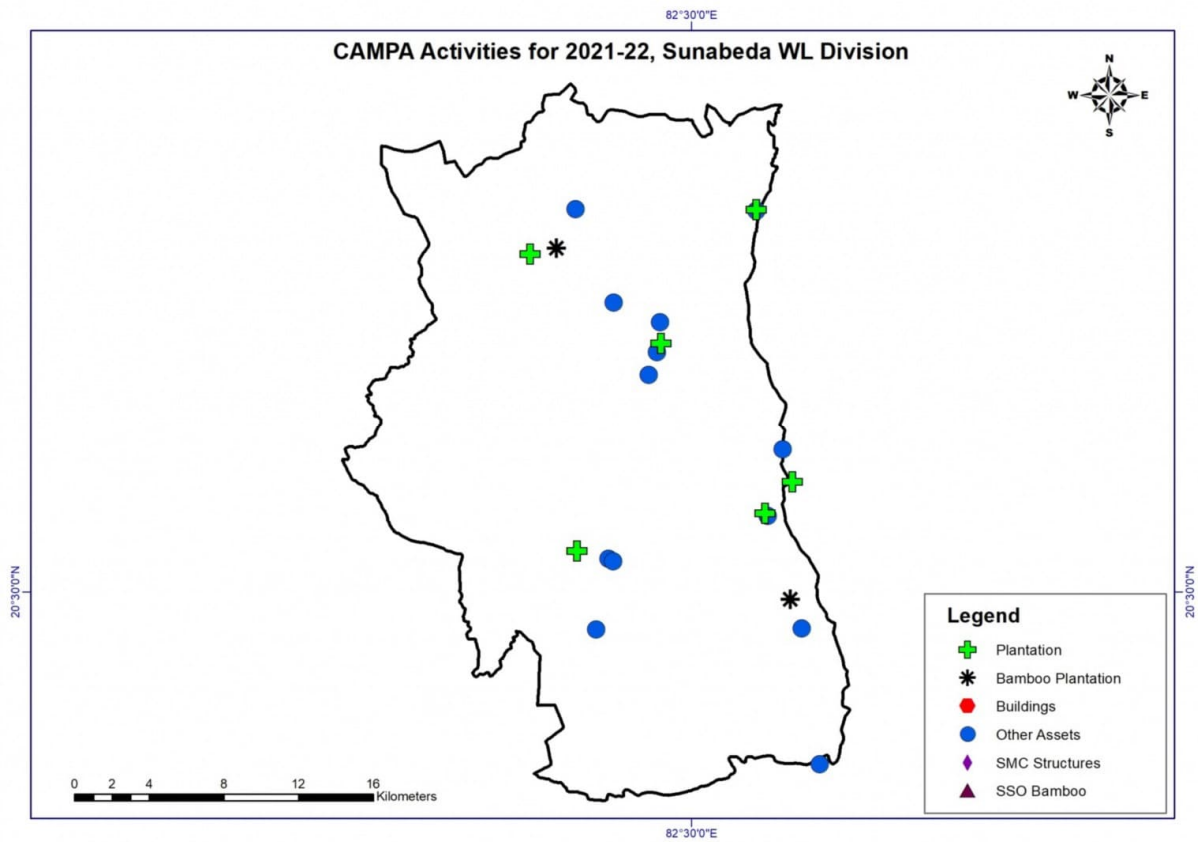
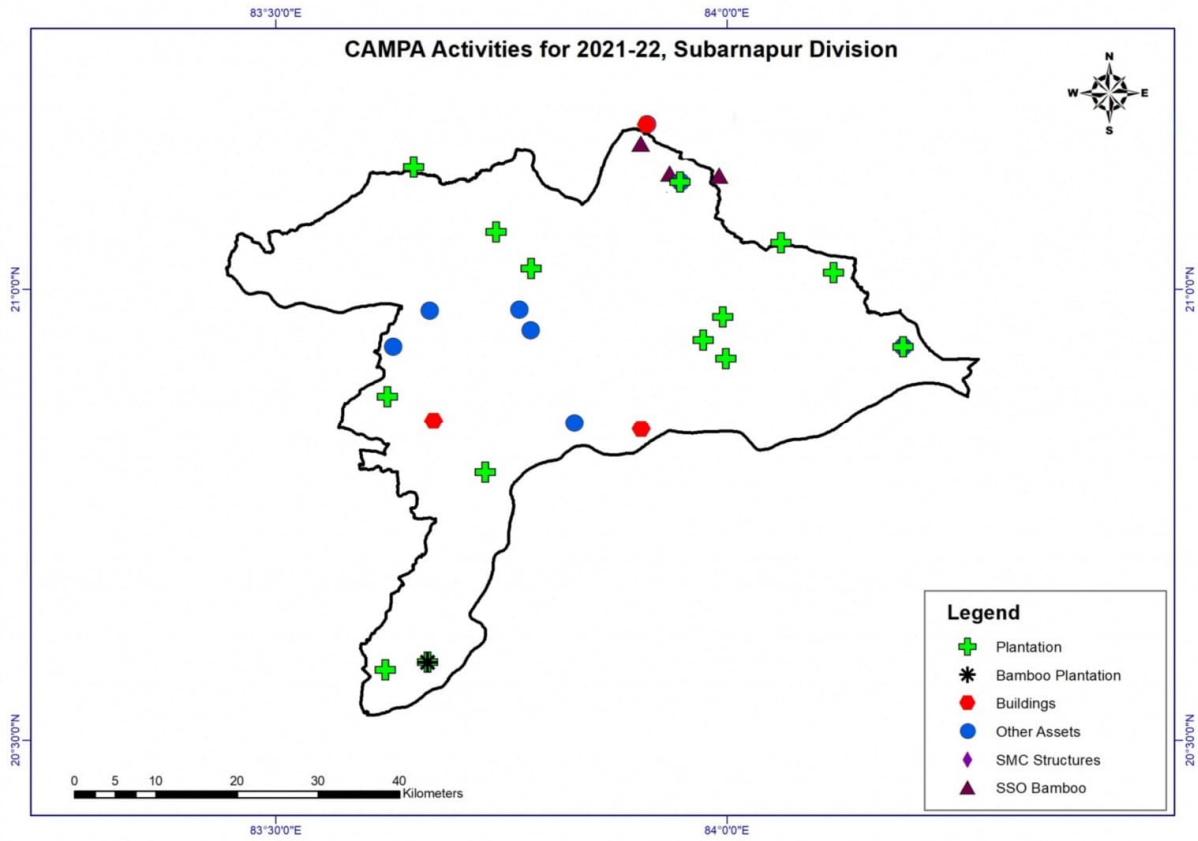


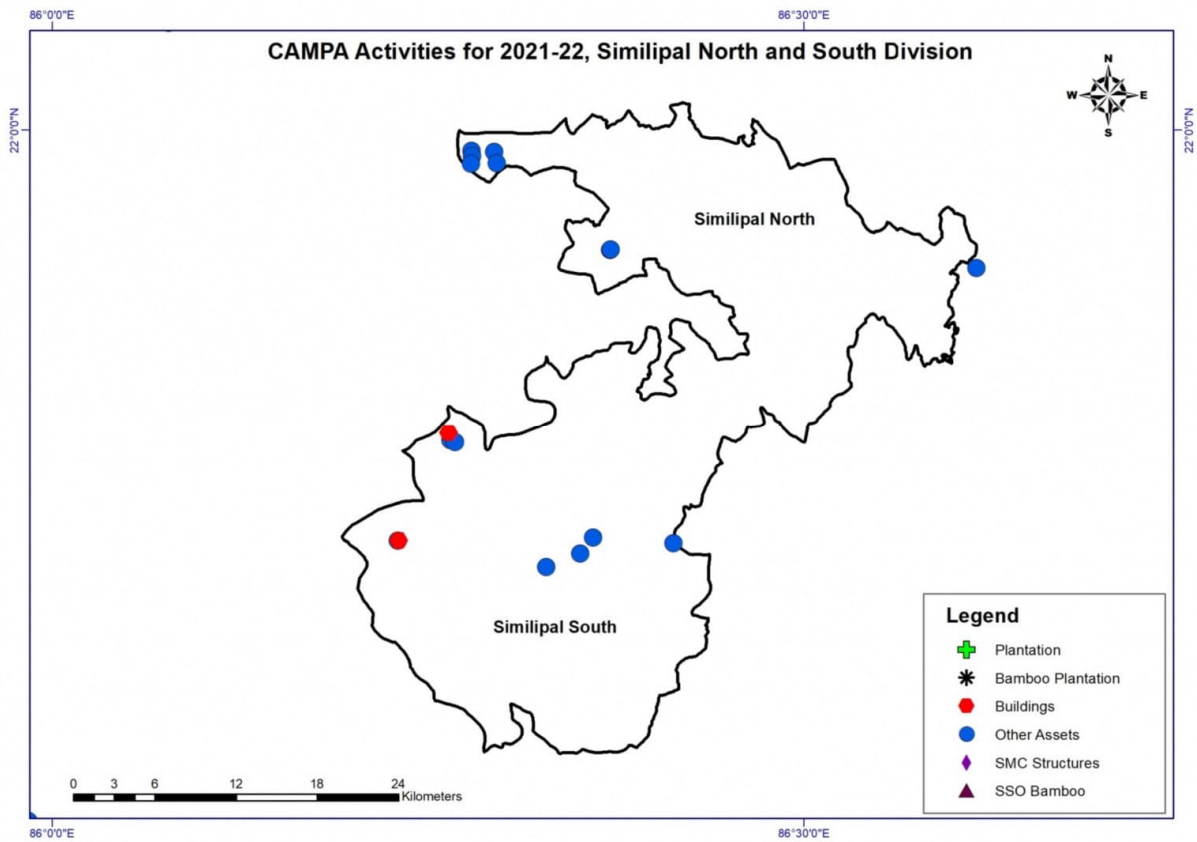
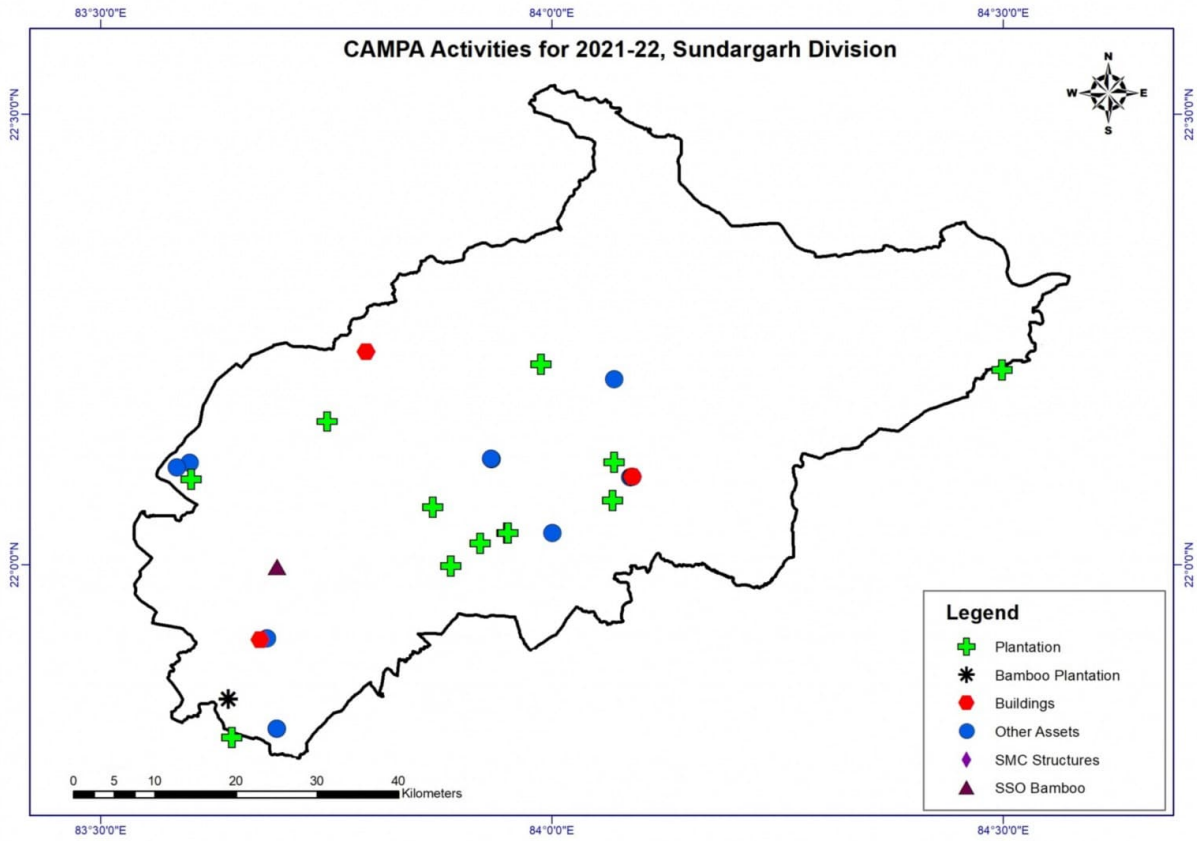




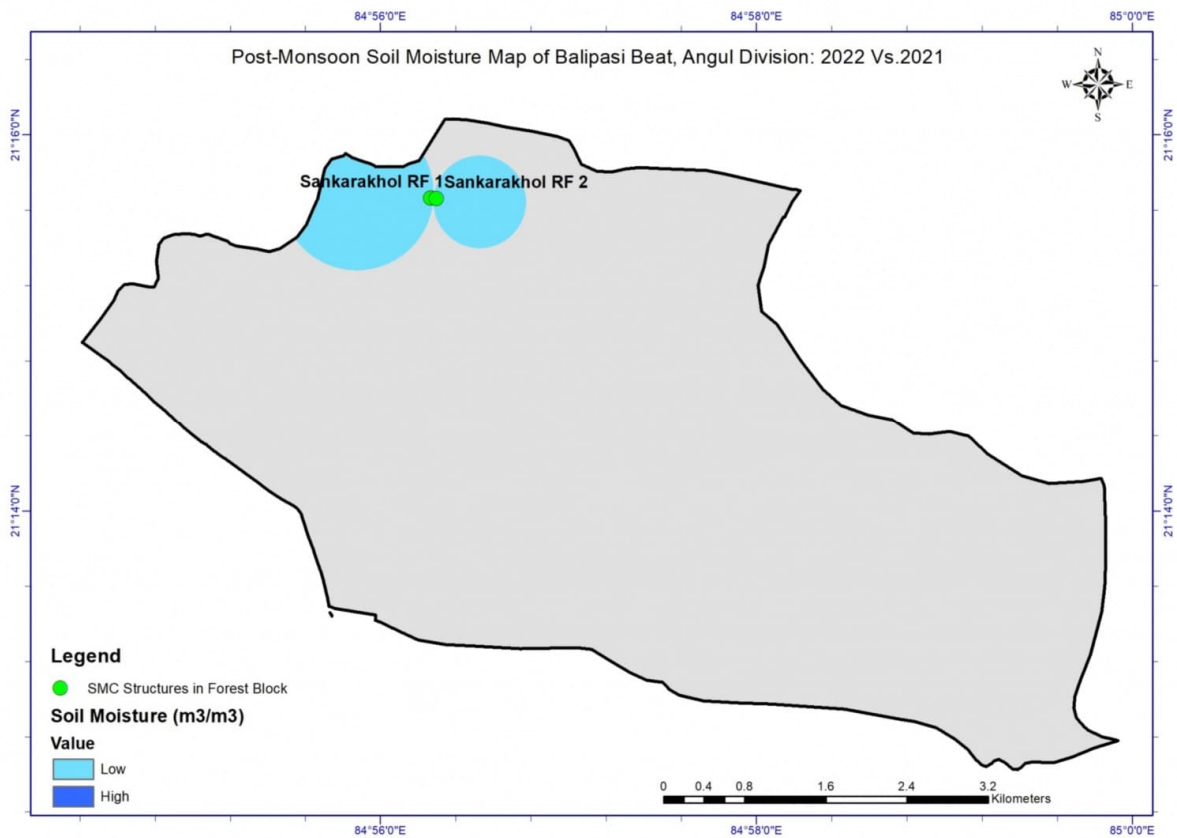
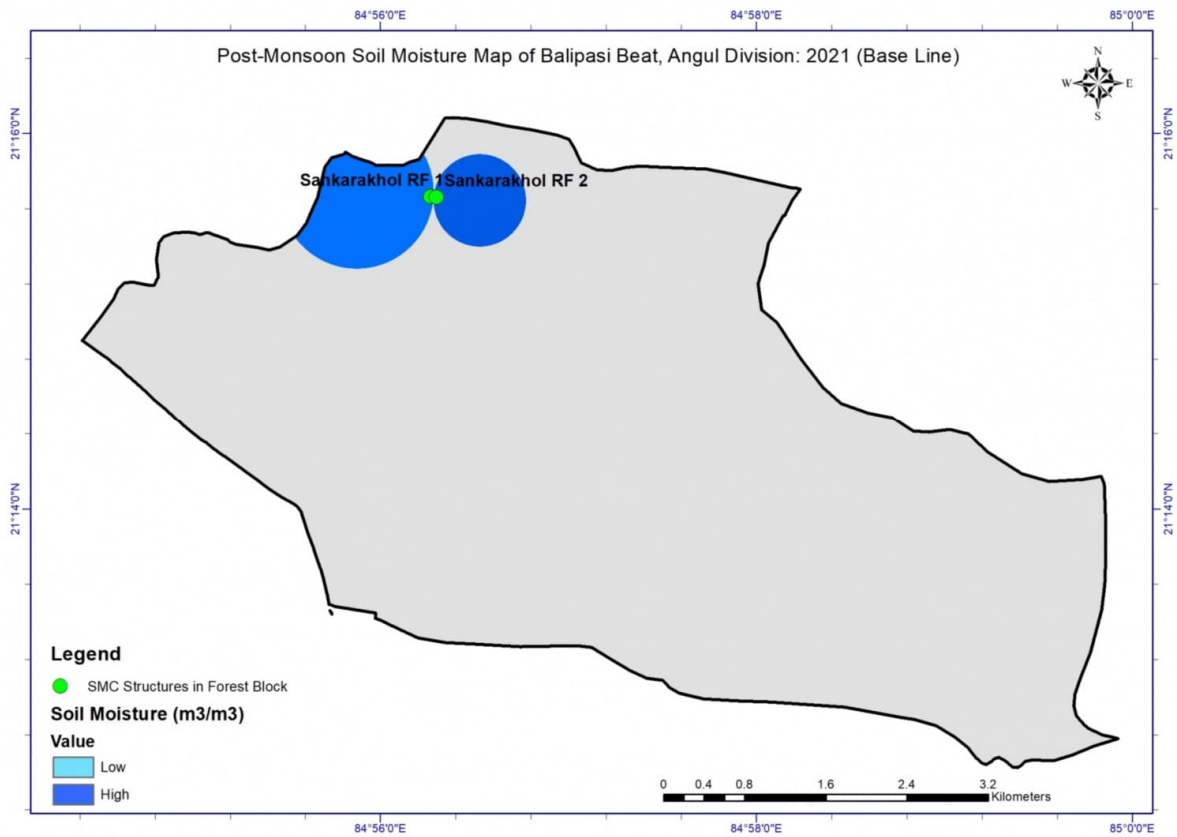


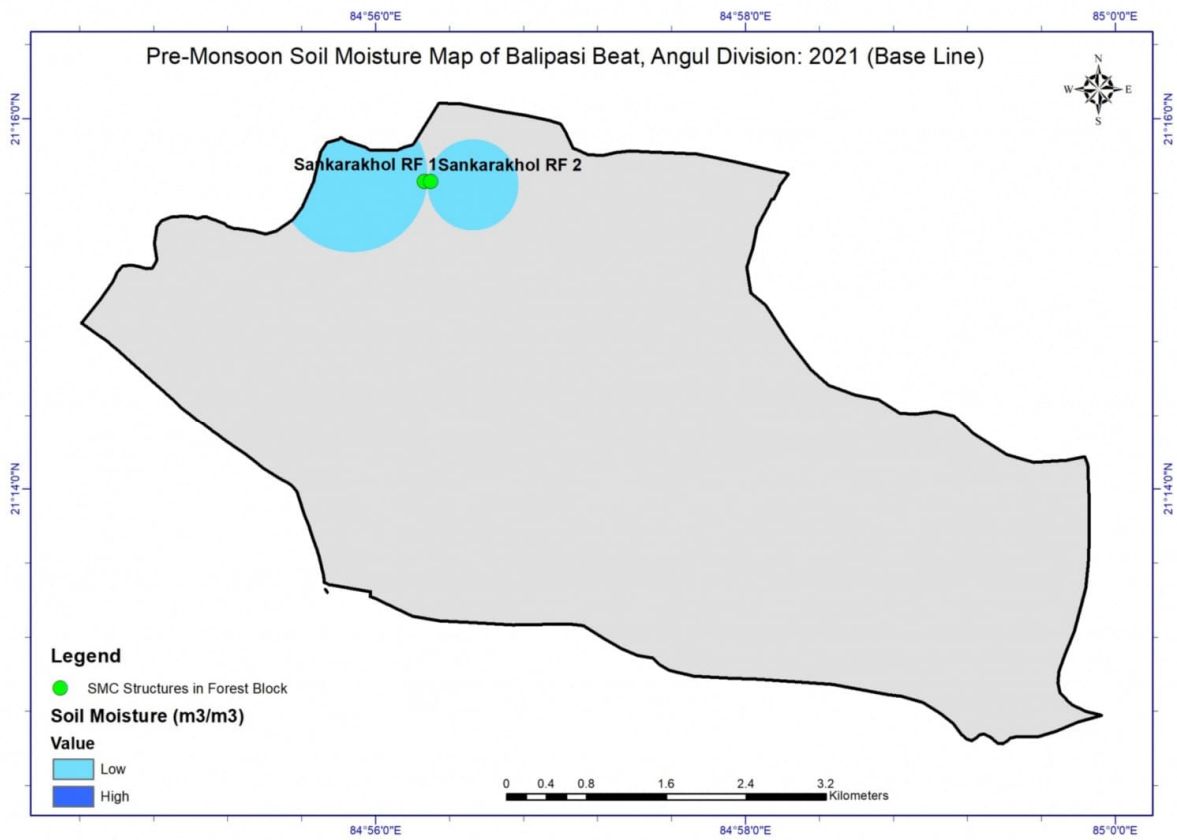
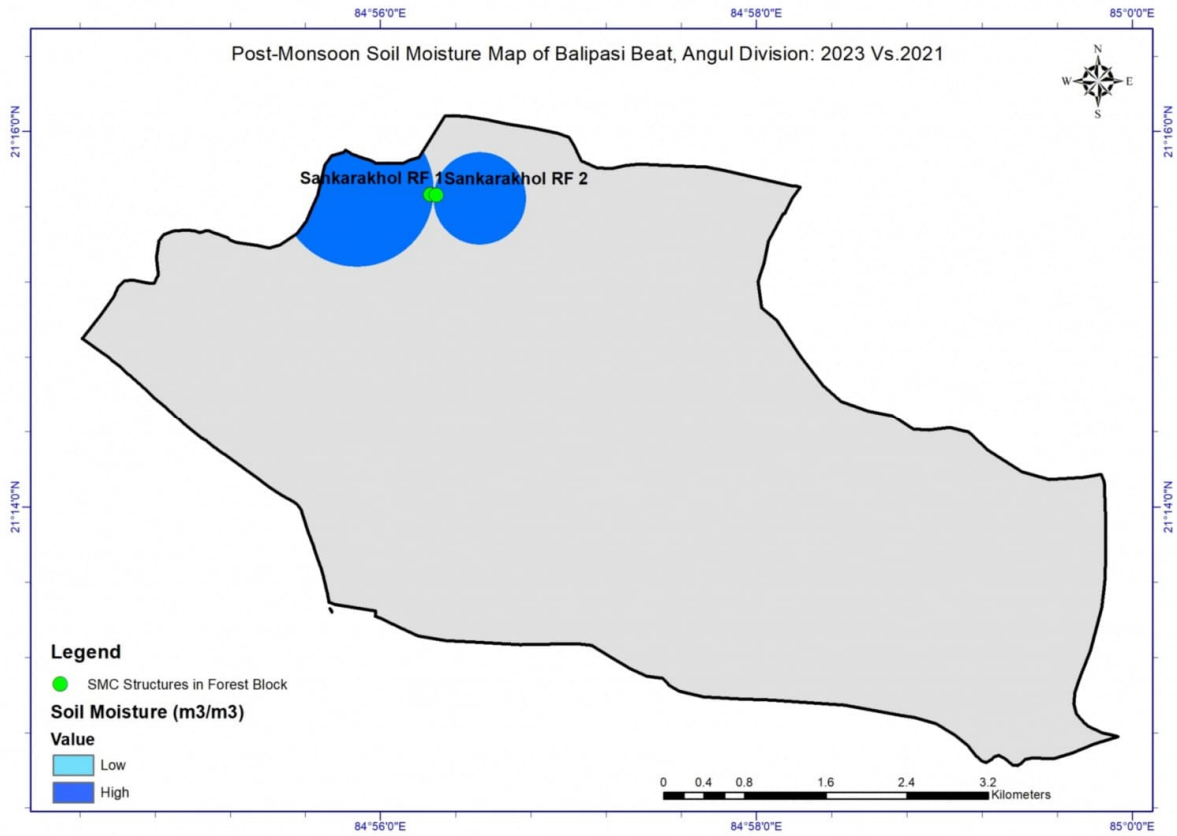


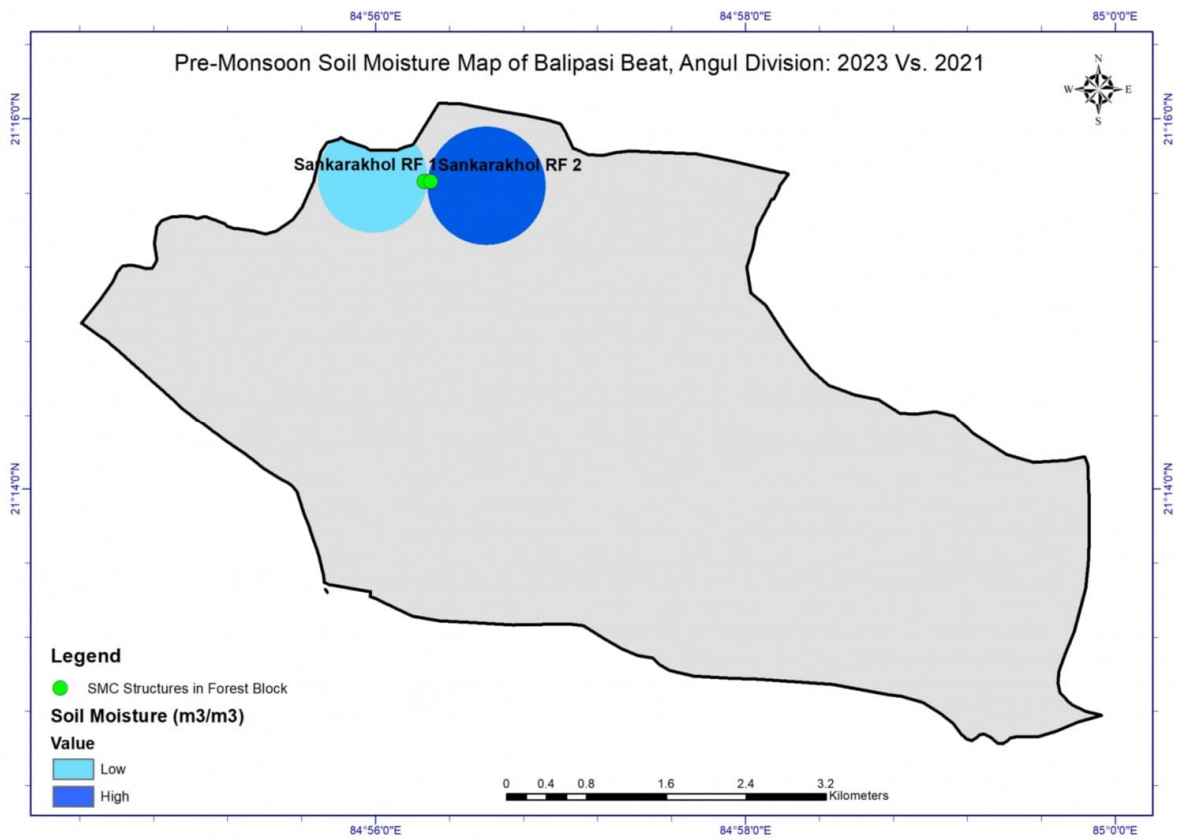
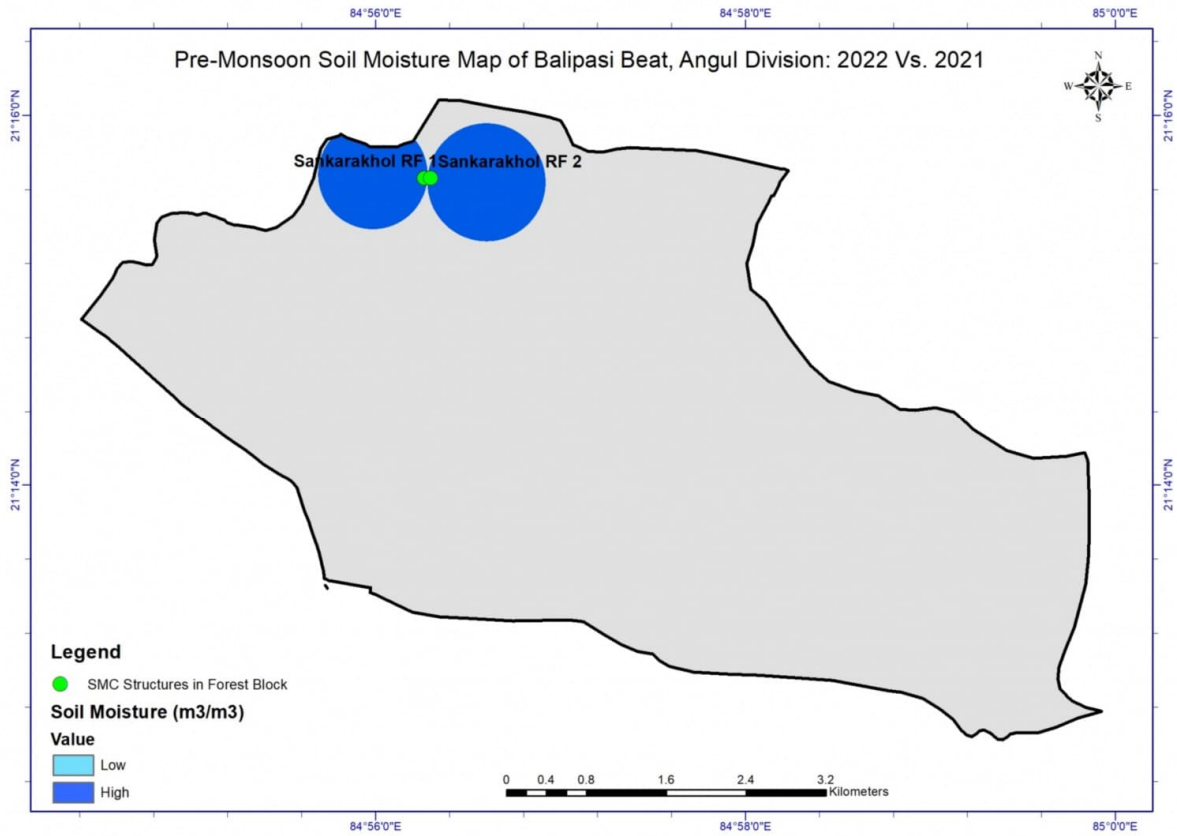


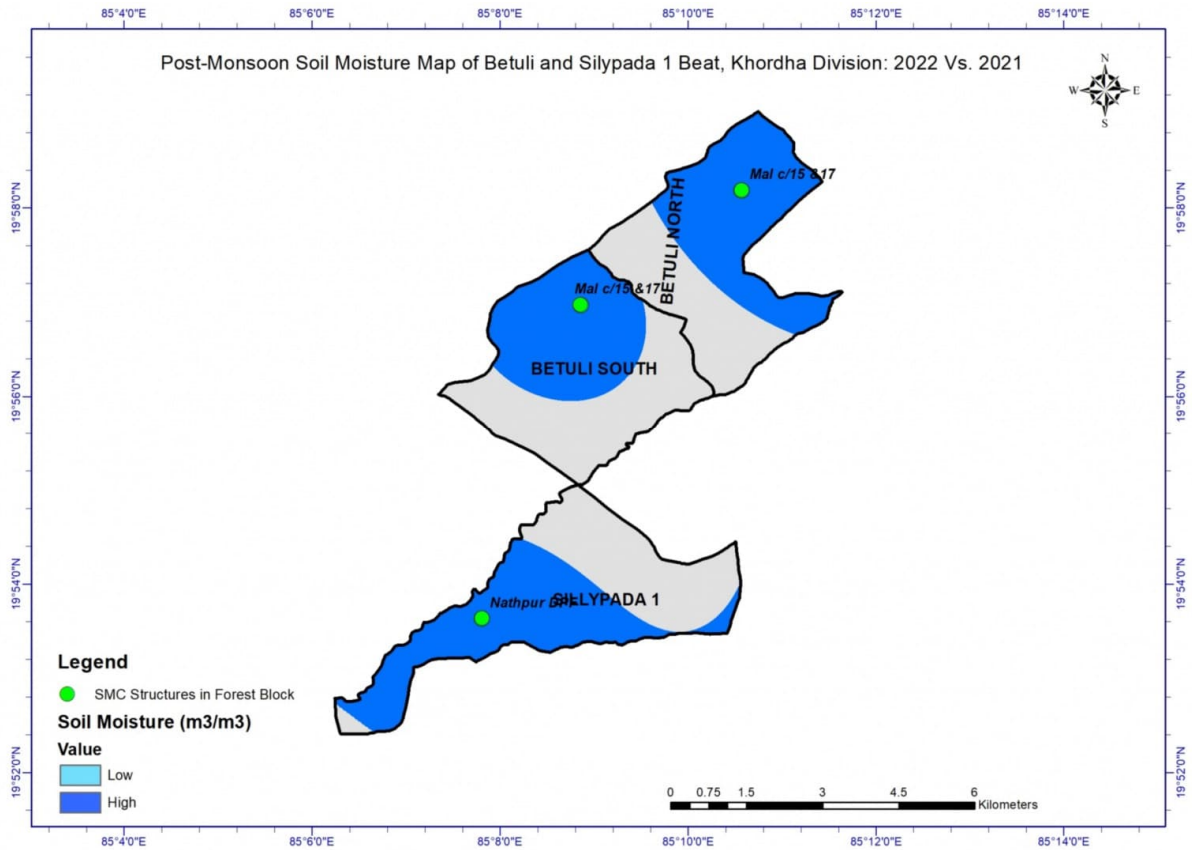
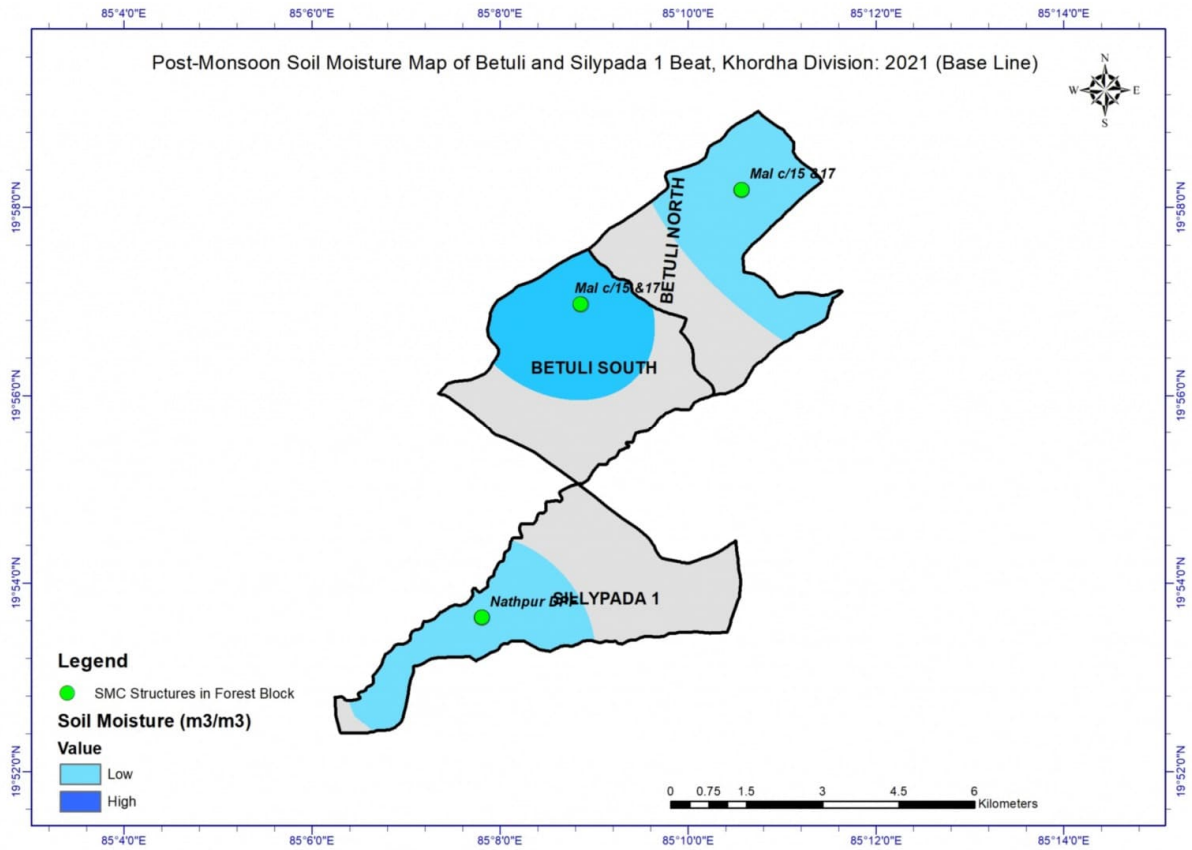


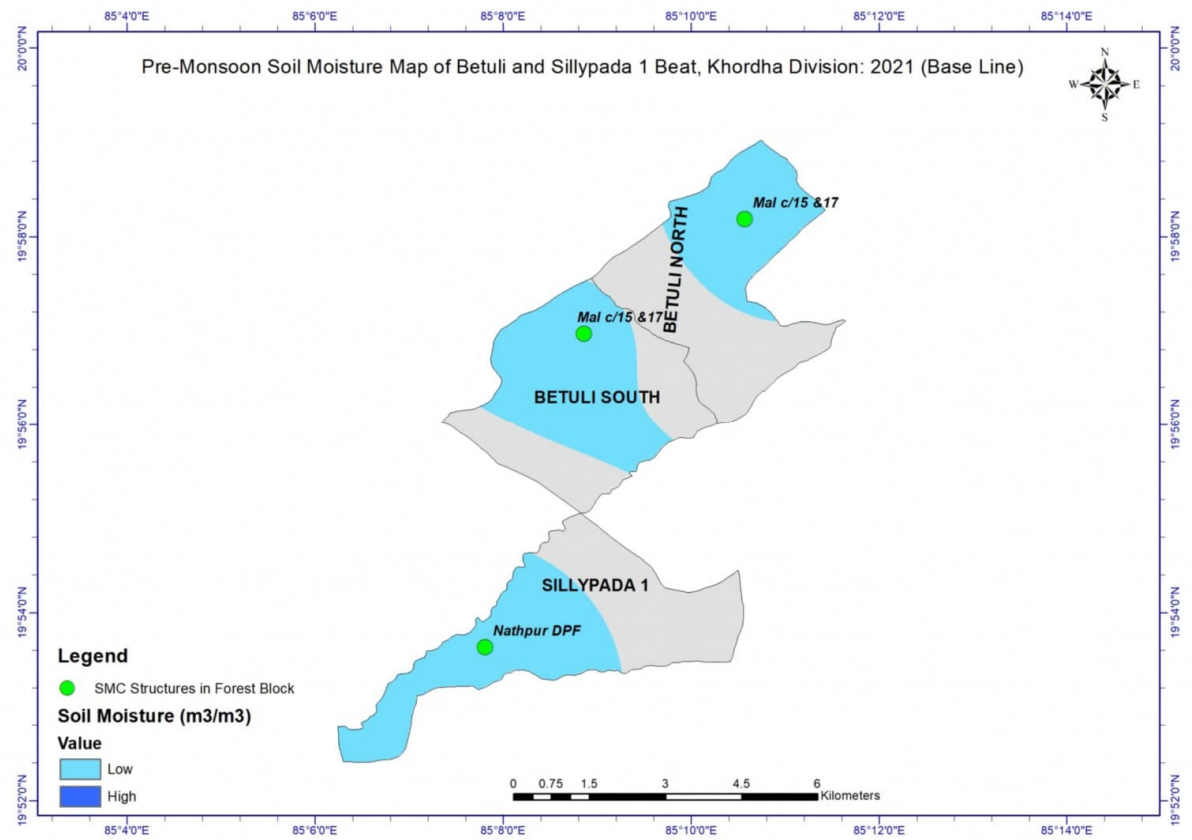
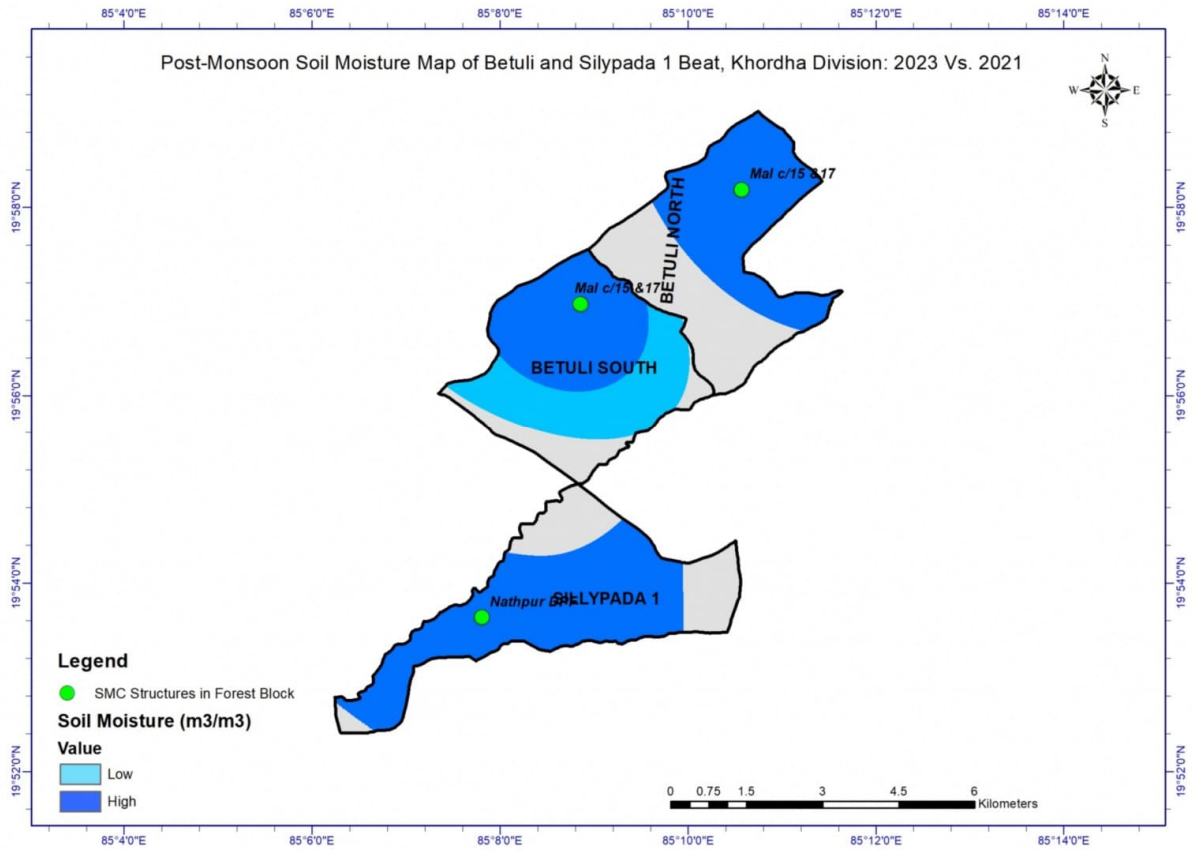
Annexure IV: Soil Moisture Maps in SMC Activities

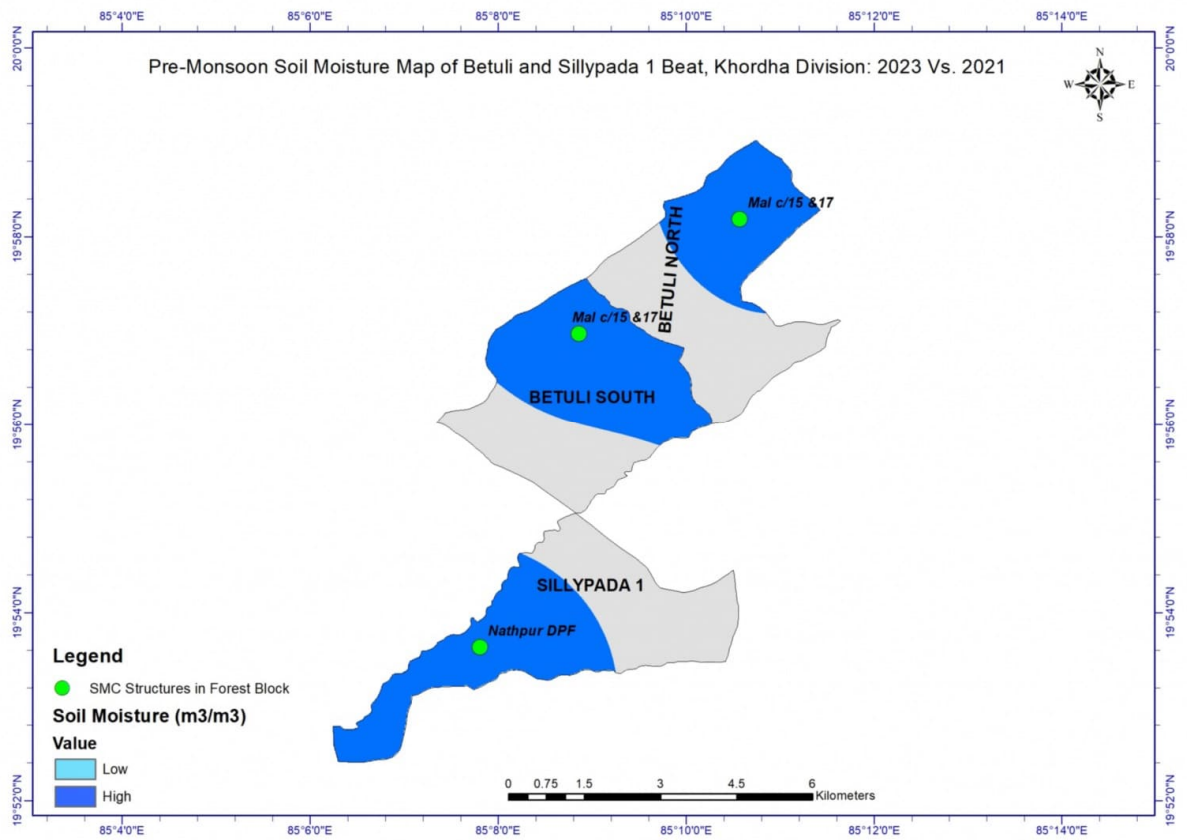
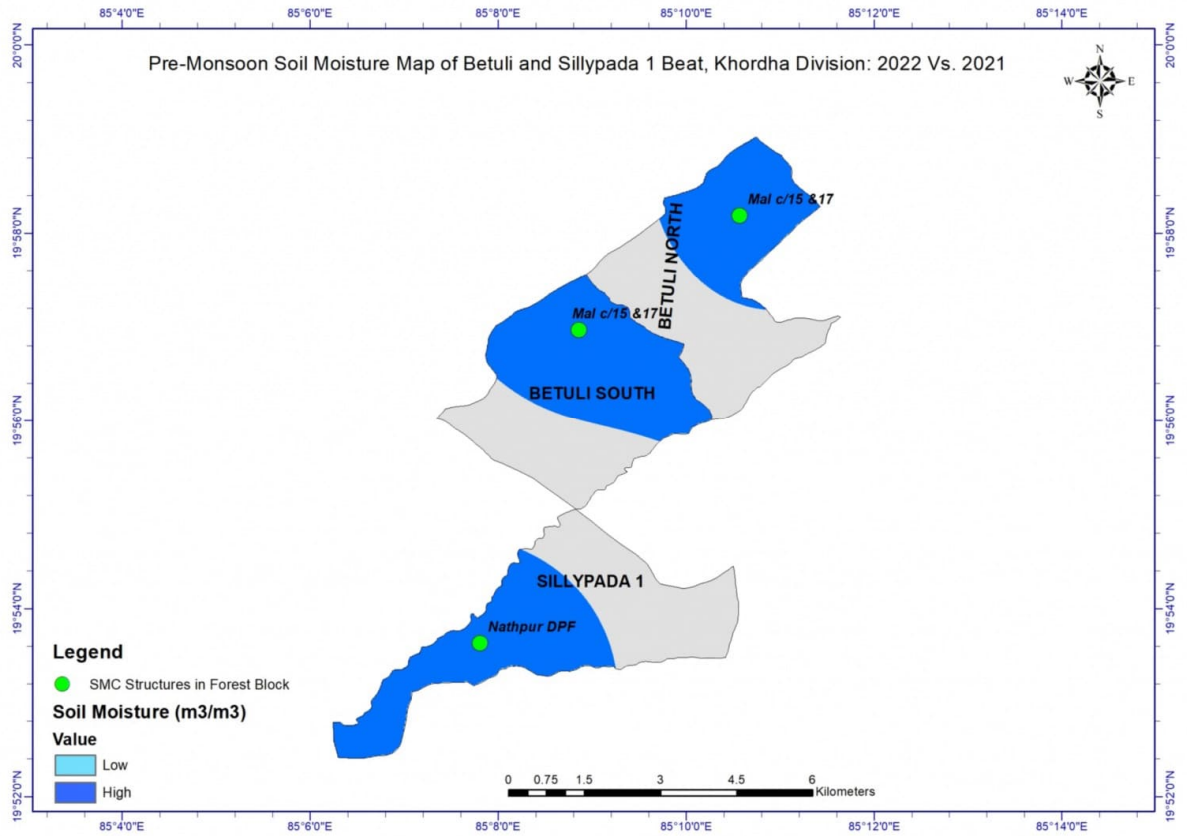


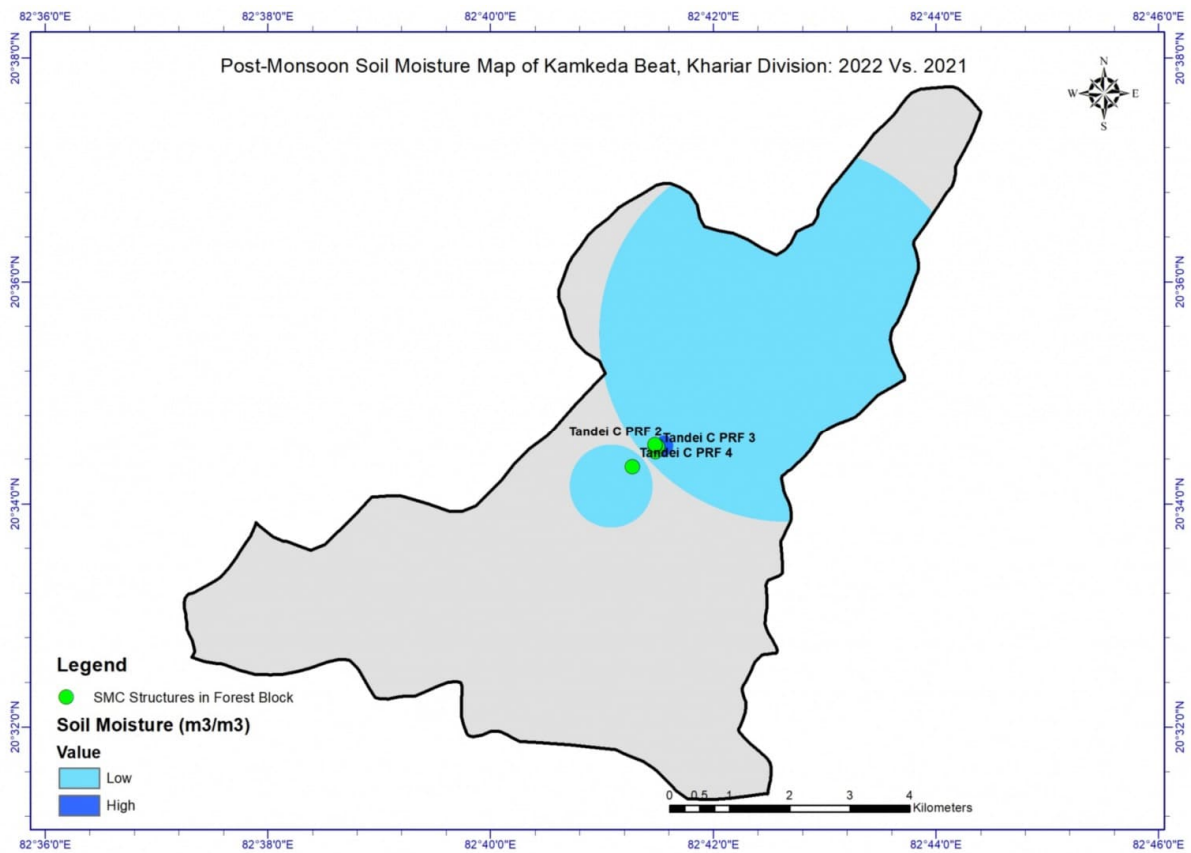
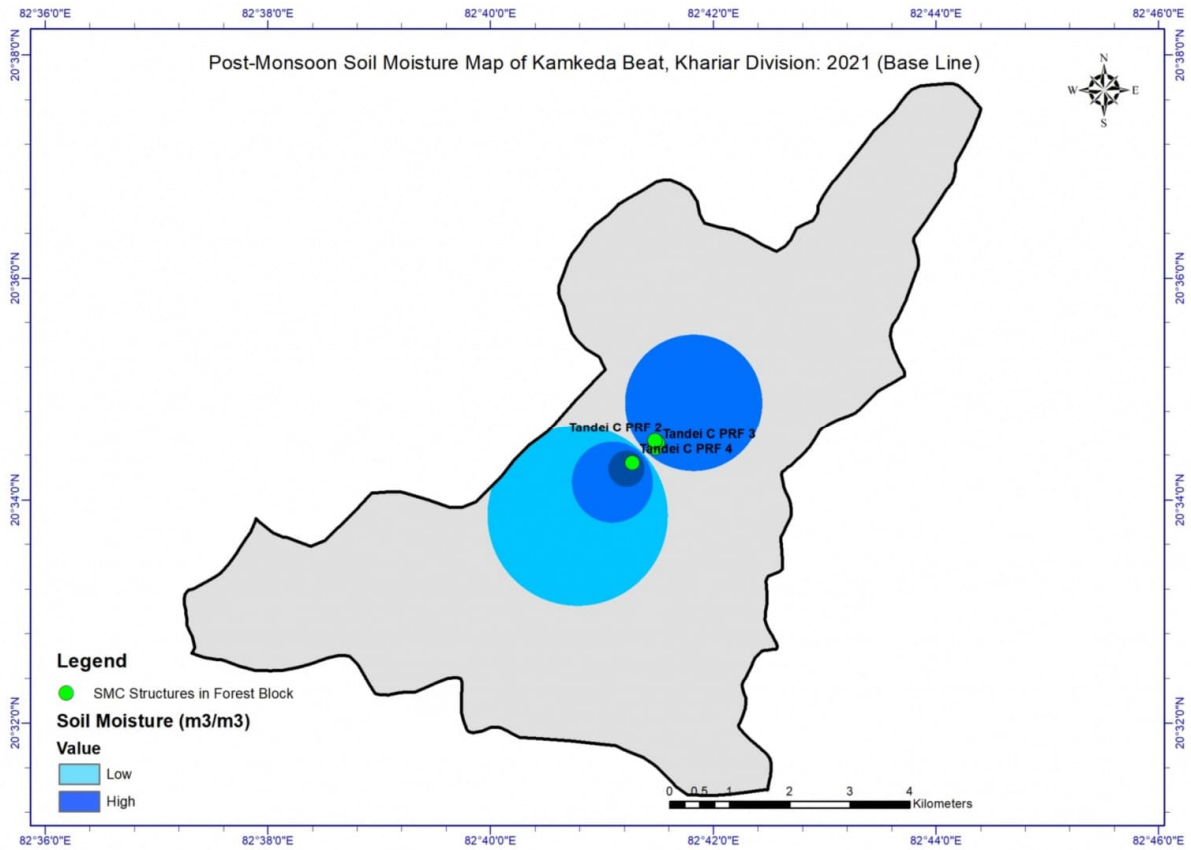


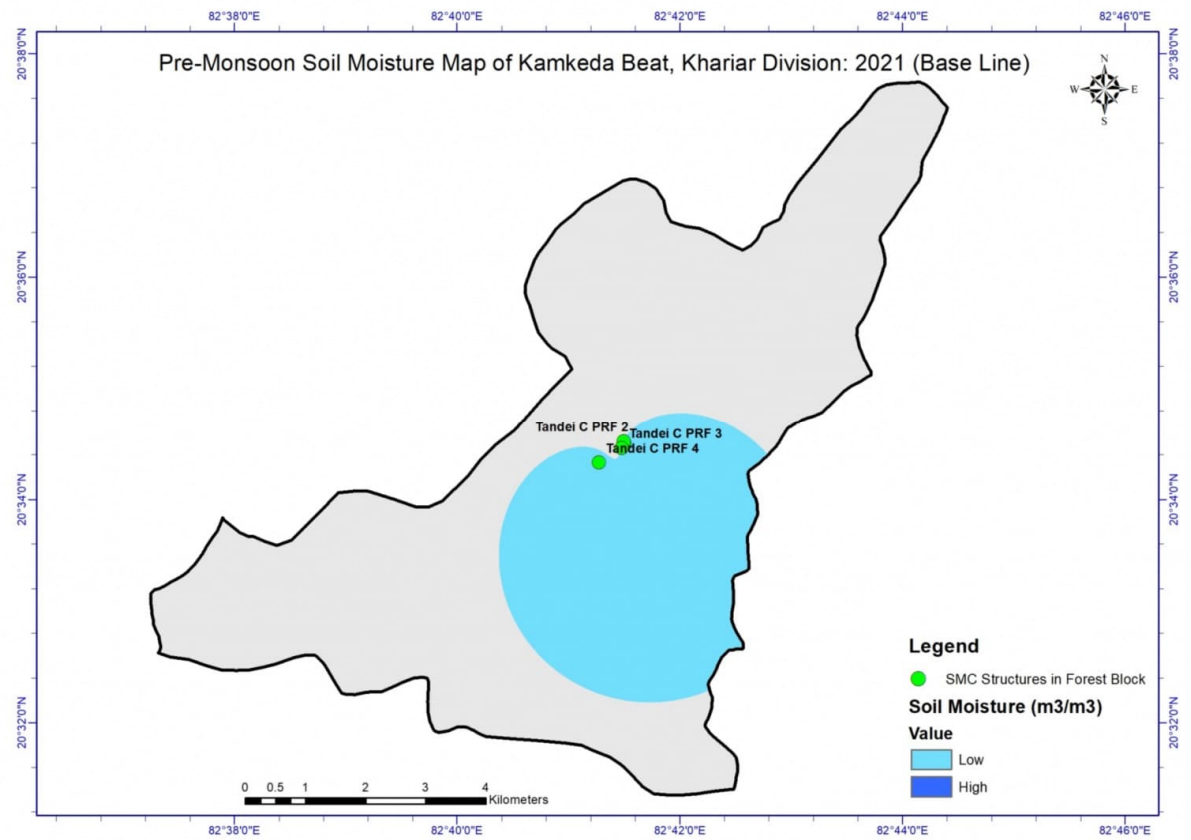
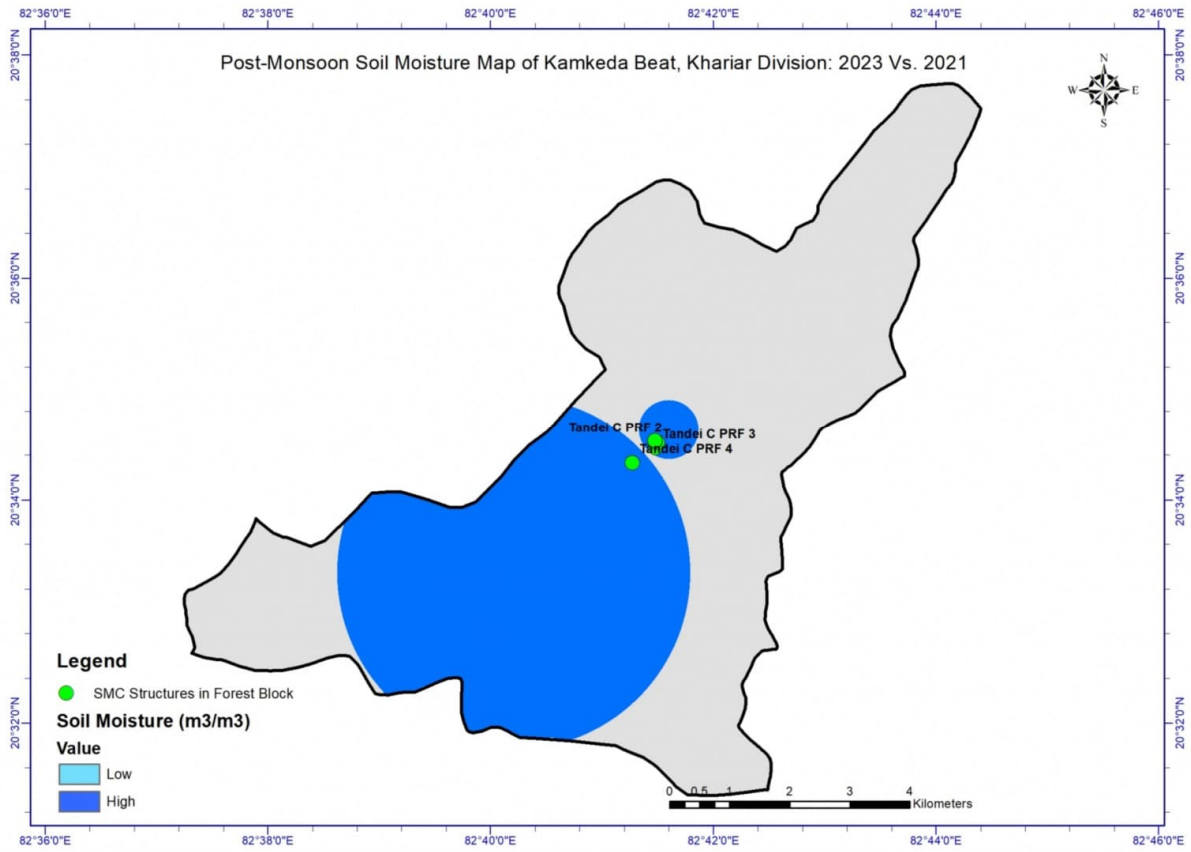


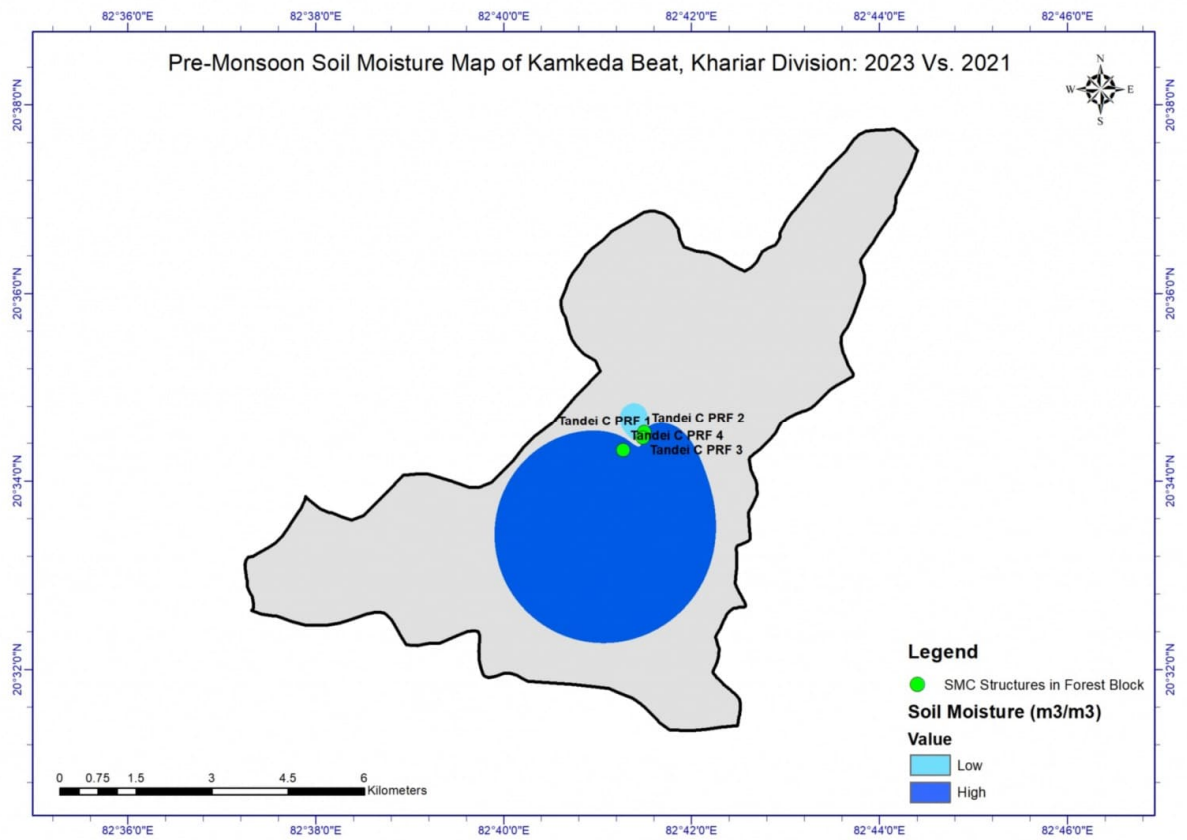
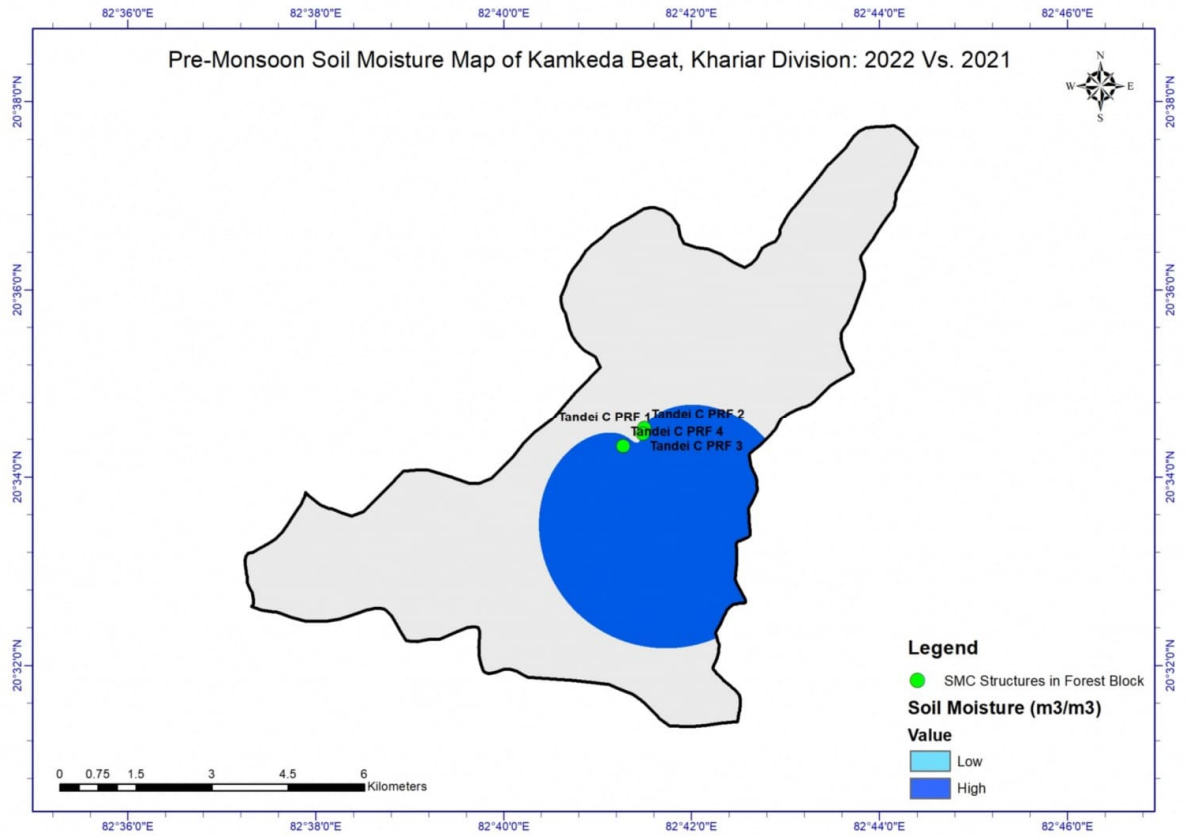


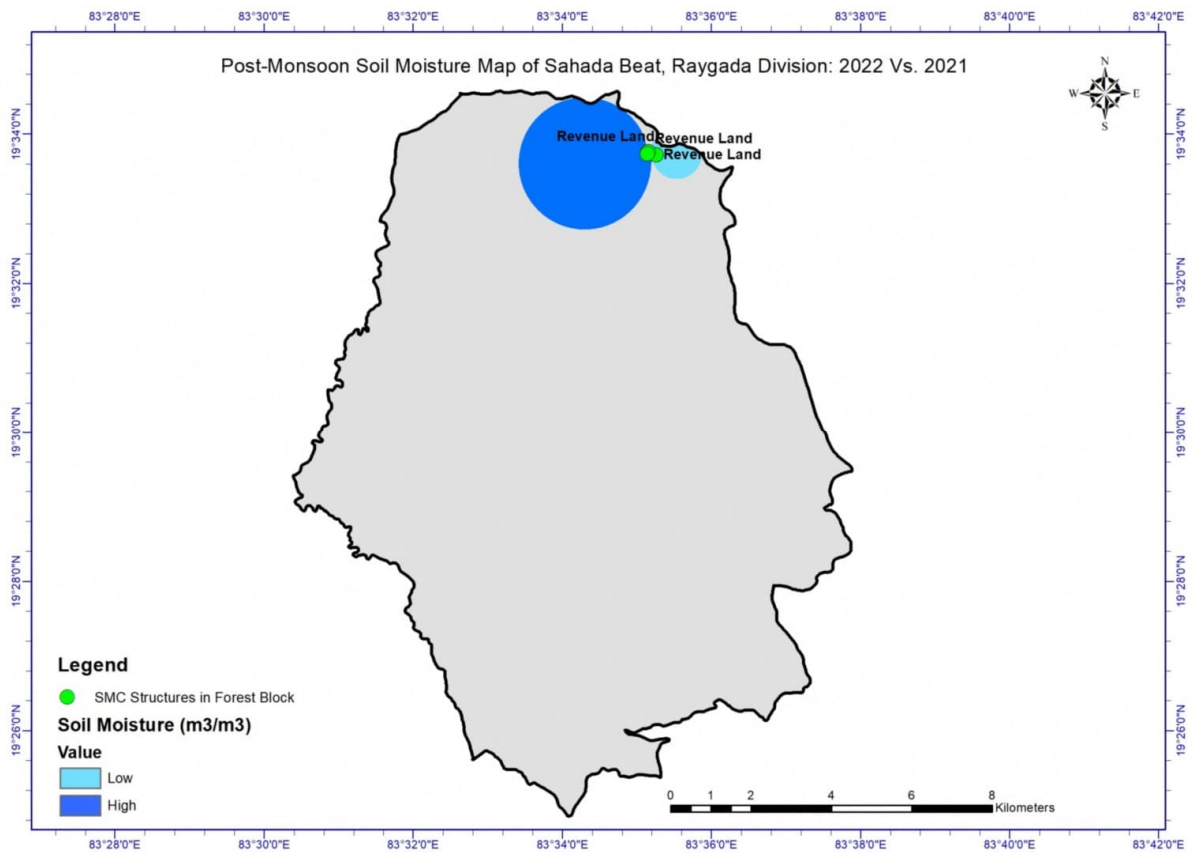
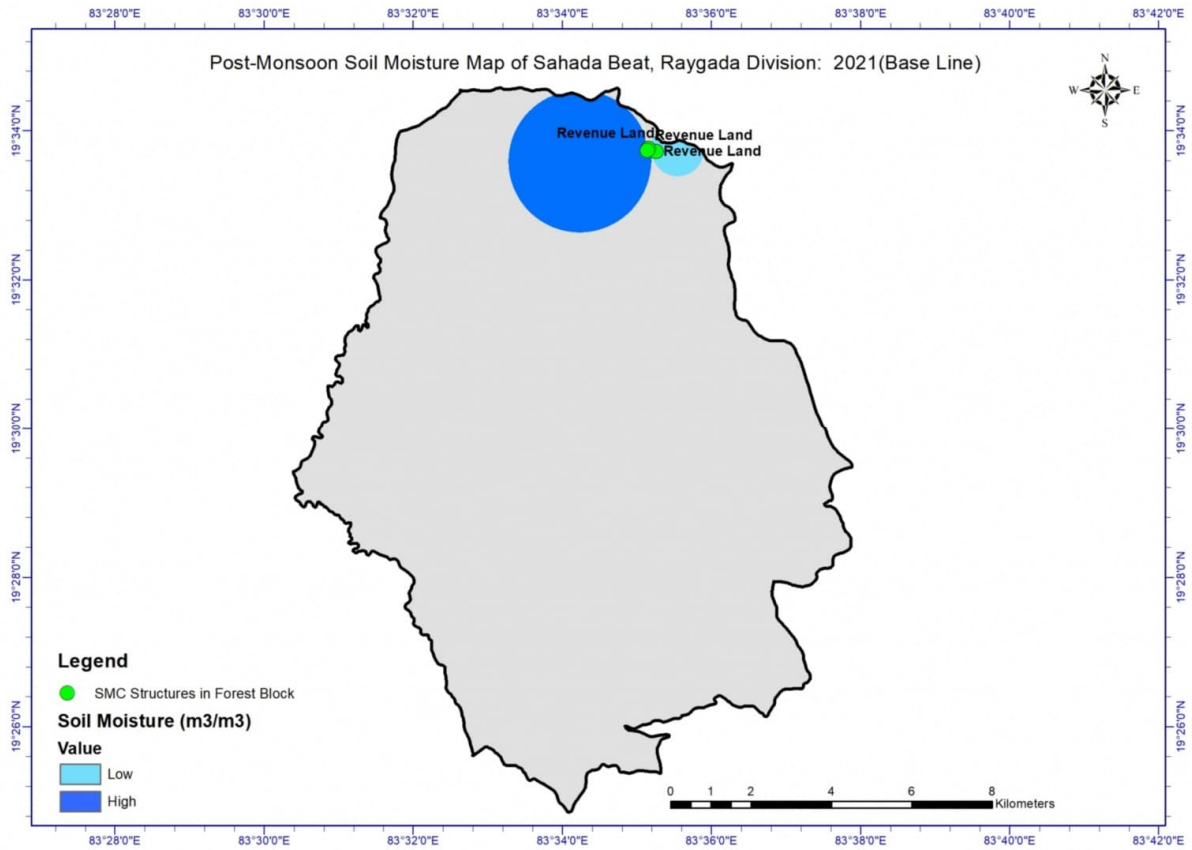


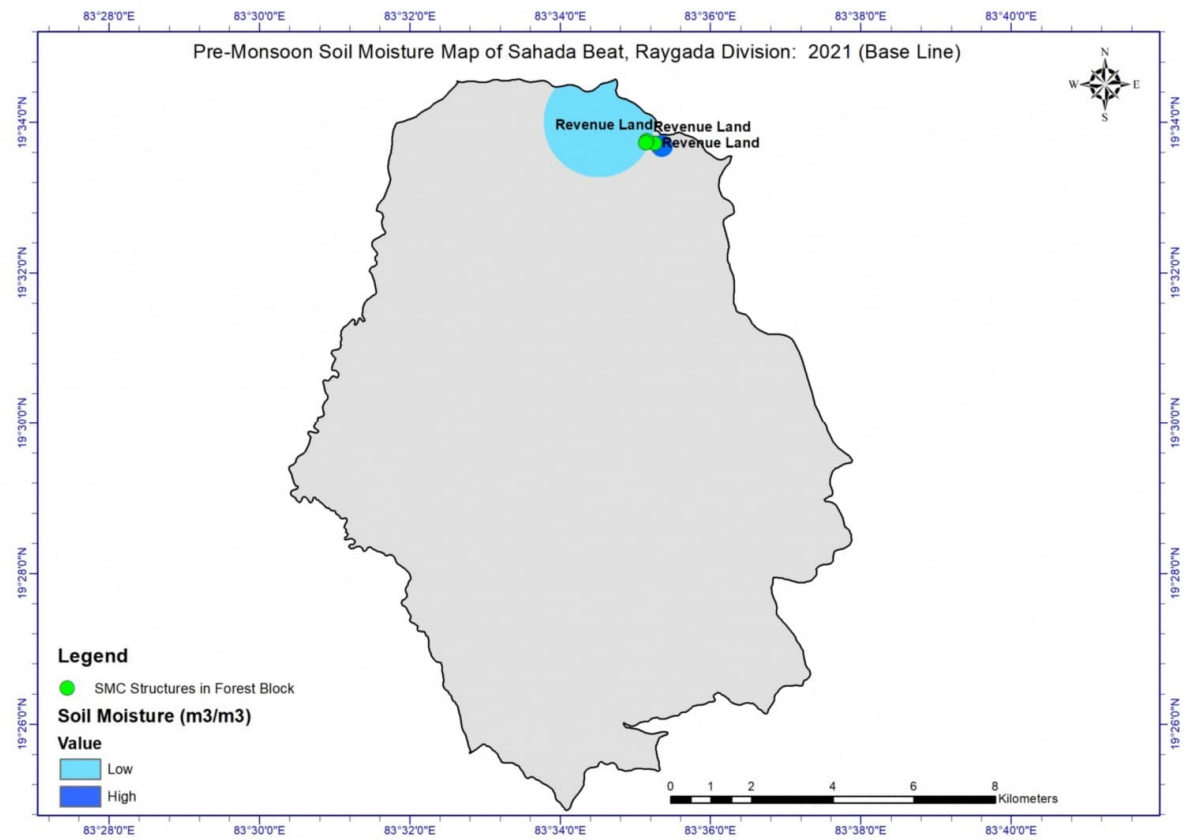
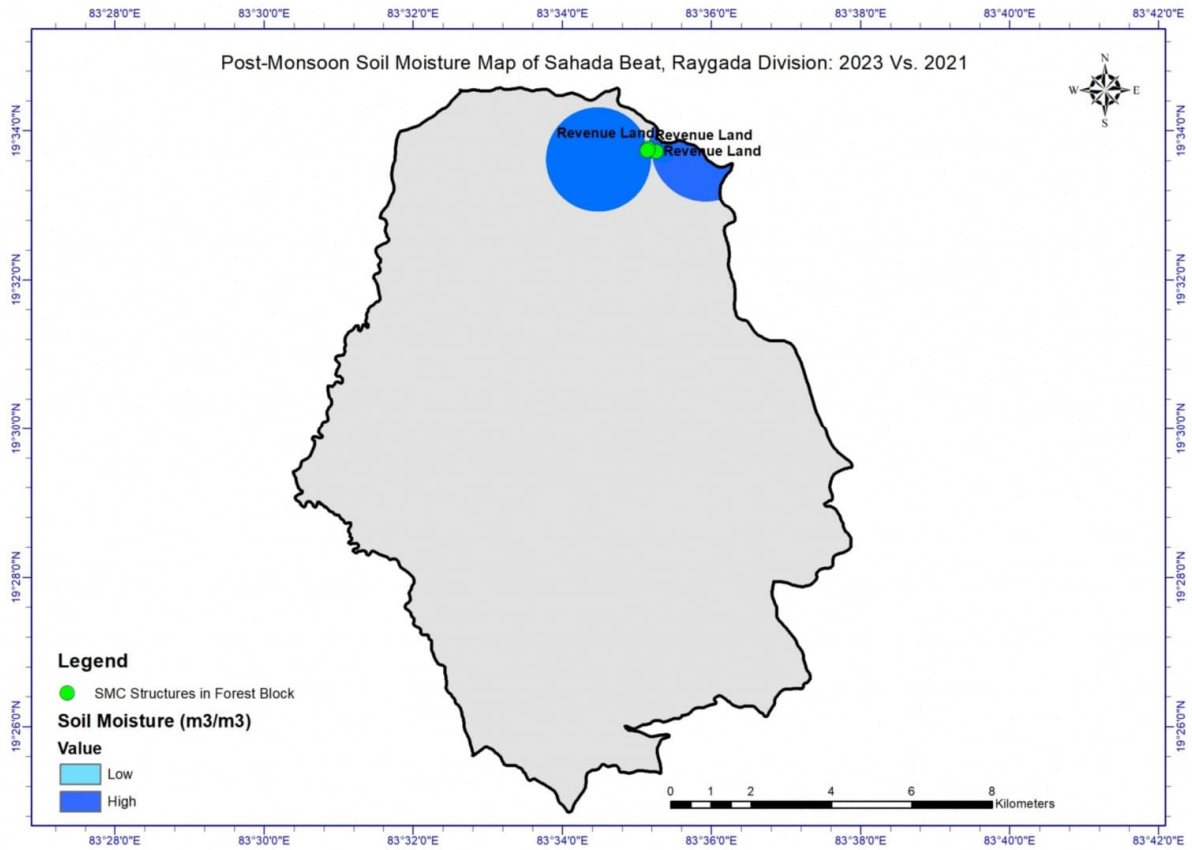


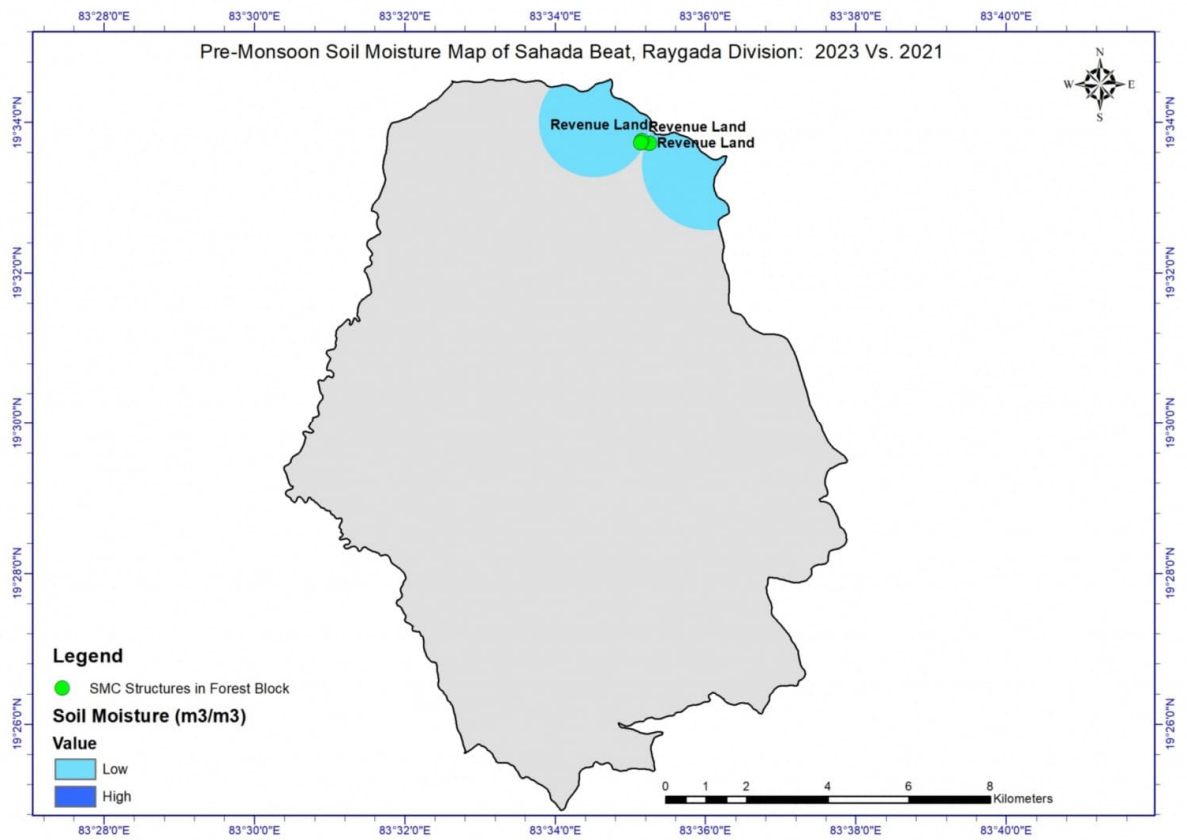
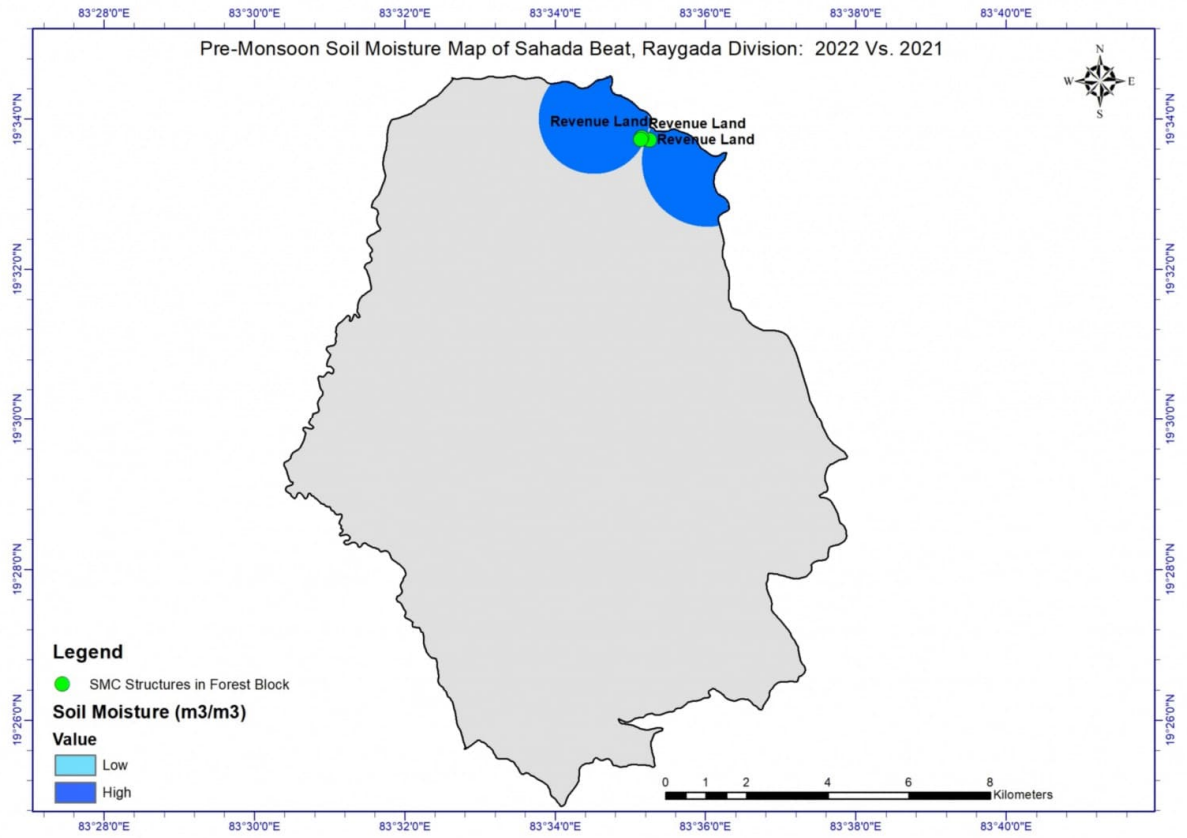












Annexure V: Photographs



WLBCD, Nayagarh



LBCD, Angul



LBCD, Nayagarh



Tube Well, Gupteswar, Jeypore.



SMC Angul



RCC Check Dam, Kegaon, Kalahandi North



Percolation Pit Angul



Boundary Wall, Ghatagaon, Keonjhar



Staggered Trench, Ghatagaon, Keonjhar



AJY, Phulbani



Sign Board, Keonjhar.



Zoo, Management, Mahanadi WL



Solar Light, BJP, Keonjhar



Water Hole, Bamur, Athamallik



Cause way, Patna, Keonjhar.



ANR Plantation, Bangiriposi, Baripada



2nd year maintenance of Bamboo plantation, Jaleswar Range of Baleswar WL



18 month Seedlings raising centra Nursery, Kuldiha Range of Balaswar WL



ANR, 2nd year Maintenance, Kotagarh Range of Baliguda Division



Forest Guard quarter, Bhadrak Range of Bhadrak WL Division



Boundary demarcation & Pillar posting, Dhamnagar Range of Bhadrak WL Division



Causeway at Barkot Range of Debagarh Division



Fire Blower at Deogarh Range of Deogarh Division



LBCD Series at Deogarh Range of Deogarh Division



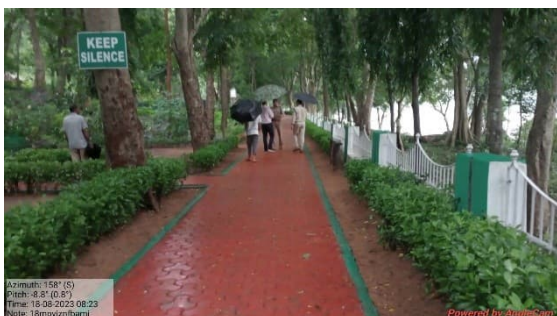
SSO Bamboo, Deogarh Range of Deogarh Division



Community Centre of Relocation village of Lakhanpur Range of Hirakud WL Division



Relocation camp of Lakhanpur Range, Hirakud WL Division



Path way under Zoo management, Pampasar Range of Satkosia WL Division



Watch Tower, Belpahad Range of Jharsuguda Division



SSO Bamboo, Daspalla Range of Nayagarh Division



ANR 200 Plantation, Panchida Range of Nayagarh Division



Maintenance of Forest Road, Balukhand Range of Puri WL Division



SMC work in CA/PCA Plantation, Charmal Range of Rairakhol Division



Madow Development, Balukhand Range of Puri WL Division



Bal Hill Plantation, Panposh Range of Rourkela Division



AR Plantation, Gop Range of Puri WLV Division



Earthen Graded Bund, Rajgangpur Range of Rourkela Division



Guided to unguided Well, Rairakhol Range of Rairakhol Division



Interaction with Anti depredation Squad, Sadar Range of Sambalpur



Fire line maintenance, Dhama Range of Sambalpur Division



Solar overhead water Tank, Sundargarh Range of Sundargarh Division



Maintenance of Forest Road, Dhama Range of Sambalpur Range



SMC work over 50ha. (LBCD) Dhama Range, Sambalpur Division



Protection of RET Species(Bija), Dhama Range of Sambalpur Division



Creation of Water Body, Dhama Range of Sambalpur Division



Boundary Wall of Hemgiri Range of Sundargarh Division



Salt Lick, Pampasar Range of Satkosia Division