OFSDP-II ANNUAL REPORT



2022-23



Odisha Forestry Sector Development Project-II
Odisha Forestry Sector Development Society
Forest, Environment and Climate Change Department, Govt. of Odisha









OFSDP-II Annual Report 2022-23







Odisha Forestry Sector Development Project-II Odisha Forestry Sector Development Society

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FOREWORD

Odisha Forestry Sector Development Project (OFSDP) Phase II is a flagship project of Govt. of Odisha has been under implementation in two phases i.e., Phase-I and Phase-II with the loan assistance of Japan International Cooperation Agency (JICA). The successful implementation of Phase-I had encouraged the Govt. of Odisha to vest the responsibility of implementing the Phase-II of OFSDP to the Odisha Forestry Sector Development Society (OFSDS) under the overall administrative control of the Department of Forest, Environment and Climate Change, Govt. of Odisha with JICA's loan assistance since 2017-18. The tenure of the project is for ten years i.e., from 2017-18 to 2026-27.

The OFSDP-II is being executed in 12 Territorial Forest Divisions and 2 Wildlife Divisions covering ten revenue Districts of Odisha. The project covers 1211 VSSs of territorial forest Divisions and 10 EDCs of Bamra Wildlife Division. The entire project area covers 47 Forest Ranges of 12 Forest Divisions of Odisha. Primarily the project strives to achieve sustainable forest management following the JFM mode of operation in the targeted area along with ensuring long term livelihood security to the economically marginalized households of forest fringe villages. In addition, an integrated landscape management approach for sustainable biodiversity management, which is widely known by the Japanese term 'Satoyama Initiative', is being implemented in ten Eco Development Committees (EDCs) of Badarma Wildlife Sanctuary in Bamra Wildlife Division. The aim of Satoyama Initiative is to achieve landscape-based development, benefiting both the biodiversity as well as human livelihoods.

The Year 2022-23 under report was the sixth year of OFSDP-II and assumes significance in implementation of the project as it constitutes full-fledged implementation of project activities or fully renewed activities after somewhat a subdued period in project implementation due to pandemic. Thanks to the commitment and cooperation of the project staff at all levels, community members, associated line Departments and other collaborating partners, the Project Management Unit (PMU) was able to revive the implementation activities related to all major project components and fulfill most of its targets during the year under report.

During the year 2022-23, the project has also achieved a significant milestone in implementation. As envisaged in the project document, the Re-visit of Micro Plan was initiated in 355 VSSs of Batch-I during this year. This was a unique exercise undertaken for the first time among the JICA supported projects being implemented in natural resource management sector of the country. Another innovative aspect of this micro plan revision exercise was the inclusion of VSS level self-assessment frameworks related to the cross-cutting components such as Gender Mainstreaming (GM), Environmental and Social Management System Framework (ESMSF) and Community based Monitoring, Reporting and Verification (CMRV) which were entirely responded and recorded by the VSS members. The successful micro plan revision exercise will be repeated soon in the subsequent VSSs of Batch-II, Batch-III and IV.

Another major accomplishment of the project during the year was the successful engagement of Marketing and Management Support Agency (MMSA) which is a Consortium of KIIT Technology Business Incubator (KIIT-TBI), Bhubaneswar; Bhubaneswar City Knowledge Innovation Cluster (BCKIC), Bhubaneswar and Indian Institute of Entrepreneurship ((IIE), Guwahati and various location and product based Social Enablers for the purpose of strengthening, establishing and operationalizing effective and efficient Multi-Product Clusters (MPC) in all 12 territorial Forest Divisions under the project. These agencies, in collaboration with Livelihood Resource Center (LRC) of PMU are expected to provide strategic support to the MPCs in the areas of planning, skill building, establishing, operationalizing, positioning of multiple products in the market and providing marketing and R&D support. Already efforts had been made during the period of reporting to make collective procurement of forestry/agriculture / horticulture-based products produced by the VSSs / SHGs/MPCs through Social Enablers identified and engaged by MMSA in different DMUs. The aim of this collaborative intervention is to enable the subsistence farmers / PoP families / forest dependent communities to get adequate price for their products and thus better economic status.

During the year under report, apart from regular implementation of key-project components like Sustainable Forest Management, Sustainable Livelihood Initiatives, substantial progress in terms of funds (to the tune of Rs. 9105 lakhs) mobilized as well as the benefits accrued by the communities (3,63,986 beneficiaries) was achieved in Community Development activities through inter- sectoral convergence with schemes of different line departments /agencies (32 in total number). The Revolving Fund (RF) distributed by the project to the SHGs through VSS during the year had been a strong booster to the community, particularly the women members belonging to SHG/ CIG /PoP categories by the way of access to small scale finance required for investment towards Income Generation Activities (IGAs). Besides this, training and capacity building programmes were conducted by the project and P-NGO personnel in preparing viable Business Plans for effective utilization of RF by the VSS /SHG CIG /PoP members.

The project has a mandate of providing essential infrastructure facilities to the communities for carrying out the IGAs. In this respect, till March 2023, a total of 1167 number of VSS Buildings cum IGA Facilitation Centres have been constructed. The construction of remaining 44 buildings in Batch-Ill & IV is under progress. Since the focus of project interventions during the 2022-23 remained on revisit of micro plan and promotion of sustainable livelihood options at VSS level, the capacity building inputs during the year also largely focused on both of these aspects, including the development of community's skills required for effectively carrying out the identified IGAs to successfully traverse the business growth trajectory.

Out of the many JICA supported natural resource management projects being implemented across the country, OFSDP-II was the pioneer to take up the initiative to implement the highly crucial crosscutting component viz. 'Community based Monitoring, Reporting and Verification (CMRV)' in the VSSs functioning under the project. Through the CMRV initiative, OFSDP-II, in fact strives to involve the forest-based communities represented by the VSSs in the process of REDD+ readiness which is one of the globally recognized methods of climate change monitoring and mitigation.

The Annual Activity Report of OFSDP-II for 2022-23 is a comprehensive document containing the details of different activities carried out and progress made so far under the key-project components. This report is expected to serve as a useful reference document for all the stakeholders of the project.

ACKNOWLEDGEMENT

The Odisha Forestry Sector Development Project, Phase-II (OFSDP-II) which is being implemented by the Odisha Forestry Sector Development Society (OFSDS) under the overall administrative control of the Department of Forests, Environment and Climate Change, Govt. of Odisha since 2017 has successfully completed six years of implementation. The OFSDP-II, due to the positive impact in terms of improved participatory forest management, biodiversity conservation, building the capacity and strengthening the community institutions like VSS / SHG /CIG at grassroot level, enhancing the livelihood status of the forest dependent poorest of poor families, carrying out community development activities through convergence with line departments etc., created in the 14 Forest Divisions of the state, is regarded as the 'Flagship Welfare Programme' as well as the 'Replicable model of participatory sustainable forest management and inclusive community development', not only by the Govt. of Odisha, also by the funding agency JICA, Japan.

At the outset, the esteemed Chief Secretary to Government of Odisha and the Chairperson of OFSDS along with the members of both the High-Power Committee (HPC) as well as the Governing Body of OFSDS have to be profusely thanked for their constant guidance and support in management and implementation of the project, without which this achievement and recognition would not have been achieved.

The Additional Chief Secretary, Department of Forest, Environment and Climate Change, Government of Odisha and the Chairperson of the Governing Body, OFSDS has always led from the front and has always been positive to any innovative intervention suggested.

The Project Management Unit is very much grateful to the PCCF & HOFF, Dept. of Forest, Environment and Climate Change (DFE&CC), Govt of Odisha and the entire DFE&CC for their sustained support and cooperation in implementing the project in both territorial and selected wildlife divisions of the state.

The success achieved in community mobilization and implementation of the project activities in all forest 14 divisions is primarily due to the hard work and sincere effort made by the project team, including the P-NGOs, and project personnel at the PMU, DMU and FMU levels. Special credit for the same is also due to the VSS, SHG, CIG and PoP members in the forest fringe villages who have actively participated in micro planning and implementation of project interventions. The role played by the

Animators in guiding and facilitating the community members in planning and implementation of development activities in the village is well appreciated. Special mention is also to be made regarding the interest and commitment shown by the officials / staff of the various line departments in convergence and extending the benefits of different community welfare schemes / programmes to the communities in the project villages.

The effective management and execution of project activities at the field level are also due to the consistent professional support extended by the Project Management Consultants (PMC) to the PMU. The PMU-PMC collaboration has been crucial in seamless management of the project activities at all levels. Likewise, the role of Marketing and Management Support Agency (MMSA) and Social Enables in supporting the Multi Product Clusters initiated by the Livelihood Resource Centre (LRC) of PMU needs appreciation.

Special appreciation is due to the entire team of Project Management Unit (PMU), OFSDS led by the senior officials like DPDs and guided by the SPMs for its untiring work and valuable technical & administrative contributions in smooth running of the project across the project divisions.

The overall success in project management, implementation of the project interventions and equitable sharing of benefits by the target communities is the result of inspirational and visionary leadership of the PCCF (Projects) and project Director, OFSDS. The professional guidance and encouragement provided by the Project Director has enabled the project team to enhance its level of performance towards timely achieving the set goals / targets and thus attaining different milestones in project implementation which are adequately highlighted in this Annual progress Report for the year 2022-23.

Dr. Krishnakumar K. Navaladi Team Leader, Project Management Consultant, OFSDS

Contents

| • | CHAPTER-1 | ç |
|---|---|-----|
| | About Odisha Forestry Sector Development Project, Phase-II | |
| • | CHAPTER-2 Target and Achievements upto 2022-23 (Consolidated) | 19 |
| • | CHAPTER-3 Revisit of Microplan | 23 |
| • | CHAPTER-4 Initiatives on Sustainable Forest Management | 27 |
| • | CHAPTER-5 Sustainable Biodiversity Management: | 40 |
| • | CHAPTER-6 Livelihood Initiatives under OFSDP-II | 61 |
| • | CHAPTER-7 Innovations under OFSDP-II | 79 |
| • | CHAPTER-8 Capacity Building Initiatives | 96 |
| • | CHAPTER-9 Coordination and Supporting Activities: | 112 |
| • | CHAPTER-10 Communication & Knowledge Management | 114 |
| • | CHAPTER-11 Geomatic Centre, OFSDS | 121 |
| • | CHAPTER-12 Financial Management | 133 |

Chapter 1

About Odisha Forestry Sector Development Project, Phase-II

1.01 Introduction

Odisha Forestry Sector Development Project, Phase-II (OFSDP-II) is being implemented in 1211 VSSs of 50 Ranges in 12 Territorial Forest Divisions and 2 Wild Life Divisions in the state of Odisha by Odisha Forestry Sector Development Society (OSDPS) functioning under the Department of Forest, Environment and Climate Change, Government of Odisha. The project is being supported by Japan International Cooperation Agency (JICA) through the loan assistance. The tenure of the project is ten years, starting from 2017-18 to 2026-27. The Odisha Forestry Sector Development Project, Phase-II is, in fact, the continuation of Odisha Forestry Sector Development Project, Phase-I (OFSDP-I) successfully implemented in the State from 2006-07 to 2014-15. The learning's of OFSDP-I in the state and other JICA assisted Sustainable Forestry Management Projects in the country have been incorporated in the project document of OFSDP-II.

It was realized that most of the developmental activities which are indiscriminately implemented have contributed to deforestation and depletion of forest resources. Moreover, extensive and uncontrolled use of forest resources by the forest dependent communities also contributes to forest degradation in Odisha. Forest fringe dwellers largely depend on forest for fuel wood and livelihood support. Majority of people living in forest fringe areas come under Below Poverty Line (BPL) category. Non availability of options for alternate livelihood leads these communities to resort to daily wage employment and forest-dependence for livelihood. This has resulted in severe biotic pressure and un-sustainable use of forest resources in the state. In addition, other factors such as frequent forest fires, illegal smuggling of wood by mafias, lack of active involvement of forest fringe dwellers in protection and management of forests etc. are also observed to be detrimental for conservation and protection as well as effective management of forest resources in the state.

In this backdrop, Government of Odisha intended to implement the OFSDP, Phase-II in additional areas based on the achievements and learning's of OFSDP-I in compliance with the "Forestry Vision 2020" with the aim to promote sustainable forest management and community development through active community participation following Joint Forest Management guidelines.

1.02 **Objectives**

The Odisha Forestry Sector Development Project, Phase II aims at enhancing forest ecosystem along with sustainable livelihood of local people by improving sustainable forest management, sustainable biodiversity conservation and simultaneous community development, thereby contributing to harmonization between environmental conservation and socio-economic development in the project area in the State. The major themes of the project are:

- Sustainable Forest Management (SFM) through community participation
- Livelihood promotion through Inter-sectoral convergence
- Experiments in Biodiversity Conservation & management, which include

- Satoyama Initiatives in Badarama Wildlife Sanctuary &
- Scientific Monitoring of Bhittarkanika Conservation Area in Mangrove Wildlife Division, Rajnagar.

OFSDP-II is being implemented following Joint Forest Management Mode, wherein, communities are facilitated by the project to initiate planning and execution of interventions with the assistance of project personnel. Funds for the implementation of the planned work is largely managed through the community institutions, namely-Vana Surakshva Samiti (VSS).

In order to achieve the overall goal, the basic approaches followed are:

- Protection and management of forest by active participation of community through Joint Forest Management.
- Forest Restoration component like plantation of indigenous forest species in the degraded forest land assigned to the VSSs, soil and moisture conservation measures and forest fire control and management.
- Augmenting alternate livelihood options for the forest fringe dwellers for the reduction of and biotic pressure on forest.
- Conducting experiments on conservation and scientific management of the biodiversity in protected areas.
- Comprehensive community development through inter-sectoral convergence.
- Promotion of Income Generating Activities (IGAs) by the Self-Help Groups (SHGs), Common Interest Groups (CIGs) and Poorest of Poor (PoP) with the additional assistance of Revolving Fund (RF) at VSS level.
- Strengthening the backward and forward market linkages trough establishing & operationalizing the multiproduct clusters under the project.
- Sustainable forest management and people's empowerment in decision making through enhanced capacity of community members.

Project Design 1.03

OFSDP-II has been formulated to be implemented in ten years commencing from 2017-18 to 2026-27 and the implementation modality has been divided in to three phases, as below:

- Preparatory Phase (First Year of the Project- 2017-18)
- Implementation Phase (2nd to 8th year of the Project- 2018-19 to 2024-25)
- Consolidation / Phase Out Phase (Last two years of the project-2025-26 and 2026-27)

1.03.1 Preparatory Phase

The first year of the project has been designated as Preparatory Phase, where in the initial activities include setting of Project Executing Bodies, establishment of Project Management Unit (PMU) at state level, Divisional Management Units (DMUs) at Forest Division level, Field Management Units (FMUs) at Forest Range level, deployment of contractual staff at PMU/DMU/FMU, engagement of Partner-NGO (P-NGOs) and procuring Project Management Consultant (PMC) at PMU level were executed. Further, preparation of guidelines v.i.z Operation Manual, VSS Management Manual and other Guidelines, Formulation of Training Need Assessment (TNA), preparation of quideline for the preparation of Micro plan document at VSS level, selection and mobilization of VSS and orientation to the officials and staff of OFSDP-II were taken up during the preparatory phase.

1.03.2 Implementation Phase

Implementation of the project activities in 1200 VSSs/EDCs were planned to be taken up in four batches by covering 300 VSSs in Batch-1, 400 VSSs in Batch-II, 350 VSSs in Batch-III & 150 VSSs in Batch-IV. In addition, the

project is also implemented with the objective of sustainable bio diversity conservation in 10 EDCs of Badarama Wildlife Santuary in Bamra Wildlife Division. The P-NGO Teams were deployed in each FMU to ensure and assist VSSs to take up project activities in respective batches. Engagement of Animators at VSS level has been provisioned to facilitate the Executive Committee of the VSS and the Self-Help Groups (SHGs) for implementation of project activities. Interventions scheduled to be taken up in the Implementation Phase include:

A. Sustainable Forest Management:

1. In JFM Mode

- Silvicultural Operations including Plantation
- ANR without gap plantation
- ANR with gap plantation of 200 / 400 / 800 seedlings/ha
- Block plantation v.i.z Fuel and Fodder, NTFP and other Block plantations
- Soil and Moisture Conservation (SMC) measures,
- Drainage Line Treatment (DLT)
- Fire prevention and protection measures

2. In Non-JFM Mode

- Consolidation and demarcation of forest boundaries
- Construction and improvement of permanent nursery in the form of Hi-Tech Nursery
- Soil and Moisture Conservation Measures
- Non-JFM Drainage Line Treatment
- Farm Forestry

B. Experiments in Sustainable Biodiversity Management

- Formulation of scientific Health Report Card for concurrent monitoring of conservation and management parameters of Bhitakanika Conservation Area (BCA).
- Implementation of Satoyama Initiative model in Badarma Wildlife Sanctuary under Bamra Wildlife Division for Sustainable Biodiversity Management.

C. Livelihood Initiatives

- Comprehensive community development through inter-sectoral convergence with the schemes and programme of line Departments
- Coordination with line Departments for convergence through District Advisory Committee (DAC) at District level and Block Level Advisory Committee (BLAC) at Block level.
- Augmenting alternate livelihood options through Vana Surakshya Samitees (VSS)/ Self Help Groups (SHGs)/ Common Interest Groups (CIGs)/ Poorest of Poor (PoPs).
- Establishment of Product Clusters for promotion of income generating activities in the project area.
- Establishing Livelihood Resource Cell (LRC) at PMU level to facilitate promotion of cluster based income generating activities.

D. Capacity Building:

- Capacity building trainings and orientations for all stakeholders
- Consultation and seminars
- Exposure visits

E. **Knowledge Management and Documentation:**

- Documentation of lessons learnt during implementation of project.
- Publication of success stories, newsletters, theme-based documentary films, quarterly reports, annual reports etc.
- Publication of training materials and guidelines.

F. **Cross-cutting Issues**

- Gender Mainstreaming (GM)
- Community Based Monitoring, Reporting and Verification (CMRV)
- Environmental and Social Monitoring Framework (ESMSF)

G. Monitoring and Evaluation System in OFSDP-II

The key elements of Monitoring and Evaluation System of OFSDP-II are mainly grouped into

- a) Monitoring,
- b) Impact Assessment and
- c) Audit.

The elements of the M&E arrangement are as follows:

a. Monitoring:

- Concurrent monitoring and periodic Reviews,
- Inter-sectoral coordination meetings for convergence,
- Community self-monitoring
- Computerized MIS & GIS,
- Computerized Accounting System,
- Technology based monitoring-GIS and MIS applications, and
- Annual strategy planning and review workshops.

b. **Impact Assessment:**

- Annual outcome assessments,
- Baseline and impact surveys, and
- Thematic and short studies.

Audits: c.

- Social audits,
- Statutory financial audits,
- Concurrent audits.
- Grievance redressal, RTI and public disclosure,
- Operation and effect indicators

1.03.3 Consolidation / Phase-Out phase:

The consolidation phase is the Phase-out period of OFSDP-II which will start during the 9th year of the project i.e during 2025-26. Accordingly, it has been planned to complete all project interventions by end of 8th year for all batches (i.e. by 2024- 25). Phase-out is the time for consolidation of project achievements and to start the process to handover the project to the actual owners (Forest Department / Community Institutions). It is also mandated to review the capacity of the VSSs and SHGs and ensure sustainability of such institutions by way of linking them with appropriate institutions / support organizations for continued operations. The interventions proposed during the consolidation phase include:

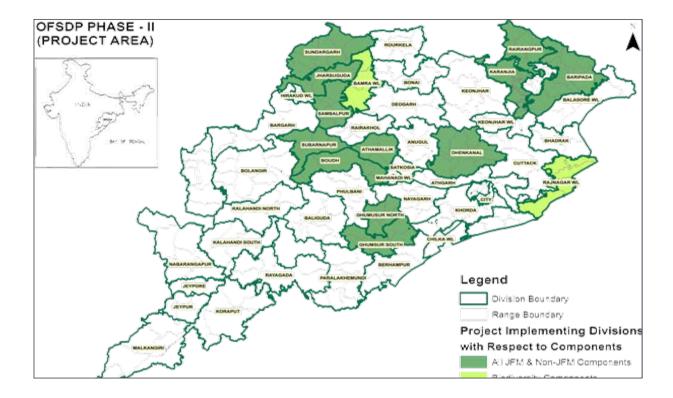
- Asset inventory
- Revisiting of Micro Plans
- Phase-out trainings
- Strengthening the clusters/ federations of VSS at FMU level
- Linkage with the Livelihood Resource Centre
- End term evaluation
- Dissemination of knowledge / lessons learnt and its management etc.

1.04 Project Area

The project was planned to be implemented in 1200 VSSs from 50 Forest Ranges in 12 Territorial Forest Divisions and 10 numbers of EDCs in Badarma Wildlife Sanctuary of Bamra Wildlife Divisions and Experiment in Mangrove Wildlife Division, Rajnagar falling under 10 numbers of administrative Districts and 7 numbers of Forest Circles in the state of Odisha. The VSSs covered under the project is given below:

| Circle | District | Division | No of FMUs | No of VSSs |
|--------------|--------------|------------------------|------------|--------------------|
| A == === l | Angul | Athamallik | 3 | 75 |
| Angul | Dhenkanal | Dhenkanal | 6 | 150 |
| | | Baripada | 6 | 135 |
| Baripada | Mayurbhanj | Rairangpur | 5 | 107 |
| | | Karanjia | 4 | 80 |
| | Boudh | Boudh | 3 | 71 |
| Berhampur | Caniam | Ghumsur (N) | 4 | 100 |
| | Ganjam | Ghumsur (S) | 3 | 65 |
| Bhawanipatna | Sonepur | Subarnapur | 3 | 84 |
| Rourkela | Sundergarh | Sundergarh | 5 | 156 |
| | Jharsuguda | Jharsuguda | 3 | 88 |
| Sambalpur | Cll | Sambalpur | 4 | 100 |
| | Sambalpur | Bamra (WL) | 0 | 10 EDCs |
| Bhubaneswar | Kendrapada | Rajnagar Mangrove (WL) | 0 | |
| 7 Circles | 10 Districts | 12 Divisions | 49 FMUs | 1211 VSSs +10 EDCs |

Note: Kendumundi and Thakurmunda FMUs of Karanjia Forest Division have been merged to form Thakurmunda FMU. Thus at present the number of FMUs in the Project area is 49.



Institutional Arrangements

Odisha Forestry Sector Development Project, Phase-II (OFSD-II) is being implemented by Odisha Forestry Sector Development Society (OFSDS), which is an autonomous registered Society under the administrative control of Forest, Environment and Climate Change Department, Govt. of Odisha. The office bearers of the Society are as below:

- President is the Chief Secretary, Government of Odisha
- Vice President is the Additional Chief Secretary Department of Forest, Environment and Climate Change, Government of Odisha
- Chief Executive Officer is the PCCF (Projects) and Project Director, OFSDS

1.05.1 High Power Committee: The High- Power Committee (HPC) is the highest decision- making body for the OFSDP-II at State Government level. HPC is responsible for the following

- approval of the Operation Manual (including Financial Rules / Procedures) for the Project,
- approval of Budget and Annual Plan of Operation of the Project,
- review the project performance every six months and framing of operational procedures for the project for smooth and effective implementation.

The Committee meets at least once in every six months or more frequently as per necessity. The HPC also facilitates coordination amongst various line Departments of the state and other agencies to achieve the project goals.

1.05.2 Governing Body: The Governing Body (GB) of OFSDS is the highest decision-making body for OFSDP-II within the OFSDS as per the Society Registration Act, 1860. The Governing Body is headed by Additional Chief Secretary to Govt., Department of Forest, Environment & Climate Change, Government of Odisha. It is responsible for providing authority to the PMU for day-to-day functioning, supporting the PMU by approving Budget and Annual Plan of Operation and other proposals during the year, rigorously reviewing the project progress visà-vis annual plans at least once every quarter, monitoring financial and physical progress, quiding the PMU in

the preparation of Operational Manual, and preparing proposals for the HPC, whenever necessary for smooth implementation of the Project activities.

- **1.05.3** Project Management Unit: The Project Management Unit (PMU) of OFSDP-II has been established at the State level to manage, coordinate, implement and monitor the activities of the Project. The PMU exclusively works to implement proposed project activities following the project implementation schedule, Annual Plan of Operations and envisaged processes. Project Management Unit is headed by PCCF (Projects) & Project Director, OFSDS and is assisted by a team of officers, namely- Addl. Project Director / Joint Project Director, Deputy Project Directors (DPDs) and State Project Managers to facilitate the implementation of project interventions.
- **1.05.4** Regional CCF Offices (RCCFs): Circle Offices of the Forest Department having the jurisdiction of the Project Divisions, supervise the project interventions and co- ordinate between the project and regular Departmental activities. The RCCFs also review the project works vis-à-vis financial and physical progress of the Divisions under their jurisdiction.
- **1.05.5** Project Management Consultants (PMC): As a part of the project design and institutional arrangements, a team of Project Management Consultants (PMC) has been deployed at state level to assist PMU in managing the project, and extending required technical guidance in project interventions during the implementation years.
- **1.05.6 Divisional Management Unit:** In total, 14 Divisional Management Units (DMUs) have been created within the existing Forest Territorial and Wildlife Divisions for implementation of the project interventions through the Field Management Units at field level. The DMU is headed by the Divisional Forest Officer (DFO) of the concerned Division, who has been designated as DMU Chief. The DMU Chiefs are assisted by an officer in the rank of Asst. Conservator of Forest (ACF) and two Subject Matter Specialists (Livelihood, Rural Financing and Marketing) and (M&E, GIS/MIS, REDD+) and one Project Accountant engaged on contractual basis.
- **1.05.7 Field Management Units:** Field Management Units (FMUs) numbering 50 (now 49 units) have been created in the existing Forest Ranges in 12 Territorial Forest Divisions for implementation of project interventions at field level. The FMU Chief is assisted by one of the Forester designated as Asst. FMU Chief, two FMU Coordinators (Micro Planning & Livelihood Support and Training & Process Documentation) and one Project Accountant for implementation of the project interventions at VSS level.
- **1.05.8** Van Surakshya Samiti (VSS) / Eco Development Committees (EDC): Against the target of 1200 VSSs and 1 EDC, 1211 number of VSSs and 10 EDCs have been identified following the prescribed selection criteria and are being taken up for project interventions under Joint Forest Management Mode, after seeking the willingness of these institutions. Thereafter, following JFM Resolution, 2011 read with its Amendment of 2015, MoU has been signed between VSSs and DMU. The MoU spells out the extent of assigned area with geo-coordinates, roles and responsibilities of both parties in detail along with facilities and usufructs sharing arrangement. Further, the Executive Committee of each VSS is recognized by the Gram Sabha to function as a Sub Committee of the Gram Sabha for protection and management of the forest assigned to the VSS.

The VSSs or EDCs receives funds directly from the DMU as per the Annual Plan of Operation during the respective financial year in one or more instalments. The VSS is responsible for planning implementation, monitoring and reporting at the grassroot level as per the MoU agreements. The direct fund transfer from DMU to the VSS/ EDC from the project account promotes efficiency and timely implementation of project interventions as per the plan. The FMUs play a key role in sanctioning and releasing funds from respective DMU for VSSs/ EDCs based on the Annual Plan as well as in facilitating the timely implementation of agreed interventions.

1.05.9 Partner NGOs: Partner NGOs (P-NGOs) have been engaged at FMU level to support and mobilize the VSSs/EDCs / SHGs / CIGs / POPs for the field level implementation of the project activities. The Partner NGOs team positioned at the FMU level are being directly supervised by FMU Chief to ensure that the works are performed as per the Terms of Reference (ToR). The partner NGO team is primarily responsible for community mobilization, institution building, PRA and micro planning, facilitating the VSSs to take up the interventions as per the Annual Plan, coordinating with the extension officers of different line Departments for inter-sectoral convergence in

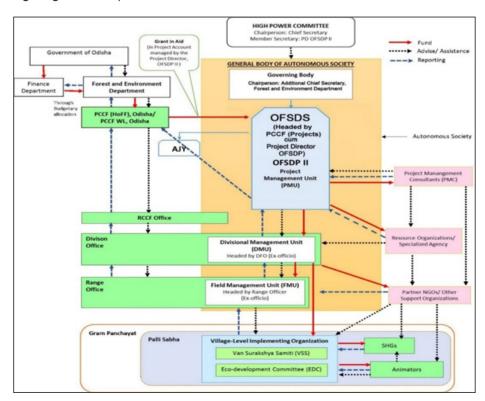
community development and also to facilitate the community institutions like VSSs and SHGs in carrying out Income Generating Activities (IGAs) on a sustainable basis.

1.05.10 Animator: Two Animators in each VSS are being engaged on payment of honorarium by the respective VSSs following the prescribed guidelines of the project. The Animators are responsible for assisting and supporting Executive Committee office bearers as well as VSS/ EDC members in their routine functions and documentation works. For initial two years, two Animators for each VSS are being engaged and from third year onwards, one animator, preferably a lady to continue to work for subsequent 3 years.

1.05.11 District Advisory Committee (DAC): District Advisory Committee has been constituted by Government vide Notification No 8118 / F&E, Dated 21st April, 2017 in ten Project Districts of the State v.i.z Mayurbhanj, Ganjam, Boudh, Sonepur, Sambalpur, Angul, Sundergarh, Jharsuguda, Dhenkanal & Kendrapada for smooth implementation and to function as a multi-sectoral coordination body for ensuring optimum and effective intersectoral convergence of various ongoing government programmes / schemes within the Districts in which, OFSDP-II is being implemented. The members of the DAC meet at least once in two months. The District Advisory Committee is headed by the District Collector as Chairperson, DFO of the District Head Quarter is the Member Convenor and the senior officials of line Departments are the members of the Committee.

1.05.12 Block Level Advisory Committee (BLAC): Block level Advisory Committee has been constituted by the Government vide Notification No 4F (S)-03 /2017 (Pt.) / 26724 / F&E, Dated 23rd December in 63 Blocks to cover the areas falling in 50 Field Management Unit (Range) of OFSDP-II. The Block level Advisory Committee has been constituted for smooth implementation and to function as a multi-sectoral coordination body for ensuring optimum and effective inter sectoral convergence of various ongoing government programmes / schemes in the CD Block in which, OFSDP-II is being implemented. The Block Development Officer of respective Revenue Block Chairs the Meeting and the Head Quarter, Range Officer is the Member Convenor. All Block level officials from welfare Departments are the members of the Committee. The Committee meets once in every month to facilitate the implementation of Govt. Schemes and programmes in the project village as per the need identified by the villagers during Micro planning processes.

1.05.13 The Organogram for implementation of OFSDP-II is as below:



1.05.14. Roles and responsibilities of different Institutions:

| Institution | Roles and Responsibility |
|---|--|
| High Power Committee (HPC) | Highest decision-making Authority of the Project Approval of budget and Annual Plan of Operations of the Project; and review the project performance every six-months especially in the Preparatory Phase Approval of the Operation Manual (including Financial Rules/ procedures) for the Project; Framing operational procedures for the Project for smooth and effective implementation; Facilitating inter-Departmental coordination for required synergy and convergence and also to supervise the minimizing duplication of efforts; Taking up initiatives to resolve issues with GOI and JICA, if required. |
| Governing Body (GB) | Highest decision-making body of the autonomous society Providing authority to the PMU for day-to-day functioning; Supporting the PMU in approval of Budget and Annual Plan of Operation, and other proposals of the project; Rigorously review the project progress vis-à-vis Annual Plans at least once every quarter; monitor financial and physical progress Facilitate sanction of budgets & release and monitor the fund disbursement status Guide the PMU in the preparation of Operation Manual; Prepare proposals for the HPC whenever necessary for the smooth implementation of the Project |
| Project Management Unit (PMU) | Final decision maker with regards to day-to-day Project activities, and would utilize autonomy to ensure smooth and timely implementation of the project PMU manages the budgets and releases and monitors the project activities Keeps track of the project implementation, and responsible to guide, issue instructions, prepare guidelines, execute capacity development plan, establish and operate M&E system, Undertake field visits and provide-hand holding support in field in almost all respect for ensuring efficient implementation of the project Collate and consolidate the expenditure statements from DMU and FMU offices and prepare Statement of Expenditures for getting Reimbursement of Claims Organize annual planning and review workshop at state level, and conduct AGM Undertake statutory and internal/ concurrent audits |
| Project Management Consultants (PMC) | Provides technical and managerial support to PMU Supports PMU by a team of experts to augment various skills required for the project implementation |

| Circle Offices | Are responsible for the regular overseeing of DMU offices |
|--|---|
| | Cross-checking project works vis-à-vis financial and physical progress reporting |
| | Conduct monthly meetings / hearings for Grievance Redressal |
| | Chair and participate in Annual Planning and Review Workshop and other events organized at Division level |
| Divisional Management Unit | Assist the PMU in planning, fund management, work progress monitoring and documentation at the field level |
| (DMU) | Supervise, monitor, review and guide field functionaries and activities; and conduct monthly review meetings |
| | Prepare physical and financial reports, and timely submit SOEs and utilization certificates |
| | Maintain separate bank account and records for project funds, and facilitate audits |
| | Organize annual planning and review workshop at Divisional level, and execute capacity building plan |
| | Provide budgets to VSSs, EDCs, prepared as per approved micro-plans / Annual plans of Implementation |
| Field Management Unit (FMU) | Assist the DMU in planning, fund management, work progress monitoring and documentation at the field level |
| | Facilitate micro-planning process, and support its implementation |
| | FMU will provide technical assistance directly to implementing institutions (VSSs, EDCs, SHGs) and Partner NGOs |
| | Maintain separate bank account and records for project funds, and facilitate audits |
| | Prepare physical and financial reports, and timely provide utilization certificates for all annual releases to FMU and VSSs/ EDCs |
| District Advisory Committee (DAC) | For smooth implementation and to function as a multi-sector coordination body for ensuring optimum inter sectoral convergence of various ongoing government programmes / schemes in the District in which, Odisha Forestry Sector Development Project, Phase-II is being implemented. |
| Block level Advisory Committee (BLAC) | To function as a multi-sector coordination body for ensuring optimum inter sectoral convergence of various ongoing government programmes / schemes in the CD Block in which, Odisha Forestry Sector Development Project, Phase-II is being implemented |

Chapter 2

Target and Achievements upto 2022-23 (Consolidated)

2.01 Introduction

The Financial Year 2022-23 was the sixth year of implementation of Odisha Forestry Sector Development Project, Phase-II (OFSDP-II). A total of 1211 VSSs from 49 FMUs have been covered under OFSDP-II till the year of reporting. All the planned interventions continued in the 1211 numbers VSSs across the Project Divisions. Socio-ecological production landscape interventions under Satoyama initiatives covered during previous years have been continued in 10 EDCs. OFSDP-II, in collaboration with the National Center for Sustainable Coastal Management (NCSCM), Chennai collected data for the preparation of long-term monitoring plan of Bhitarkanika Conservation Area. Based on this monitoring process, the Ecological Health Report Card for 2021 was prepared and published.

2.02 Targets and Achievements upto 2022-23 (Consolidated)

The consolidated Targets and Achievements upto 2022-23 are narrated in the table given below:

| SI. No. | Component | Activities | Target Details | Cumulative Achievements |
|------------|----------------------|--|--------------------------|---|
| 1 | Preparatory Works | 1. Constitution of PMU, DMU, FMU and deployment of Staff | 1 PMU, 12 DMU, 50 FMU | 1 PMU, 12 DMU, 50 FMU |
| | | 2. Deployment of P-NGO | 50 Nos | 34 Nos |
| | | 3. Engagement of PMC | 1 Team. | 1 Team. |
| | | 4. Orientation for PMU/DMU/FMU | 1 PMU, 12 DMU, 50 FMU | 1 PMU, 12 DMU, 50 FMU |
| | | 5. Identification of VSS | 1200 Nos. | 1211 Nos |
| | | 6. Survey, demarcation and mapping of area assigned to VSSs. | 1200 Nos. | 1211 Nos; Assigned Area = 1,25,612 ha. Treatment Area = 57,292 ha. |
| | | 7. Review and revision of project manuals/guidelines | 11 Nos | 20 Nos |
| | | 8. Engagement of VSS/EDC animators | 2400 Numbers | 2422 Numbers |
| | | 9. Micro Planning | 1200 Nos | 1211 Nos |
| | | 10. Annual Planning | 1200 Nos | 1211 Nos |
| | | 11. Revisit of Micro Plan (Fourth Year) | 1200 Nos | 355 VSSs |
| | | 12. Social and Environmental Consideration | 1 PMU, 12 DMU, 50 FMU | 1 PMU, 12 DMU, 50 FMU |

| | Sustainable | 1. Assisted natural Regeneration. | 51000 ha. | 51006 | |
|----|---|--|---|--|--|
| | Forest | 2. Artificial Regeneration. | 6000 ha. | 6286 ha | |
| | Management – JFM Mode | 3. Fire Protection. | 1710 km. | 1710 Km | |
| | 31 m mode | 4. Drainage line treatment and maintenance JFM. | 1500 ha. | 1505 ha | |
| 2 | Sustainable Forest | 5. Drainage line treatment and maintenance non JFM. | 750 ha | 756 ha | |
| | Management – Non JFM Mode | 6. Consolidation and demarcation of forest boundaries. | 1898 km. | 1898 Km | |
| | Mode | 7. Setting up of Hi-Tech Nursery | 6 Numbers | 6 Nos | |
| | | 8. Farm Forestry | 10000 ha. | 6887 ha | |
| 2 | Sustainable Biodiversity Management | Sustainable biodiversity management incorporating concept of SATOYAMA model. | 1 Sanctuary | 1 Sanctuary: 10 EDCs | |
| 3. | 3. | 2. Establishment of scientific monitoring system at Bhitarakanika | 1 Sanctuary: Health Report Card for 2 years published | | |
| 4. | | 1. Community Development | 1200 VSS | 1211 VSS | |
| | Livelihood Improvement | 2. Promotion of IGA | 3600 WSHG | 7010 Borrowing Entities: WSHGs: 2753 Nos CIGs: 183 Nos PoPs: 4074 Nos | |
| | Capacity Development | 1. Executing Agency | 1 PMU, 12 DMU, Capacity Building 50 FMU Training of All | | |
| | | 2. Community Institutions | 1200 VSS | Stakeholders as per | |
| | | 3. Training of P-NGOs | 50 Teams | target completed. Till March, 2023: | |
| 5. | | 4. Training of Animators | 2400 Numbers | 3401 Nos of CBT on | |
| | | 5. Promotion of product cluster at DMU | 12 Numbers | 33 themes taken up covering 1,39,424 participants. | |
| | | 6. Training of expansion of Farm Forestry | 1200 VSS | participants. | |
| 6. | Supporting activities | Institutional and project management support | 1 PMU, 12 DMU, 50 FMU & 6 | 1 PMU, 12 DMU, 50 FMU & 6 Circle Offices | |
| | | 2. Monitoring and evaluation | Circle Offices. | | |
| | | 3. Community based MRV system | | | |

Chapter 3

Revisit of Microplan

3.01 Introduction

MICRO PLAN" in the context of Odisha Forestry Sector Development Project Phase II has been perceived to be a guiding document for both management of forest areas assigned to the community under Joint Forest Management (JFM) mode as well as to plan for livelihood initiatives including income generating activities at the community level. It is a 'Ten Year Development Plan' encompassing the expectations of the villagers, particularly the forest-dependent communities, Poorest of the Poor House Holds and other socially vulnerable sections.

Microplan is a document which is used to plan out the needs and priorities of a community. It has been used to enable the forest fringe dwellers to effectively identify their needs and find means to fulfil them in a time bound manner. On one hand, it plans for the resource use while simultaneously eliciting the roles and responsibilities of a group of users in sustainable forest management, on the other hand, it is instrumental in resource mobilization.

Microplan is a dynamic document and must address the requirements of changing times. It must also register the achievements, the gaps and the prospects of addressing new domains within the available and restricted resources. Its role becomes even more important in a situation where the location of the forest fringe dwellers is remote and life equally difficult. The resources and opportunities are few and the wants are many.

In this scenario, the Revisit of Microplan has been envisaged in the Project Document after 4 years of initial Microplan formulation. It is required to address the progress made so far, identify the gaps and explore the new possibilities. It should help in readjusting the project prescriptions from sustainable forest management to including ways to augment issues on Gender Mainstreaming, Community Based Monitoring and Reporting and registering Environmental and Social Concerns in the form of Frameworks which can be monitored at the grass-root level by the community itself.

3.02 The Rationale

The rationale for reviewing the micro plan is summarized as given below:

- To understand and review the status of implementation of work items proposed in the micro plan document
- To capture changing needs of the community and try to address the same.
- To include components those were not reflected in the previous micro plan.
- To re-evaluate the relevance of the works which are in the plan but not taken up /addressed under the present-day scenario and to readjust the same.

3.03 **Objectives of Revisit of the Micro Plan:**

The objectives of the revisit of Micro Plan are narrated below:

- To ensure the community participation in recording the progress made through the implementation of the Microplan
- To examine each intervention in terms of the targets, achievements and progress.
- To incorporate and register the changing needs of the community.
- To realign the interventions with the changing needs of the community.
- To address new concepts at community level.

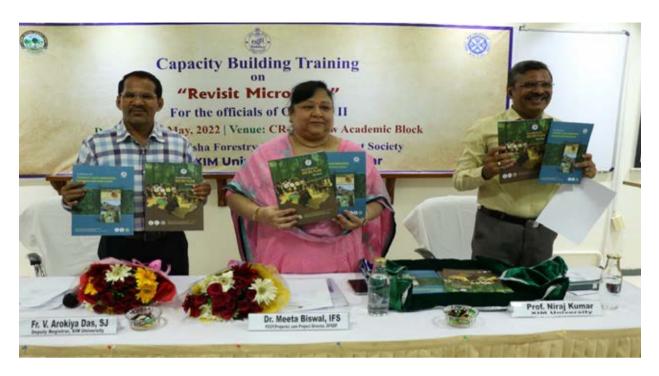
3.04 Process of Revisit of the Micro Plan:

In order to review and revisit the micro plan, a comprehensive procedure is proposed to ensure that all the parameters that need to be reviewed have been captured and analyzed properly. In-fact, the review of the micro plan requires a multifaceted approach that includes following aspects:

- Review of existing micro plan document for implementation status (work done or not) through Participatory Assessment Process.
- Review and analyze and list the works proposed in the micro plan, and try to assess their relevance under present-day scenario
- Include components like
 - Gender mainstreaming as envisaged in Gender Acton Plan (GAP)
 - Community-Based Monitoring, Reporting and Verification (CMRV) readiness at VSS level
 - Social and Environmental Safeguards Framework to be adhered at VSS level for project implementation.
 - Livelihood Initiatives planning along with feeder and product cluster.
- Parallel community consultation through Focus Group Discussions (FGD) to capture and understand ever changing present-day priorities.
- Updating tables, inclusion of new concepts in the revised micro plan document.

3.05 Progress of Re-visit of Micro Plan:

After the completion of four years, the Micro Plans prepared for the VSSs of Batch-I under OFSDP-II were revisited during 2022-23. The objectives of revisit of Micro plan were to assess the status of the development initiative planned and executed. Further, it was emphasised to capture current need and requirements and to incorporate those in the revised Micro Plan. Under this initiative, the initial Micro Plan Document was appropriately revised and the officials and field functionaries of DMU, FMU, P-NGO Team etc. were oriented on the processes of revisit of Micro Plan by the PMU-PMC expert team. The community members from 355 VSSs of Batch-I were sensitized on the objectives and processes in revisit of Micro Plan.





PMU level capacity building training on Revisit of Micro Plans

During the reporting year, the revisit of Micro Plan across the 355 VSSs covered in batch-I VSSs were initiated. The community members were actively involved in revisiting the Micro Plans prepared by their respective VSSs. The officials from PMU, PMC, DMU & FMU facilitated the processes at different level to make the revisit of micro plan effective and relevance to the community need and priorities. The Revised Micro Plans were prepared in all 355 numbers of Batch-I VSSs through PRA exercise involving the VSS members.





DMU level training on Revisit of Micro Plans

The draft of Revisit of Microplan were scrutinised at the PMU level by the experts and the detailed modifications were intimated to the concerned Divisions. This was followed by a division- wise discussion on the generic observations on the Revisit of Microplans which were subsequently incorporated by the concerned Divisions in the respective Revisit Microplans. The Division wise number of Micro Plans revised is as follows:

| Name of Division | Total no of VSS in Batch-I | No of Micro plans revised |
|------------------|----------------------------|---------------------------|
| Baripada | 46 | 46 |
| Rairangpur | 40 | 40 |
| Karanjia | 20 | 20 |
| Dhenkanal | 25 | 25 |
| Athamallik | 20 | 20 |
| Sundargarh | 30 | 30 |
| Jharsuguda | 29 | 29 |
| Sambalpur | 55 | 55 |
| Subarnapur | 25 | 25 |
| Boudh | 20 | 20 |
| Ghumsur North | 25 | 25 |
| Ghumsur South | 20 | 20 |
| Total | 355 | 355 |





PRA exercise in villages





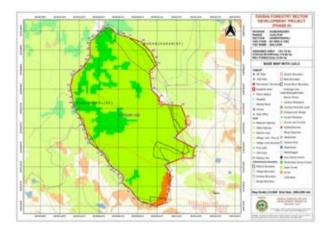
Discussion on feedback of sample revised Micro Plans at DMU Level by PMC Experts

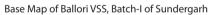
Chapter 4

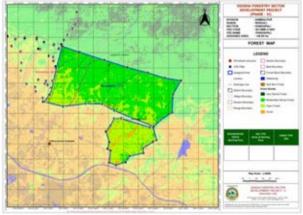
Initiatives on Sustainable Forest Management

4.01 Site Specific Planning (JFM Mode)

Site Specific Planning is taken up at VSS level to identify the appropriate sites for plantation and other soil moisture conservation activities to be executed at village level through JFM Mode. Such field investigations and planning exercise have been conducted by the VSS members with technical guidance and support from Division Level Project Personnel. This is done to determine site specific treatments under JFM intervention (ANR/AR/Silvicultural Operations / SMC interventions etc.) required at the concerned VSS for sustainable forest management. Forest map of each VSS showing the forest density, forest condition etc. enabling the field staff and VSS members in identifying appropriate interventions to be taken in their respective VSSs were prepared by the GIS Cell, PMU over the years and shared with the Divisions.







Forest Map of Pandapalli VSS, Batch-III of Sambalpur

4.02 Maintenance of Hi-Tech Nursery

Six numbers of Hi-Tech Nurseries, one in each Circle were established under OFSDP-II during 2018-19. The objective of establishing these hi-tech nurseries was to improve the production capacity (quantities and quantity of planting material) of quality planting material of indigenous species including NTFP and Agro Forestry species. Each Hi-tech Nursery has been strengthened to raise 4.40 lakh seedlings, out of which 2.20 lakhs seedlings are raised in Poly-pots and rest 2.20 lakh seedlings are raised in hyco-pots. Facility has been made to raise 1.1 lakhs of hyco-pot seedlings in 300 CC pots and 1.1 lakh seedlings in 150 CC pots. The Hi-tech nurseries have been established under OFSDP, Phase-II to meet the plantation target of the Project Divisions.

The locations where the Hi-Tech Nurseries have been established are as given below:

| Division | Locations | Poly Pot Seedlings | Hyco-Pot Seedlings (with 150 CC pot) | Hyco-Pot Seedlings (with 300 CC pot) | Total Seedlings | | | |
|-------------|--------------------------------------|-------------------------|--|--|-------------------------|--|--|--|
| | | (Capacity In nos. lakh) | | | | | | |
| Athamallik | Badarohila, Bamur FMU, Athmallik | | | | | | | |
| Baripada | Sankhabhanga FMU, Baripada | 2.20 Lakh | 1.10 Lakh | 1.10 Lakh | 4.40 Lakh | | | |
| Sambalpur | Larasara FMU, Sambalpur | Seedlings in | Seedlings in | Seedlings in | Seedlings in | | | |
| Subarnapur | Chhanchhandunguri FMU, Subarnapur | each Hi-Tech Nursery | each Hi-Tech Nursery | each Hi-Tech Nursery | each Hi-Tech Nursery | | | |
| Ghumsur (N) | Lalsingh FMU | | | | | | | |
| Sundergarh | Ujjwalpur, FMU, Sundergarh | | | | | | | |

18-month-old seedlings raised in the Hi-tech nurseries during the reporting year were utilized for plantations taken up in 31 VSSs and the same were also used for restocking of seedlings under casualty replacement, wherever required. As the plantation operations except the maintenance under OFSDP-II have been completed, the DMUs of concerned Divisions have been intimated for optimum utilisation of revolving fund allocated to the DMUs for raising of seedlings in the Hi-tech Nurseries and to ensure raising of quality seedlings for the need of the respective Forest Division and other Forest Divisions.

The locations where the Hi-Tech Nurseries have been established are as given below:



Hi tech Nusery at Sankhabanga in Baripada



Hi tech Nusery at Larasara in Sambalpur

4.03 Silvi-cultural Operations including Plantations under JFM Mode:

Silvi-cultural Operations including plantations in the assigned forest area are being taken up through JFM Mode. These initiatives not only encourage forest restoration through joint effort of VSS members and the project personnel but also contribute significantly to create employment opportunities for the poor forest fringe dwellers.

All the details such as site selection, choice of species, selection of nursery sites, etc. are being finalised by the respective VSS and the same are recorded in the Resolution Register of the respective VSSs. Efforts have been made to raise seedlings of indigenous species by the VSS based on the availability of sites, water facilities etc. Adequate support has been rendered to the VSS members by the forest and project personnel of respective FMUs for raising quality seedlings at VSS sites.

Different silvicultural operations like singling of coppice shoots, removal of high stumps and climbers, fire line tracing, etc., without plantation as in ANR without gap and with plantation as in ANR with 200 seedlings, 400 seedlings, 800 seedlings per hectare along with Artificial Regeneration under models of Fuel Fodder, NTFP & Other Block Plantations are taken up under OFSDP-II on the degraded sites identified jointly by the Forest Department and the respective VSSs. Only indigenous species including NTFP species are being selected by the VSS for plantation in the assigned area as identified during Micro Planning processes.

4.04 Plantations through Assisted Natural Regeneration & Artificial Regeneration:

Assisted Natural Regeneration (ANR) and Artificial Regeneration (AR) Plantations are being taken up in the project villages in JFM Mode. Plantation target of each VSSs were worked out by the villagers during preparation of Micro Plans based on availability of treatment area for plantation activities in respective VSS. About 4.51 lakh seedlings under ANR & AR were planted during 2022-23 in 31 Batch-IV VSSs. The Division wise details of plantation taken up during 2022-23 are as below:

| Plantation Achievements in 31 VSSs of Batch-IV during 2022-23 | | | | | | | | | | | | |
|---|---------------|------|-----------------------|--------------|--------------|--------------|--------------|----------------|--------|----------------|-------------|----------------------|
| | | NI- | | ANF | R (In Ha) | | | | AR (Ir | ı Ha) | | |
| Division | No of FMUs | l ot | ANR without Gap | ANR @ 200 | A NR @400 | ANR @ 800 | Total ANR | Fuel Fodder | NTFP | Other Block | Total AR | Seedlings Planted |
| Boudh | 02 | 8 | 21 | 129 | 31 | 34 | 215 | 17 | 16 | 23 | 56 | 1,51,100 |
| Ghumsur South | 02 | 5 | 13 | 138 | 50 | 25 | 226 | 00 | 04 | 08 | 12 | 82,000 |
| Subarnapur | 01 | 9 | 24 | 60 | 85 | 0 | 169 | 0 | 205 | 00 | 205 | 1,28,000 |
| Sundergarh | 03 | 6 | 16 | 200 | 0 | 0 | 216 | 0 | 00 | 00 | 00 | 40,000 |
| Jharsuguda | 02 | 3 | 9 | 40 | 40 | 0 | 89 | 07 | 10 | 03 | 20 | 50,300 |
| Total | 10 | 31 | 83 | 567 | 206 | 59 | 915 | 24 | 235 | 34 | 293 | 4,51,400 |



Plantation in Jharsuguda Division



Block Plantation in Subarnapur DMU

Maintenance of Previous Year's Plantations 4.05

Plantations taken up in the previous years in VSSs covered under the fold of OFSDP-II in different batches were maintained during 2022-23 as below:

| 4th year Maintenance of ANR & AR taken up in Batch-I VSSs during 2022-23 | | | | | | | | | | | |
|--|--------------------------|-----|--------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---|---|--|--|--|
| Division | ivision No of No FMUs VS | | ANR without gap in Ha | ANR with 200 Seedlings in Ha | ANR with 400 Seedlings in Ha | ANR with 800 Seedlings in Ha | AR – Fuel Fodder @ 2500 Seedlings in Ha | AR – NTFP @ 400 Seedlings in Ha | AR – Other Block @ 1600 Seedlings in Ha | | |
| Baripada | 02 | 46 | 550 | 235 | 120 | 0 | 0 | 0 | 0 | | |
| Rairangpur | 02 | 40 | 585 | 1115 | 0 | 0 | 30 | 66 | 16 | | |
| Karanjia | 01 | 20 | 765 | 0 | 396 | 0 | 7 | 5 | 5 | | |
| Dhenkanal | 01 | 25 | 319 | 730 | 15 | 0 | 52 | 43 | 0 | | |
| Sundargarh | 01 | 30 | 382 | 0 | 638 | 255 | 81 | 56 | 11 | | |
| Jharsuguda | 01 | 29 | 348 | 132 | 616 | 115 | 80 | 54 | 11 | | |
| Sambalpur | 01 | 55 | 755 | 0 | 916 | 416 | 334 | 224 | 113 | | |
| Subarnapur | 02 | 25 | 319 | 0 | 531 | 212 | 69 | 47 | 109 | | |
| Boudh | 01 | 20 | 1614 | 0 | 448 | 0 | 0 | 20 | 8 | | |
| Athamallik | 01 | 20 | 391 | 199 | 266 | 0 | 48 | 34 | 10 | | |
| Ghumsur(N) | 01 | 24 | 319 | 0 | 531 | 5 | 28 | 8 | 9 | | |
| Ghumsur(S) | 01 | 20 | 255 | 0.00 | 425 | 170 | 55 | 37 | 8 | | |
| Total | 15 | 355 | 6602 | 2411 | 4902 | 1173 | 784 | 594 | 300 | | |

| 3rd year Maintenance of ANR & AR taken up in Batch-II VSSs during 2022-23 | | | | | | | | | | | |
|---|-------------------------|-----|--------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---|---|--|--|--|
| Division | vision No of No FMUs VS | | ANR without gap in Ha | ANR with 200 Seedlings in Ha | ANR with 400 Seedlings in Ha | ANR with 800 Seedlings in Ha | AR – Fuel Fodder @ 2500 Seedlings in Ha | AR – NTFP @ 400 Seedlings in Ha | AR – Other Block @ 1600 Seedlings in Ha | | |
| Baripada | 03 | 70 | 929 | 120 | 0 | 0 | 38 | 69 | 19 | | |
| Rairangpur | 04 | 60 | 954 | 2672 | 0 | 0 | 33 | 24 | 31 | | |
| Karanjia | 01 | 20 | 255 | 552 | 255 | 0 | 10 | 15 | 7 | | |
| Dhenkanal | 01 | 27 | 370 | 661 | 61 | 10 | 72 | 83 | 0 | | |
| Sundargarh | 02 | 60 | 766 | 892 | 638 | 254 | 103 | 183 | 31 | | |
| Jharsuguda | 02 | 51 | 988 | 729 | 232 | 30 | 52 | 91 | 55 | | |
| Sambalpur | 01 | 20 | 255 | 298 | 212 | 85 | 55 | 43 | 7 | | |
| Subarnapur | 01 | 25 | 319 | 372 | 266 | 106 | 69 | 47 | 9 | | |
| Boudh | 01 | 20 | 364 | 210 | 256 | 64 | 32 | 19 | 10 | | |
| Athamallik | 01 | 25 | 443 | 402 | 235 | 0 | 52 | 52 | 9 | | |
| Ghumsur(N) | 01 | 24 | 771 | 328 | 60 | 2 | 0 | 8 | 9 | | |
| Ghumsur(S) | 01 | 20 | 443 | 310 | 94 | 10 | 22 | 70 | 8 | | |
| Total | 19 | 422 | 6857 | 7546 | 2309 | 561 | 538 | 709 | 195 | | |

| 2nd year Maintenance of ANR & AR taken up in Batch-III & IV VSSs during 2022-23 | | | | | | | | | |
|---|---------------|---------------|--------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---|---|--|
| Division | No of FMUs | No of VSSs | ANR without gap in Ha | ANR with 200 Seedlings in Ha | ANR with 400 Seedlings in Ha | ANR with 800 Seedlings in Ha | AR – Fuel Fodder @ 2500 Seedlings in Ha | AR – NTFP @ 400 Seedlings in Ha | AR – Other Block @ 1600 Seedlings in Ha |
| Baripada | 01 | 19 | 48 | 110 | 0 | 0 | 142 | 39 | 0 |
| Rairangpur | 02 | 07 | 48 | 238 | 0 | 0 | 0 | 17 | 0 |
| Karanjia | 02 | 40 | 174 | 1649 | 621 | 0 | 184 | 111 | 0 |
| Dhenkanal | 04 | 98 | 426 | 3648 | 231 | 20 | 299 | 380 | 0 |
| Sundargarh | 02 | 60 | 262 | 1933 | 430 | 25 | 282 | 134 | 0 |
| Jharsuguda | 02 | 05 | 35 | 140 | 0 | 0 | 50 | 35 | 0 |
| Sambalpur | 01 | 25 | 109 | 735 | 160 | 100 | 58 | 115 | 0 |
| Subarnapur | 02 | 25 | 109 | 468 | 328 | 199 | 117 | 56 | 0 |
| Boudh | 01 | 23 | 107 | 419 | 311 | 169 | 90 | 68 | 5 |
| Athamallik | 01 | 30 | 131 | 990 | 204 | 0 | 62 | 107 | 40 |
| Ghumsur(N) | 02 | 51 | 222 | 1791 | 147 | 103 | 157 | 192 | 0 |
| Ghumsur(S) | 01 | 20 | 87 | 398 | 263 | 142 | 88 | 45 | 0 |
| Total | 21 | 403 | 1758 | 12519 | 2695 | 758 | 1529 | 1299 | 45 |



Silvicultural Operation in Baripada Division

4.06 Drainage Line Treatment under JFM & Non JFM Mode (Ex-situ SMC Work):

Under the ridge to valley approach, the Soil and Moisture Conservation Measures are taken up both outside the assigned area as well as within the assigned area of the VSSs. Drainage Line Treatment within the assigned area of VSSs were taken up with the active participation of VSSs members following JFM Mode, whereas, the sites beyond the assigned area were treated in Non JFM Mode. Soil and Moisture Conservation Measures such as gully plugging, construction of staggered trenches, digging of percolation pits, construction of check dams etc. have been taken up as interventions under Drainage Line Treatment under OFSDP, Phase-II. Ridge to valley approach of SMC treatment helped significantly in improving the moisture content and water table as well for effective growth of seedlings planted under the project. Soil and Moisture Conservation interventions across 1211 VSSs covered under OFSDP-II in Batch-I, II, III & IV were completed during 2021-22. Batch wise SMC interventions taken up under OFSDP-II are as below:

Soil Moisture Conservation Measures (All Batches)

| Batch | No of Ranges (FMUs) | No of VSSs | Year | DLT on JFM Mode (In ha) | DLT on Non JFM Mode (In ha) | Total DLT (In ha) |
|--------------------|------------------------|------------|---------|----------------------------|--------------------------------|----------------------|
| Batch-I | 15 | 355 | 2018-19 | 446 | 222 | 668 |
| Batch-II | 18 | 422 | 2019-20 | 530 | 270 | 800 |
| Batch-III &IV | 16 | 403 | 2020-21 | 502 | 251 | 753 |
| Batch-IV (31 VSSs) | - | 31 | 2021-22 | 26 | 13 | 39 |
| Total | 49 | 1211 | | 1504 | 756 | 2260 |



SMC Measures in Baripada DMU

4.07 Maintenance of Drainage Line Treatment (DLT) (under JFM & Non JFM Mode):

The project has the provision to maintain the established DLT structures in the subsequent years so as to ensure effective functioning of the SMC structures established at VSS level under DLT (JFM & Non JFM mode). Under the project fund has been provisioned to maintain the DLT structures established such as Loose Boulder Check dam, Gully Plugs, Concrete Check Dams, Water Harvesting Structures, Staggered Trench, Counter Trenches etc. after first year & third year of its establishment. The details of DLT Structures established during the year 2022-23 were as below:

| After 2nd week (2nd Meintenene) | of DLT Structures in Batch-I -355 VSSs |
|----------------------------------|--|
| After 3rd year (2nd Maintenance) | of DLI Structures in Batch-i-355 v55s |

| Division (DMUs) | Ranges (FMUs) | DLT on JFM Mode (In ha) | DLT on Non JFM Mode (In ha) | Total DLT (In ha) |
|-----------------|--------------------|----------------------------|--------------------------------|-------------------|
| Athamallik | Athamallik | 25 | 12 | 37 |
| Davin a da | Dukura | 28 | 14 | 42 |
| Baripada | Kaptipada | 30 | 15 | 45 |
| Boudh | Boudh | 25 | 12 | 37 |
| Dhenkanal | Dhenkanal | 32 | 16 | 48 |
| Ghumsur North | Mujagarh | 31 | 16 | 47 |
| Ghumsur South | Buguda | 25 | 13 | 38 |
| Jharsuguda | Belpahar | 36 | 18 | 54 |
| Karanjia | Dudhiani | 25 | 12 | 37 |
| Deironom | Badampahar | 25 | 12 | 37 |
| Rairangpur | Bahalda | 25 | 12 | 37 |
| 6 1 1 | Padiabahal | 31 | 16 | 47 |
| Sambalpur | Sadar | 38 | 19 | 57 |
| Subarnapur | Sonepur | 32 | 16 | 48 |
| Sundargarh | Sundargarh Ujalpur | | 19 | 57 |
| Total | | 446 | 222 | 668 |



SMC Measures in Subarnapur DMU

39

| Division (DMUs) | Ranges (FMUs) | DLT on JFM Mode (In ha) | DLT on Non JFM Mode (In ha) | Total DLT (In ha) |
|-----------------|---------------|----------------------------|--------------------------------|-------------------|
| Boudh | 02 | 7 | 3 | 10 |
| Ghumsur South | 02 | 4 | 2 | 6 |
| Jharsuguda | 02 | 3 | 2 | 5 |
| Subarnapur | 01 | 7 | 4 | 11 |
| Sundergarh | 03 | 5 | 2 | 7 |
| | | | | |

26

13

After 1st year (1st Maintenance) of DLT Structures in Batch-IV - 31 VSSs

4.08 Fire Line (FL) Creation and Maintenance:

10

Total

Forest fires have been identified as the potential threat which destroy forest resources across the globe including our State. However, small inputs and advance planning of the villagers and forest staff reduces the forest fire incidences to a great extent and help to conserve the forest resources. Accordingly, in order to protect forests from fire incidences, 4 m wide fire lines to the extent of 1710 Kms. were established across the JFM areas assigned to 1211 numbers of Batch-I, II, III & IV VSSs in JFM Mode in previous years and the same were maintained during 2022-23 as below:



my 27 (5844) 3 folds 8 (27) 7 folds

Fire line measures in Sambalpur DMU

Fire line measures in Baripada DMU

Maintenance of Fire Lines created under OFSDP-II in 1211 VSSs

| Division (DMUs) | Ranges (FMUs) | VSSs (In Nos) | Fire line Maintained (In Kms) |
|-----------------|---------------|---------------|-------------------------------|
| Athmallik | 03 | 75 | 107.38 |
| Baripada | 06 | 135 | 191.84 |
| Boudh | 03 | 71 | 96.28 |
| Dhenkanal | 06 | 150 | 214.13 |
| Ghumsur (N) | 04 | 100 | 142.89 |
| Ghumsur (S) | 03 | 65 | 91.00 |
| Jharsuguda | 03 | 88 | 123.81 |
| Karanjia | 04 | 80 | 113.50 |
| Rairangpur | 05 | 107 | 151.48 |
| Sambalpur | 04 | 100 | 143.13 |
| Subarnapur | 03 | 84 | 115.26 |
| Sundergarh | 05 | 156 | 219.50 |
| Total | 49 | 1211 | 1710.20 |

4.09 **Consolidation and Demarcation of Forest Boundaries**

Consolidation and demarcation of forest boundaries are intended to consolidate and demarcate boundaries of the Forest Blocks i.e Reserved Forest (RF), Protected Reserve Forest (PRF) and Demarcated Protected Forests (DPF) which fall across the project villages of OFSDP-II. This activity helps in identifying different forest areas and in controlling encroachment of the forest area.

Under Consolidation and Demarcation, the damaged / dilapidated pillars are repaired / replaced around the RFs, PRFs, & DPFs under Project Activities. All pillars were appropriately maintained, coloured and geo-referenced. Consolidation and Demarcation of forest boundaries to the extent of 1898 Kms covering 229 numbers of Forest Blocks across 1211 VSSs from all batches covered under OFSDP-II which were completed during the previous years. Further, the Consolidation and Demarcation of forest boundaries over 561 Kms across the 355 Batch-I VSSs were maintained through JFM Mode. The cumulative progress of Consolidation and Demarcation of forest boundaries taken up under OFSDP-II over the years are as below:





Consolidation of Forest Boundaries in Athmallik

Consolidation of Forest Boundaries in Ghumsur North DMU

Cumulative progress in Consolidation and Demarcation of Forest Boundaries under OFSDP-II

| Batch | No of DMUs | No of FMUs | No of VSSs | Area Covered | Forest Block Covered |
|-----------|------------|------------|------------|--------------|-------------------------|
| Batch-I | 12 DMUs | 15 FMUs | 355 VSSs | 561 Kms | 58 Nos |
| Batch-II | 12 DMUs | 18 FMUs | 422 VSSs | 669 Kms | 62 Nos |
| Batch-III | 12 DMUs | 11 FMUs | 281 VSSs | 445 Kms | 64 Nos |
| Batch-IV | 4 DMUs | 5 FMUs | 122 VSSs | 191 Kms | 45 Nos |
| Batch-IV | 5 DMUs | - | 31 VSSs | 32 Kms | |
| Total | 12 DMUs | 49 FMUs | 1211 VSSs | 1898 KMs | 229 Nos. |

| Division wise cumulative details on Consolidation and Demarcation of Forest Boundaries under OFSDP-II |
|---|
|---|

| Division (DMUs) | Ranges (FMUs) | No of VSSs Covered (In Nos.) | Consolidation of Forest Boundaries (In Kms) | No of Forest Blocks Covered |
|--------------------|---------------|---------------------------------|--|--------------------------------|
| Athmallik | 03 | 75 | 118.99 | 13 |
| Baripada | 06 | 135 | 213.76 | 21 |
| Boudh | 03 | 71 | 108.01 | 07 |
| Dhenkanal | 06 | 150 | 236.71 | 32 |
| Ghumsur North | 04 | 100 | 157.58 | 13 |
| Ghumsur South | 03 | 65 | 100.26 | 06 |
| Jharsuguda | 03 | 88 | 137.57 | 18 |
| Karanjia | 04 | 80 | 126.89 | 51 |
| Rairangpur | 05 | 107 | 169.96 | 20 |
| Sambalpur | 04 | 100 | 157.17 | 09 |
| Subarnapur | 03 | 84 | 128.08 | 07 |
| Sundergarh | 05 | 156 | 242.80 | 32 |
| Total | 49 | 75 | 1897.78 | 229 |

4.10 Farm Forestry Operations:

Improving the tree cover outside of the forest areas has been envisaged under the project through Farm Forestry Component. Based on the feedback on the species and plantation models obtained from the villagers, a detailed guideline on Farm Forestry interventions was formulated in consultation with the institutes, namely- Central Horticulture Experiment Station, Bhubaneswar, Central Institute for Women in Agriculture (CIWA), Bhubaneswar, Indian Council of Agriculture & Research (ICAR), Odisha University of Agriculture & Technology (OUAT), J K Paper Mill, Rayagada, Avanthi Agri-tech Pulp wood Industries and Directorate of Horticulture.

Based on the above consultation, the following models were considered and implemented.

Farm Forestry Models under OFSDP-II

| Models | Species / No of Seedlings per Ha. | Seedlings/ ha | Area | Inter Cropping |
|-------------------------|--------------------------------------|------------------|------------------|-----------------------------------|
| Agro Forestry Model | Forest Plants | 96 Nos | 0.15 ha | Arher/Sesame/Bengal Gram |
| | Pulpwood Plants | 480 Nos | 0.48 ha | /Turmeric- during 1st to 3rd year |
| | Horticulture Plant | 78 Nos | 0.37 ha | |
| Timber Species Model | Forest Plant | 1000 Nos | 1 ha | Pineapple/Ginger 4th year onwards |
| Pulpwood Model | Pulpwood Species | 1000 Nos | 1 ha | |
| Horti-NTFP Model | NTFP Species | 200 Nos | 0.5 ha | |
| | Horti Species | 200 Nos | 0.5 ha | |
| Field Bund / Dyke Model | Forest Plants | 75 Nos | Across the field | Usual Food Grain Crops |
| | Horti Plants | 25 Nos | | |

Up to 2021-22, a total of 4118 ha area covered under Farm Forestry Plantation Component covering 9425 numbers of beneficiaries from 777 VSSs of Batch-I & II FMUs of OFSDP-II. Identification of beneficiaries from Batch-III & IV VSSs of OFSDP-II were carried out during the reporting year. A total of 5734 numbers of beneficiaries expressed their willingness to take up farm forestry plantation in 2714.60 ha of their patta land during 2022-23. Further, based on the request to DMUs and to meet the project target, innovative Farm Forestry Model were explored and during 2022-23, Lemon grass model under Farm Forestry plantation was taken up through convergence under MGNREGS in Jharsuguda Forest Division under OFSDP-II.

The cultivation of lemongrass has been taken up in the cluster mode. For each 01 ha of lemongrass plantation, 27,778 nos. of slips were planted at a spacing 60 cm x 60 cm. The life span of the grass is 05-08 years i.e. once planted it can yield the produce for 05-08 years giving scope for at least 3 to 4 cuttings per annum. It is also considered as non-browsing crop. Also, it prevents soil erosion. A yield of 30-40 tonnes of green herbage per year is obtained which on average oil recovery of 0.3% to 0.4% yield i.e. 100-150 kg oil per hectare per year. However, the average oil yield largely depends upon the conditions of soil, climate and management practices. Hydrodistillation or Steam Distillation method is used for the extraction of oil from the green foliage of lemongrass

During 2021-22, a total of 54.4 Ha area of patta land of 84 farmers has been brought under cultivation of lemongrass in the project VSSs in Jharsuguda. The provisions for lemongrass plantation has also been taken up in convergence with different line Departments like the Watershed and Horticulture Department under MGNRESS and OFSDP-II. Distillation units at two locations namely at Badimal VSS of Belphara Range and Bhatoloida VSS of Kolabira FMU are being installed with the financial assistance of District Mineral Fund (DMF) for extraction of lemon grass. Marketing of the produce and capacity building is being taken up through OFSDP-II with the support of MMSA through the Consortium of KIIT-TBI, BCKIC & IIE.



Farm Forestry taken up under OFSDP-II in Baripada Division

The details of plantation taken up under Farm Forestry Component during 2022-23 in Batch-III & IV VSSs are as below

| | | | Farm | ι Forestry Pla | ntation in | Farm Forestry Plantation in Batch-III & IV during 2022-23 | during 20 | 22-23 | | | |
|-------------|---------|---------------|--------|----------------|-------------|---|------------|-----------|-------------|---------|-----------|
| | | | Mo | del wise Targ | et in ha an | Model wise Target in ha and Seedlings planted in Nos. | planted in | Nos. | | | |
| 200 | Agro Fo | Agro Forestry | Ė | Timber | Pulp | Pulp-Wood | Hor | Hort-NTFP | Lemon Grass | Total | tal |
| | Area | Seedlings | Area | Seedlings | Area | Seedlings | Area | Seedlings | Area | Area | Seedlings |
| Athamallik | 0 | 0 | 25.47 | 25470.00 | 166.74 | 166740.00 | 52.23 | 20892.00 | 0 | 244.44 | 213102 |
| Baripada | 1.76 | 1158 | 9.0 | 600.00 | 26.63 | 26630.00 | 0.84 | 336.00 | 0 | 29.83 | 28724 |
| Boudh | 0 | 0 | 0 | 0.00 | 195.52 | 195520.00 | 00:00 | 00:00 | 0 | 195.52 | 195520 |
| Dhenkanal | 0 | 0 | 0 | 00.00 | 762.23 | 762230.00 | 25.73 | 10292.00 | 0 | 787.96 | 772522 |
| Ghumsur (N) | 103.66 | 68208 | 0 | 0.00 | 8.00 | 8000.00 | 00:00 | 00:00 | 0 | 111.66 | 76208 |
| Ghumsur (S) | 39.71 | 26129 | 0 | 0.00 | 00:00 | 0.00 | 12.21 | 4884.00 | 0 | 51.92 | 31013 |
| Jharsuguda | 54.72 | 36006 | 63.00 | 63000.00 | 54.31 | 54310.00 | 24.80 | 9920.00 | 54 | 251.23 | 163236 |
| Karanjia | 29.90 | 19674 | 61.37 | 61370.00 | 50.77 | 50770.00 | 160.22 | 64088.00 | 0 | 302.26 | 195902 |
| Rairangpur | 9.95 | 6547 | 53.19 | 53190.00 | 89.69 | 89690.00 | 32.96 | 13184.00 | 0 | 185.79 | 162611 |
| Sambalpur | 0 | 0 | 53.87 | 53870.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 53.87 | 53870 |
| Subarnapur | 12 | 7896 | 70.00 | 70000.00 | 204.00 | 204000.00 | 17.00 | 6800.00 | 0 | 303.00 | 288696 |
| Sundargarh | 37.70 | 24807 | 168.65 | 168650.00 | 0.00 | 00:00 | 45.16 | 18064.00 | 0 | 251.51 | 211521 |
| Total | 289.40 | 190425 | 496.15 | 496150.00 | 1557.89 | 1557890.00 | 371.15 | 148460.00 | 0 | 2768.99 | 2392925 |

Chapter 5

Sustainable Biodiversity Management:

5.1: SATOYAMA initiative in Badrama WL Sanctuary of Bamra WL Division:

5.1.1: SATOYAMA – a Pilot approach on Bio-diversity conservation:

SATOYAMA Initiative (a Japanese term for Landscapes) in Badrama Wildlife sanctuary under Bamra WL Division in Sambalpur District, is an example of Socio – Ecological Production Landscapes where livelihood of local communities is ensured with biodiversity conservation leading to "Society living in harmony with nature". SATOYAMA initiative is based on the principle that such landscapes, when properly managed, can benefit the biodiversity and human livelihood, rather than the two being in a state of opposition.

The Pilot Study of Satoyama Initiative on Biodiversity Conservation in Badrama Wildlife Sanctuary of Bamra WL Division in Sambalpur District was taken up under OFSDP-II in the year 2018-19 with the objective of promoting socio-ecological land scape with sustainable management of biodiversity. SATOYAMA model is thus designed to develop a common awareness on the value of nature and to create a model for sustainable rural society living in harmony with nature.

5.1.2: Rationale of SATOYAMA Initiative under OFSDP II:

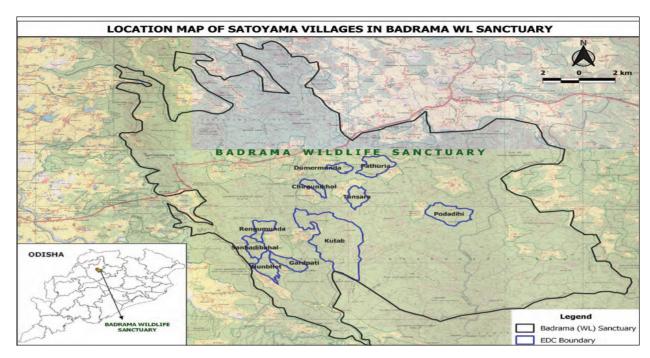
One of the key mandates of the OFSDP-II project is conservation and scientific management of the biodiversity with inputs on development of livelihood initiatives. In this context, the landscape management has been introduced for revitalization and sustainable management adopting SATOYAMA framework i.e. socio-ecological production landscape with the capacity development, the community members are encouraged to map and reflect the indicators of landscape as well as live in harmony with nature. The local communities require a complete understanding of the status and changes in condition of their landscapes in order to strengthen their resilience. Changes are captured in the sphere of ecological, agricultural, cultural and socio-economic aspects. The concept of SATOYAMA is thus piloted in two micro watersheds in Badrama Wildlife sanctuary where the communities can increase their capacity to respond to social, economic and environmental changes in their surroundings and to improve their environmental and economic conditions.

5.1.3: SATOYAMA initiative in Badrama WL sanctuary of Bamra WL Division.

On this pretext, SATOYAMA model, (originated and is being successfully implemented in Japan), is being implemented in 10 villages / EDCs of Badarma Wildlife Sanctuary of Bamra Wildlife Division, which is a remote area in western part of Odisha, for conservation of biodiversity and improvement of livelihood of the rural people living in the protected area. It also aims at addressing the issues of man-animal interface faced by the communities in the protected area as well as at preservation of the local traditional culture with ultimate socio-economic development of the communities living in the landscape. The initiative was started initially in one village i.e. Nunvet in the year 2018-19 on pilot basis and based on the overwhelming response from the adjoining villages, it was extended to 9 other adjoining villages (EDCs) within the protected area in the year 2019-20.

5.1.3.1: Target Area under SATOYAMA:

Badrama WL Sanctuary in Bamra Wildlife Division is spread over 348.17 Sq Km in Sambalpur District. The Forest Type in the area is Dry Deciduous and rich in biodiversity i.e. both flora and fauna composition. The area is part of Sambalpur Elephant Reserve. Local inhabitants are mostly tribal and live in the available valleys within the sanctuary and are mostly depend on agriculture for their living. The EDCs / villages covered under the project are located close to each other within a radius of 20 Kms from the Range Headquarters located at Badrama.



Location of Satoyama villages in Badrama Wildlife Sanctuary

Local communities living in and around the sanctuary are involved in protection of forest and wildlife. Eco-Development Committees (EDCs) have been constituted with active participation of local communities for protection of forests as per the JFM Resolution 2011 of Govt. of Odisha and the communities have been assigned with specific forest areas for conservation and sustainable management. The forest areas assigned to the EDCs covered under SATOYAMA model is as follows:

| S No | Name of EDC | Assigned forest area in ha |
|------|----------------|----------------------------|
| 1 | Rengumunda | 142.91 |
| 2 | Kutab | 168.44 |
| 3 | Sana badibahal | 152.37 |
| 4 | Tansara | 144.42 |
| 5 | Podadihi | 324.76 |
| 6 | Pathuria | 250.68 |
| 7 | Gadapati | 150.87 |
| 8 | Dumermunda | 78.66 |
| 9 | Chirguikhol | 95.73 |
| 10 | Nunvet | 195.52 |
| | Total | 1704.36 |

5.1.3.2: Demographic Profile of villages under SATOYAMA Initiative:

The target EDCs are generally small villages, with the household size ranging from 23 in case of Sana Badibahal to 77 in case of Nunvet and Kutab. Majority of population belongs to Schedule Tribes (79.4%). The pilot area has a sex ratio of 1000 male: 1050 female. The literacy level is low, while 117 families out of 487 families are literate and only 11 individuals have passed Higher Secondary. The major occupation of the community members is agriculture. In addition to agriculture, people largely depend on daily wages for their income. The average land holding at community level is around 2 acres and around 10% of the households are landless.

| S. No | Village Name | Total HH | ST HH | OBC and others HH | Total family Members | Total Male Members | Total female Members | %age of ST | Other % |
|-------|----------------|-------------|-------|-------------------------|----------------------------|-----------------------|----------------------------|---------------|------------|
| 1 | Rengumunda | 32 | 20 | 12 | 129 | 60 | 69 | 63 | 37 |
| 2 | Kutab | 77 | 40 | 37 | 296 | 152 | 144 | 52 | 48 |
| 3 | Sana badibahal | 23 | 18 | 5 | 108 | 56 | 52 | 79 | 21 |
| 4 | Tansara | 68 | 65 | 3 | 271 | 130 | 141 | 96 | 4 |
| 5 | Podadihi | 51 | 49 | 2 | 204 | 88 | 116 | 96 | 4 |
| 6 | Pathuria | 68 | 52 | 16 | 251 | 123 | 128 | 77 | 23 |
| 7 | Gadapati | 25 | 25 | 0 | 101 | 53 | 48 | 100 | 0 |
| 8 | Dumermunda | 26 | 26 | 0 | 108 | 52 | 56 | 100 | 0 |
| 9 | Chirgunkhol | 40 | 35 | 5 | 177 | 90 | 87 | 88 | 12 |
| 10 | Nunvet | 77 | 54 | 23 | 307 | 147 | 160 | 70 | 30 |
| Total | | 487 | 384 | 103 | 1952 | 951 | 1001 | 79.4 | 20.6 |

5.1.4: Initiatives:

Varieties of initiatives have been taken up in the project villages / EDCs to fulfil the mandate of SATOYAMA Initiative as well as for the sustainable conservation of biodiversity. The broad categories of interventions include: Community Mobilization, Micro Plan formulation, Natural Resource and Biodiversity Management, Habitat Improvement, Resolution measures on Man-animal conflicts, Environmental Conservation, Livelihood Improvement, Retaining and Improving Socio-cultural fabric and Institution and Capacity Building etc.

5.1.4.1: Community Mobilization and Preparation of Village Development Plan:

EDC meetings were held in all 10 Villages / EDCs at regular intervals ensuring participation of villagers in planning process as well as during implementation of the project activities. Micro Plans for each individual EDC was prepared through PRA exercise involving all stakeholders from the EDCs, PRI members and local line department representatives. The EDCs have been adopted as the sub committee of Gram/Palli Sabha for forest protection and conservation. The Micro Plans have been approved by the respective Palli / Gram Sabhas. The Micro Plans indicate the aspirations of villagers and overall plan for village development.





PRA exercise & micro planning

5.1.4.2: Construction of Multipurpose EDC Buildings:

Multi-purpose EDC Buildings have been constructed in all 10 EDCs / villages for holding EDC meetings, training programmes as well as showcasing the activities taken up in the village. These buildings also serve as the resource centres for the village for organizing common festivals / cultural activities, celebrations etc. Out of 10 EDC buildings 5 buildings i.e. in villages like Nunvet, Kutab, Rengumunda, Gardpati and Sanbadibahl are complete in all respects and other EDC buildings are in various stages of completion.









Completed VSS buildings

5.1.4.3: Natural Resource and Biodiversity Management: The following activities were taken up in the project villages during 2022-23 towards natural resource and biodiversity management.

a) Forest Fire Management: Under SATOYAMA Initiative extensive awareness campaign and forest fire management works were taken up in all 10 EDCs (Project villages) in Badrama WL sanctuary during 2022-23. Repeated meetings were conducted in each EDC highlighting the adverse effects of forest fire. Fire line @ 10 Km per village was created and about 80 RKm of existing fire lines in the area was maintained to prevent any occurrence and spread of forest fire.

FIRE PREVENTION AND CONTROL





Community Mobilization on fire prevention





Awareness meeting on Forest fire







Creation of Fire line in forest areas

b) SMC Measures through Drainage Line Treatment (DLT): In order to conserve the soil in the slopes and to improve moisture regime in the area, 37 nos of Check dams across the existing Nallahs were constructed under the project initiative in EDCs like Kutab - 8 nos, Nunvet - 19 nos and Rengumunda - 10 nos during the year 2022-23. This activity is being continued in all target villages in a phased manner with planning for SMC and DLT structures as per the field requirement based on the treatment map prepared for each EDC.





Check dams constructed

c) Removal of invasive weeds:

The forest type in Badrama WL sanctuary is mostly Sal dominated Dry Deciduous Forests which leads to growth of many invasive weeds like Lantana, Eupatorium and Atundi in the foot hill region. This affects the regeneration of ground flora which is very essential for the wild life specially the herbivores. As part of wildlife management and in line with the Management Plan of the Sanctuary, removal of invasive weeds was taken up in two EDCs i.e. Nunvet over 29 ha and Gadapati over 27.2 ha during the year 2022-23.



d) Medicinal Plants (Nursery and Garden): With an objective of preserving and promoting locally available medicinal plants, one medicinal plants nursery cum garden has been established in Podadihi village over an area of 1.5 Acres of land. In the medicinal garden, a total of 820 saplings comprising 100 varieties have been planted and are being maintained i.e. 120 saplings of 30 varieties of local species and 700 saplings of 70 varieties of medicinal plants brought form Medicinal Plants Garden, Bhubaneswar.



Medicinal plants nursery cum Garden in Podadihi

5.1.4.4: Habitat Improvement:

During summer months most of the water sources in the sanctuary dry up and the wild animals face a lot of difficulty. In order to address the issue, 2 nos of water bodies specifically meant for wildlife i.e. one in Ushakothi RF within Podadihi EDC and another within Nunvet EDc area, have been planned to be created during the year 2022-23. The water body in Podadiha EDC with a size of 40m x 30m x 4m has already been completed and the one at Nunvet is under progress.



Creation of Water body in Podadihi:

5.1.4.5: Man – Animal conflict- Mitigation Measures

All the target villages (10 Nos) are located within the limits of Badrama Wildlife Sanctuary and very often the wild animals stray into the village limits. The area being part of Sambalpur Elephant Reserve, elephants come into the village area and cause crop damage and sometime cause human deaths too. In order to avoid such a problem, there is plan for providing solar street lights in all the villages and to erect solar fences to prevent entry of elephants. During the year 2022-23, 14 solar street light systems have been installed in 7 EDCs @ 2 street lights per village i.e. Rengumunda, Tansara, Chirgenkhol, Sanbadibahl, Podadihi and Pathuria.



Solar street light in villages

5.1.4.6: Environmental Conservation:

The overall objective of the Project is to bring improvement in the environmental conditions with active involvement of local people so that it can become their way of life. Accordingly, it was intended to keep the rural environment free from plastic pollution and the adverse effects of plastic was elaborated to the villagers. The EDC members willingly accepted and decided to keep their villages free from plastic.

The EDCs selected two Eco-volunteers for each Pada (hamlet) from their village who would carry forward the campaign and educate people to segregate the plastic waste and to dispose at designated sites. At present, 80 members of Eco-Volunteers covering 10 members of EDCs are working towards making their villages plastic free.

Two cotton bags (Eco-bags) per family were distributed from the project funds as an alternative to plastic bags. In total 1020 cotton bags, specially designed and prepared by the project, have been distributed among the household covering all 10 EDCs.

Dust bins (made of bamboo) were put up at places in the villages and Garbage Pits were dug in the villages.

Campaigns against use of Plastic are being conducted at regular intervals (every three months) in all the EDCs involving the community, school teachers and students, PRI members, SHG members etc. to keep the moto alive.



Plastic free campaign



Eco bags / Eco volunteers









Garbage pits Bamboo dust bins

5.1.4.7: Livelihood Promotion:

a) Promoting organic farming of traditional Paddy:

With an objective of reducing the use of chemical fertilizers and pesticides and promoting use of organic manure, farmers in the project villages were motivated and trained by Resource Persons to prepare the bio-fertilizer and bio-pesticides using cow dung / urine for their own use. Preparation and use of bio-fertilizer and bio-pesticide for agriculture as well as kitchen garden (Mo Bagicha) is gaining popularity in the locality and more and more people / farmers are coming forward to accept and practise the concept. During 2022-23, 232 farmers covering all 10 EDCs, produced their bio-fertilizer and bio-pesticide and cultivated paddy over 162.79 Acres. The details of EDC wise no of farmers and area cultivated using bio-fertilizer are given below:

Cultivation of traditional paddy using bio-fertilizer during 2022-23:

| S No | Name of EDC | No of farmers | Area in Acres |
|------|-------------|---------------|---------------|
| 1 | Nunvet | 57 | 23.3 |
| 2 | Gadapati | 16 | 8.63 |
| 3 | Sanbadibahl | 22 | 15.34 |
| 4 | Rengumunda | 16 | 12.15 |
| 5 | Kutab | 36 | 13.77 |
| 6 | Dumermunda | 7 | 3.15 |
| 7 | Tansara | 5 | 3.1 |
| 8 | Chirgenkhol | 4 | 1.85 |
| 9 | Podadihi | 41 | 55.0 |
| 10 | Pathuria | 28 | 26.5 |
| | Total | 232 | 162.79 |







Organic paddy cultivation during 2022-23

b) Promoting Horticulture and Custard Apple plantation:

The landscape covered under SATOYAMA initiative is within the wildlife sanctuary and moreover a habitat for elephants. Hence horticultural crop, which are not liked by elephants like Pine apple, Yam, Lemon etc. are promoted in the area to minimise the depredation. Custard Apple is locally available in all the villages and is not liked by the elephants. With an objective of promoting plantation of custard apple, 8000 seedlings were raised by the villagers in Nunvet (4000), Rengumunda (2500) and Gadapati (1500) during 2022-23. Custard Apple plantation in community land was taken up in Kutab and Nunvet villages i.e. 368 plants over 1.0 Ac in Kutab village and 600 seedlings over 2.56 Ac in Nunvet village during 2022-23 in addition to the plantation taken up by villagers in their own back yard and fallow land.





Custard apple plantation

c) Promoting Spine Gourd cultivation:

Spine gourd (locally called as Kankada) is locally available in the wild and this wild variety of spine gourd has high demand in the local market during rainy season. People used to collect the fruits from wild in the rainy season and sell in the market. Taking advantage of market potential of this gourd, a few households had planted the rhizomes in the back yard and got good returns from sale. Hence, cultivation of this plant in the back yard, through collection of rhizomes from the nearby forest areas was promoted under the project involving more households and the farmers got good return during the fruiting season. The total number of farmers who took up spine gourd cultivation and the village / EDC wise production of spine gourd in the project area during 2022-23 is given below:

| S No | Name of EDC | Total no of farmers took up Olericulture | Total No of rhizomes/ plants planted | Total production in Qntl during 2022-23 |
|------|-------------|---|---|--|
| 1 | Nunvet | 32 | 1070 | 28.0 |
| 2 | Gadapati | 9 | 42 | 1.0 |
| 3 | Sanbadibahl | 14 | 110 | 1.0 |
| 4 | Rengumunda | 8 | 45 | 2.0 |
| 5 | Kutab | 22 | 380 | 2.5 |
| 6 | Dumermunda | 6 | 75 | 1.5 |
| 7 | Tansara | 27 | 230 | 2.5 |
| 8 | Chirgenkhol | 24 | 305 | 2.0 |
| 9 | Podadihi | 25 | 220 | 3.5 |
| 10 | Pathuria | 28 | 110 | 1.0 |
| | Total | 195 | 2587 | 45.0 |





Olericulture by farmers in villages

d) Apiculture:

Collection of Honey from the nearby forest is a regular practice in the locality. Taking the feedback from the elderly people in the villages, rearing of Honey bee was promoted. Honey Boxes were provided by the Odisha Forest Development Corporation (through convergence) and 10 boxes were installed by the beneficiaries in villages like Rengumunda, Nunvet and Kutab. Training on rearing of bees and collection of honey was imparted to the beneficiaries by the experts. Despite coordination and expert advice, the result in the first year was not encouraging and out of the 10 boxes installed, only 3 boxes are expected to be successful in getting good harvest. However, people / beneficiaries are very much interested to continue apiculture and it is expected that more number of Honey Boxes would be installed in the coming year and with timely training to the beneficiaries.



Honeybee rearing

e) Pisciculture:

Pisciculture in five available village ponds were taken up by the EDCs like Kutab, Rengumunda, Tansara and Podadihi during 2022-23. In total 26000 fingerlings of IMC variety were released in consultation with the Fisheries Department and the EDC wise fingerlings released and fish harvested is given below:



Pisciculture

| S No | Name of village | No of ponds | No of fingerlings released | Total quantity of fish harvested in Kg | Quantity consumed by villagers in Kg | Quantity sold in Kg | Sale value in Rs |
|------|-----------------|----------------|----------------------------------|--|--|------------------------|---------------------|
| 1 | Kutab | 1 | 8000 | 72 | 50 | 22 | 12,960 |
| 2 | Tansara | 1 | 6000 | 85 | - | 85 | 15,300 |
| 3 | Podadihi | 2 | 8000 | 125 | 98 | 27 | 22,500 |
| 4 | Rengumunda | 1 | 4000 | Not yet harvested | | | |
| | Total | 5 | 26000 | 282 | 148 | 134 | 50,760 |

f) Promotion of Nutri-Garden:

The households in all the 10 EDCs covered under the project were promoted to raise nutri-garden in their backyard with an objective to supplement their nutritional requirement. In total 301 households were provided with 10 types of seasonal vegetable seeds for raising in their back yard for their consumption. In addition to raising kitchen garden with seasonal vegetable, families were persuaded to plant Papaya, Drum stick, Lemon, Guava, pomegranate etc. to meet their daily requirements. Out of total 487 hose holds in all the EDCs, 482 families were supplied with 5 nos of Papaya, 3 nos of Lemon, 2 nos of Huava, 2 nos of Drum stick and 2 nos of Pomegranate seedlings each. Villagers have planted the seedlings in their backyards and are taking care of them.





Nutri garden

g) Mushroom cultivation:

Two SHGs in Nunvet EDC, namely- Maa Vanadurga SHG and Maa Tarina SHG had taken up mushroom cultivation during the year 2022-23 with 120 beds and 100 beds respectively. The production was about 100 Kg. The lessons learnt from this cultivation / experience i.e. low production and poor marketing etc. will be addressed during the coming season.





Mushroom cultivation in Nunvet EDC

5.1.4.8: Institution and Capacity Building:

Sensitization Training of the office bearers of 10 EDCs about their roles & responsibility was held at Badrama on 01.5.2022 in addition to the EDC meetings held at regular intervals in the villages.

Field Training on SMC measures and DLT activities was organized at Pathuria where the staff of Badrama WL Range and EDC members from Pathuria had participated.

Capacity building training of SHG members on Mushroom cultivation was held at Podadihi and Dumermunda villages with Resource Persons from Sambalpur. Special meetings with the beneficiaries / EDC members and SHGs were also held with the PMU Officials, Enablers and Marketing agencies for marketing of the produces / surplus paddy, vegetables and spine gourds.



Sensitization of EDC members

5.1.4.9: Retaining and Improving Socio-Cultural fabric:

a) Animal Health / Vaccination camp:

People living in project villages mostly depend on agriculture and almost all households have some domestic cattle, either to help in agriculture, or to get milk or even for the purpose of CDM only. Regular / periodical vaccination of these cattle is essential to prevent any spread of communicable diseases to wildlife in the sanctuary. In association with the Animal Husbandry Department, Govt of Odisha, Health cum Vaccination camps for the domestic cattle were organized. The details of Animal Health camps organized are as follows:





Animal vaccination & health camp

| S No | S No Location of Animal Health | | No of animals Vaccinated / checked | | |
|------|--------------------------------|----------|------------------------------------|------|-------|
| | Camp | | Cows | Goat | Total |
| 1 | GADAPATI | 25-09-22 | 58 | 22 | 80 |
| 2 | SANABADIBAHAL | 25-09-22 | 60 | 25 | 85 |
| 3 | RENGUMUNDA | 25-09-22 | 64 | 27 | 91 |
| 4 | KUTAB | 24-09-22 | 183 | 63 | 246 |
| 5 | DUMERMUNDA | 18-09-22 | 61 | 23 | 84 |
| 6 | TANSARA | 18-09-22 | 169 | 39 | 208 |
| 7 | CHIRGENKHOL | 23-09-22 | 128 | 29 | 157 |
| 8 | PATHURIA | 22-09-22 | 151 | 44 | 195 |
| 9 | PODADIHI | 20-09-22 | 150 | 37 | 187 |
| | Total | | 1024 | 309 | 1333 |

b) Human Health Camps:

The targeted project villages are remotely located about 20 Kms away from the Primary Health Centre at Jamankira. People are neither health conscious nor the facilities are readily available. Under the circumstances, Health Camps are organised in consultation with the Health & Family Welfare Department for regular health check up of the EDC members / villagers in the project villages for early detection of possible diseases and to avoid future complications. During 2022-23, the health camps were organised at the following locations:

| S No | Location of Human Health Camp | Date | No of People treated. |
|------|-------------------------------|----------|-----------------------|
| 1 | NUNVET | 21-12-22 | 53 |
| 2 | GARDPATI | 21-12-22 | 47 |
| 3 | SANABADIBAHAL | 21-12-22 | 26 |
| 4 | RENGUMUNDA | 26-12-22 | 57 |
| 5 | DUMERMUNDA | 10-12-22 | 17 |
| 6 | TANSARA | 31-12-22 | 67 |
| 7 | CHIRGENKHOL | 31-12-22 | 51 |
| 8 | PATHURIA | 10-12-22 | 47 |
| 9 | PODADIHI | 21-11-22 | 45 |
| | TOTAL | | 410 |





Human health camp

5.1.4.10: Convergence and Support Activities:

Under convergence with the Block Social Security Officer (BSSO) of Jamankira Block, Sri Bhubaneswar Pradhan of Nunvet, who is a physically challenged person, was provided with a Tricycle for his easy movement.



Bhubaneswar Pradhan with tricycle

5.2: Long-term Monitoring Plan for Management of Ecosystem-based Conservation of Bhitarkanika Conservation Area in Mangrove Wildlife Division, Rajnagar.

5.2.01 Introduction

Bhitarkanika Mangroves are considered to be one of the mangrove forest of the world with unique biodiversity that warrants a high conservation priority. A holistic ecosystem-based approach to strengthening present conservation measures is required. Given the potential impact of mangroves on climate change mitigation, increased human intervention, and the conservation priority for the Bhitarkanika ecosystem, the National Centre for Sustainable Coastal Management (NCSCM), a Centre of Excellence of Ministry of Forest, Environment & Climate Change, Govt. of India, located in Chennai has partnered with Odisha Forestry Sector Development Project, Phase-II for conducting a long-term study in collaboration with the Wildlife Wing of the Forest Department of the Government of Odisha to develop an ecosystem-based management programme.

5.2.02 Objectives

The objectives of the study are:

- a) Assessment of eco-flows to the BCA including coastal process studies (discharge, sediment transport, bathymetry);
- b) Characterization of mangroves for their resilience towards change climate and salinity gradient;
- Significance of BCA mangroves in climate change mitigation and NDC; c)
- Biodiversity Assessment and documentation; d)
- Environmental Monitoring of Microplastics in BCA; e)
- f) Ecosystem Goods and Services for the BCA;
- Development of Ecosystem Health Report Card for BCA and g)
- h) Capacity Building for monitoring and use of tools for conservation management

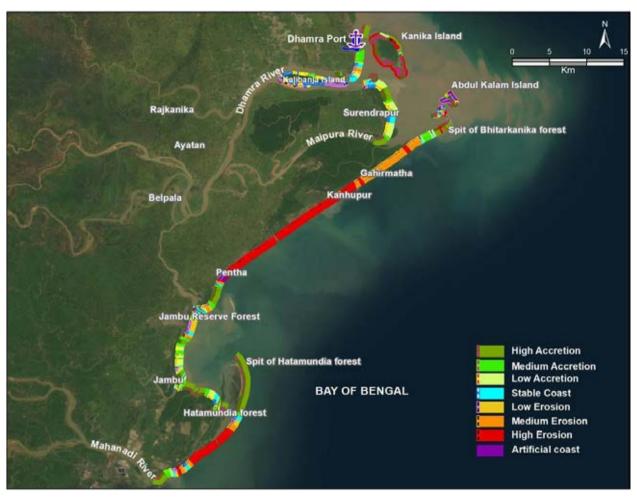
5.2.03 Strategy and Approach

Initially agreement was signed with NCSCM, Chennai for three years from December 2017 to December, 2020 to formulate the "Long term Monitoring Plan for Management of Ecosystem based Conservation for Bhitarkanika Conservation Area (BCA). After completion of three years of study, the progress of work was reviewed by the Governing Body of OFSDS and based on the feedback obtained from PCCF & HoFF, Odidha, Chief Wildlife Warden and PCCF (Wildlife), Odisha, RCCF, Bhubaneswar and DFO Mangrove Wildlife Division, Rajnagar, the assignment has been extended for further two years from 20th December, 2021 to 19th December, 2023 with revised Scope of work.

5.2.04 Progress

The progress made under the assignment during the reporting year 2022-23 is detailed below:

To create a long-term database for physical, chemical and biological variables from the BCA, an elaborate sampling plan has been adopted. Research team from NCSCM carried out sampling and analyses from April 2022 to March 2023. A brief summary of the activities carried out during the Year IV of the research study is mentioned below:



Shoreline change assessment along the Bhitarkanika Mangrove Forest (1990-2021

5.2.05 Assessment of Eco-flows

The eco-flows in the Bhitarkanika region were assessed in two parts:

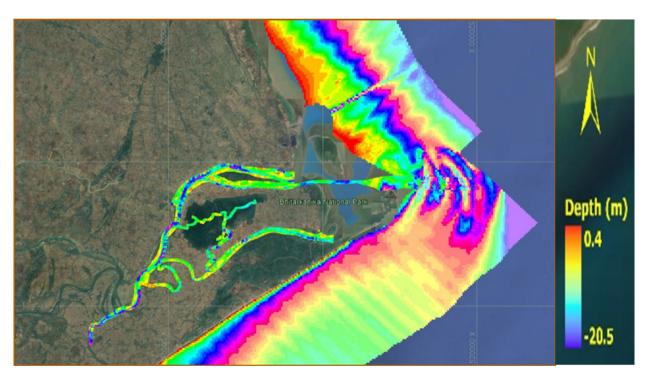
- (i) bathymetry surveys of major creeks; and
- (ii) estimation of river discharge by deploying the real-time current metre (RCM) at the confluence point of the Brahmani River during the dry season (February-March) of 2022.

A. The data from field survey was assessed during April - May 2022 and is beneficial in developing an ecosystem conservation plan and mitigating strategies for creek bank erosion. The present study revealed that, the Mouth of Bhitarkanika region (Block 4) has a very shallow depth of about 6 m compared to other creeks. Similarly, the Brahmani River Creek (Block 1), the creeks of the Taluchava regions (Block 3), and the open ocean (Block 6) have the maximum depth, varying from 18 m to 21 m. The mangrove creeks of the Bhitarkanika region (Block 2) have a variable depth of 0.4 m to 12 m, clearly indicating a medium depth compared to other blocks of the region. Overall the bathymetry varied between 0.4 m and 20.5 m in and around the Bhitarkanika region (Figure 1). The creek, which channels through the mangrove region, has a bathymetry that varies between 0.4 and 12 meters of depth and is highly silted in a few regions due to bank erosion and deposition of river sediments.

B. The primary reason for the coastal erosion along the coast of the Bhitarkanika is the variation in wave energy. River discharge was estimated by considering parameters such as the width between two banks of the river, depth values from the bathymetry data, and flow velocity from the field measurements. The river discharge assessment has been estimated at three locations, such as the Brahmani, Dhamra, and Gupti sites, and was observed to be 1567 m-3 s-1, 3740 m-3 s-1, and 1237 m-3 s-1, respectively. These inflow river discharges during the tidal fluctuations have a major influence on nutrient and sediment transport.

C. Analysis of shoreline change over the years indicated the existence of two hotspots that suffer intense erosion. One region is adjacent to the Hetamundia Reserve Forest, spanning a length of about 8.8 km and showing an average erosion rate of -9.3 m/yr. Besides, in the Bhitarkanika Reserve Forest, a length of about 32 km has been affected by erosion with an average erosion rate of -8.03 m/yr. The shoreline changes from east of Pentha to north of Gahirmatha, 21.5 km has suffered severe erosion marked by significant change in the shoreline position. Seawalls protect about 0.75 km of the Pentha coast.

D. The shoreline of Bhitarkanika, on the other hand, has high accretion measured for a length of around 41 km, which is seen at the tip of Hetamundia Reserve Forest (Figure 2). The northern portion of the Mahanadi River is experiencing strong accretion; either side of the Maipura River mouth is seeing accretion; and the Dhamra River mouth is experiencing low erosion on the southern side and accretion on the northern side. Accumulation occurs in both the northern and southern parts of Dhamra Port.



Bathymetry in the creeks and coastal regions of Bhitarkanika

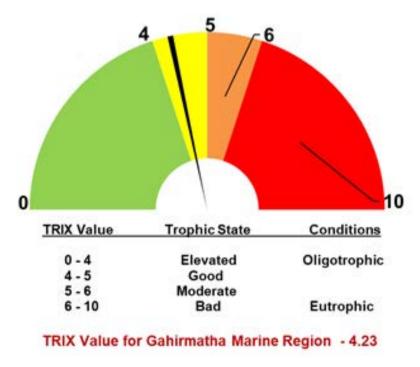
5.2.06 Mangrove litter flow in BCA mangroves

Mangrove leaf litter, the major contributor (70%) of the total litter fall, is biologically available to consumers and decomposers present in the sediment and water column. The monthly mean litter fall during the study period (Nov–Feb) was estimated as 5.43 ± 0.75 Mg dry litter ha- 1, corresponding to a mean annual leaf litter fall of 11.49 \pm 1.57 Mg dry litter ha- 1 y- 1, or 5.17 ± 0.70 Mg C ha- 1 from the Bhitarkanika mangrove ecosystem as a whole. This data was extrapolated to estimate the annual mean litter fall rate from the Bhitarkanika mangroves (Bhitarkanika Wildlife Sanctuary - BWLS), covering an area of 276 km2 (NCSCM unpublished data), which is estimated to be 317.1 ± 43 Gg of dry leaf litter, corresponding to 142.7 ± 19.4 Gg of C. Thus, an important fraction of mangrove net primary production, is returned to the environment, through litter fall in BCA mangrove area.

5.2.07 Water quality of Gahirmatha Marine Sanctuary

The water depth of the stations in Gahirmatha varied between 4.0 m to 24.0 m based on the sampling points; and the noted mean depth is 15.7 ± 5.1 m. During the survey in January, 2022, the mean salinity of the surface water was found to be 26.80 ± 1.14 and an average increase of 2 ppt in salinity from surface to bottom water was observed. Surface water dissolved oxygen ranged between 6.52 and 7.48, whereas the mean chlorophyll- A concentration was found to be 0.58 ± 0.19 μ g L-1. In general, within the total DIN pool, dominant fraction was present in reduced form as ammonium followed by nitrate and nitrite. The mean N: P ratios (4.7 ± 3.1) in the surface waters was lesser than the Redfield ratio (16) which indicates N limitation in the coastal waters of Gahirmatha.

Trophic Index (TRIX) was used to describe the trophic state of Gahirmatha Marine Sanctuary. The TRIX index was calculated using data collected in 2022 to evaluate the trophic status of the coastal waters. The obtained TRIX scores, ranged from 3.16 to 5.06 and had a mean of 4.23 (Figure 3). The finding suggests that the Gahirmatha regions eutrophication status were good, with waters that were moderately productive and occasionally turbid. This value contributes to the understanding of interrelationships between variables and the ecological processes.



Trophic status of Gahirmatha marine using TRIX

5.2.08 Benthic Biodiversity Assessment

The population density of the macro-benthic community was found to be varied between 185 to 2077 individuals/ m2. The maximum density was recorded at Bhitarkanika during the month of April 2022 and the minimum density was recorded at Maipura during the month of July 2022. Overall, when compared to the five study locations, Bhitarkanika with its dense mangrove area was found to support high macrofaunal diversity and density. After Bhitarkanika, the Mahandi mangrove and creek area revealed high density and diversity. However, the trend was not similar in all five months. During the month of July and September, the density of macrofauna was significantly reduced in all five areas, and this was attributed to high freshwater discharge in rivers and creeks due to the onset of the monsoon period. The univariate analysis showed that species richness and diversity value was high in Bhitarkanika during the March month and was due to the presence of high density and an individual number of species. A total of 9 higher taxa, with a total number of 75 genera and 101 species belonging to 33 families of meiofauna were recorded from the BCA. Of these, nematodes were found to be the dominant group with 32 species constitute 35% of the total meiobenthic organisms. Foraminifera was the next dominant group recorded with 24% followed by 19% of benthic diatoms, 8% of ostracods, 7% of benthic ciliates, 3% of copepods, 1% of tubulineans, 1% of turbellarians and 1% of kinorhynchans.

5.2.09 Real Time Emissions inventory of CO2, CH4

On an uninhabited forest area at Dangamal the EC flux tower of 15 m height was established in December 2021, to measure CO2, H2O, CH4 and energy fluxes (Figure 4). The tower is surrounded by a continuous mangrove patch with dominant species viz. Avicennia alba, Bruguiera gymnorrhiza, Rhizophora sp, with a mean canopy height of about 7 m. Overall, the exchange of CO2, H2O, and CH4 between the mangrove biosphere and the atmosphere is a complex process that is influenced by a variety of factors. Understanding this exchange is important for predicting





Eddy Flux tower installed at Dangamal

how mangrove ecosystems will respond to climate change and for developing effective strategies for their conservation and management. The results indicated that the CO2 fluxes from the mangrove forest varied from -2.78 to $0.62~\mu\text{M}$ m-2s-1 with a mean of $0.94~\mu\text{M}$ m-2s-1 (net annual sink). However, positive CO2 fluxes were observed during the months of April and May 2022. Except theses two months the mangrove ecosystem acted as a net sink of CO2 with a significant negative CO2 flux. The present study describes the net ecosystem exchange of CO2 in tropical mangroves in Bhitarkanika using monthly eddy covariance measurements from December 2021 to September 2022. The undisturbed Bhitarkanika mangrove forest is observed to be a significant net CO2 sink.

5.2.10 Ecosystem Health Report Card as a Management Tool

The Ecosystem Health Report Card was developed for the Bhitarkanika Conservation Area (BCA) capturing environmental, ecological and hydrological conditions in the BCA, which includes the Eco Sensitive Zone, Bhitarkanika Wildlife Sanctuary, Bhitarkanika National Park, Gahirmatha Marine Sanctuary and the Critically Vulnerable Coastal Areas. Overall, BCA score was found to be 'Good', based on ecological and water quality indicators. The Eco System Health Report card-2021 was developed using 2019-2021 data and the overall score was "Excellent".

Continuous improvement in planning/policy is required for maintaining the ecosystem health of BCA. Hence, preparation of the 3rd Annual Health Report Card 2023 was initiated to closely monitor the ecosystem health status and the information generated from this, will allow the local Government, Policy makers and other natural resource managers to better manage the aquatic ecosystem.



Ecosystem Health Report, Card and assigned grades for year-III, (2023)

The data reveals that there is no significant variation in pH or Chl-a concentrations across all locations, indicating that both parameters are acting consistently. Overall, water quality parameters in BCA are excellent, with an average score of 92%, with the exception of water clarity in select areas, which is a characteristic of mangrove waters (Figure 5). The water transparency in the Dhamra and Maipura portions is reduced due to heavy turbidity. Dissolved inorganic phosphate levels in the Mahanadi River were found to be greater than the previous year, possibly due to local pollution.

5.2.11 Capacity Building of field staff to monitor the health indicators of Bhitarkanika Conservation Area:

The field level officials of Kanika Range, Mangrove Wildlife Division, Rajnagar have been associated with the Scientists of NCSCM, Chennai during collection of Physical, Chemical and Biological data for management planning and monitoring of health condition of the Eco-system at regular intervals. Required capacity building trainings have been imparted to the field staff on analysis of samples collected. The laboratory at Dangmal is being upgraded with required instruments to facilitate the analysis of data being collected under different parameters.







Capacity Building of field staff

Chapter 6

Livelihood Initiatives under OFSDP-II

6.01 Introduction

Livelihood initiatives under OFSDP-II has been envisaged to go beyond the conventional approach of poverty eradication in forest fringe villages. The approach is to enhance the livelihood opportunities for the forest fringe dwellers to make their living economically, ecologically, and socially sustainable. The interventions made under livelihood initiatives have enabled to build up the resilience of the forest fringe dwellers to tide over difficult times. The activities under the broad head of livelihood improvement are being taken up with project fund as well as through convergence with the schemes of various line Departments. Community mobilisation and facilitation at the grassroots level has been taken up by the project for integrated development of the villages under the project. Various project guidelines, trainings and capacity buildings and Micro plan document are the key pointers to execute the livelihood and community development activities by the project personnel, field functionaries and Partner NGOs working in the project area.

6.02 Strategies

Livelihood interventions under the project involve the following strategies:

- Livelihood Resource Cell at PMU level for strategic planning, implementation and monitoring of livelihood initiatives.
- Engagement of Management and Marketing Support Agency and Social Enablers to support product clusters.
- Preparation of comprehensive Community Development Plan, namely- Micro Plan.
- Developing Common Facility Centre, namely- VSS Building cum IGA Facilitation Centre.
- Community Development and livelihood interventions through Inter-sectoral Convergence of schemes of line Departments.
- Provisioning of Revolving Fund to SHGs through VSSs for taking up IGAs.
- Providing IGA options along with marketing support which can be taken up through the different parts of the year.
- Participation of VSS and SHGs in State Level Tribal and Herbal Fairs.

6.03 Livelihood Resource Centre (LRC).

The Livelihood Resource Centre is a cell constituted at the Project Management Unit (PMU) of Odisha Forestry Sector Development Society. The LRC functions as a self- sustaining, autonomous unit with the project support for the purpose of organizing and upgrading clusters through promotion of income generating activities.

The Livelihood Resource Centre (LRC) is particularly functioning to augment the day-to-day handholding support to the VSSs/ SHGs/ CIGs / POPs and Multi-product Clusters for undertaking livelihood interventions with adequate backward and forward support for their long-term sustenance. In order to obtain professional support for establishing and operationalizing the product clusters, it was proposed to engage Marketing Management Support Agency (MMSA). The process of engagement of MMSA has been completed. In addition to this, LRC is also extending support for livelihood promotion in other projects under OFSDS such as Ama Jangala Yojana (AJY) and OMBADC-OFSDS.

LRC has been ensuring the access of alternative livelihoods opportunities to the forest dependent communities through Inter-Sectoral Convergence and disbursement of Revolving Fund to the Borrowing Entities. Different committees have been constituted from State level to grass-root level to ensure optimum synergy between the

line Departments and the project authorities of OFSDP-II in implementing the Govt. Schemes and Programme at the community level.

6.04 Engagement of Management and Marketing Support Agency (MMSA)

In order, to augment the technical, managerial and implementation support in establishing and operationalising Multi Product Clusters for sustainable livelihood initiatives and to promote Income Generating activities through the Self-Help Groups (SHGs), Common Interest Groups (CIGs) and the Poorest of Poor Households (PoPs), the project is collaborating with the Consortium of Kalinga Institute of Industrial Technology and Technology Business Incubator (KIIT-TBI) Bhubaneswar, Bhubaneswar City Knowledge Innovation Cluster (BCKIC), Bhubaneswar and Indian Institute of Entrepreneurship (IIE), Guwahati for Establishing and Operationalising Multi Product Clusters in the Project Area as the Management and Marketing Support Agency (MMSA).

The key objectives of the MMSA are;

- To facilitate Cluster based multi- product aggregation, value addition, packaging, marketing and supply i. chain infrastructures for products to reach remunerative markets.
- ii. To facilitate financial linkages, technological solution, quality checks, branding and market positioning of products.
- iii. To provide skill up gradation and capacity building trainings of various stakeholders, beneficiaries and participating agents of change towards building a culture of sustainable business and enterprise functioning with focus on conservation of ecological assets.

The broad scope of work of the Management and Marketing Support Agency (MMSA) includes establishing and operationalizing the Multi-Product Clusters by providing strategic support in the areas of community and CBO mobilization, business planning, appropriate skill building, identifying and defining the multi product clusters, developing systems and processes including digital platform for operationalizing and positioning of multiple products, building strategy and plans on supply chain management, value chain maximization, market development and providing marketing and R&D support. The MMSA has to work with clusters for developing financially viable and sustainable model within the environmental guidelines of Government of Odisha and make these clusters profitable and self-sustaining entities.

The MMSA under LRC, OFSDS is assisting in organizing tie-up with social enablers who are capable of linking the value-added products to the market. The MMSA is also organizing the development of standard operating protocols for collection and primary processing of different products and rolling out of the capacity building programs and membership drive of primary producers for setting up value chains.

| Status of Transactions Facilitated by MMSA Through Social Enablers under OFSDP-II till March, 2023 | | | | | | | | | |
|--|------------------------------------|------------------------|---------------------------|---------------------------------|---------------------|--------------|-------------|----------------------------|----------------------------|
| S. No. | Name of Social Enablers/Traders | Division | Date of Procurement | Products procured | Total Quantity Sold | | | No. of | Total Amount |
| | | | | | In Kg | In Pieces | In Crate | beneficiaries benefited | of Transaction (in INR) |
| 1 | Kanak Bioscience | Bamra | 04.01.2023- 07.01.2023 | Indigenous Aromatic Paddy | 19808 | 0 | 0 | 63 | 3,36,727.50 |
| 2 | Kanak Bioscience | Boudh & Ghumsur (S) | 15.02.2023 | Pulses | 65 | 0 | 0 | 2 | 6,350.00 |
| 3 | VillaMart | Dhenkanal | 08.01.2023- 17.03.2023 | Vegetables | 1505 | 1100 | 31 | 34 | 44,003.50 |
| 4 | VillaMart | Boudh | 31.01.2023- 16.02.2023 | Pulses | 126 | 0 | 0 | 2 | 13,690.00 |
| 5 | Agarwal Traders | Jharsuguda | 14.03.2023 | Dhataki Flower | 1885.4 | 0 | 0 | 98 | 53,224.86 |
| 6 | Agarwal Traders | Jharsuguda | 14.03.2023 | Bahada | 295.2 | 0 | 0 | 51 | 3,542.40 |
| TOTAL | | | | 23684 | 1100 | 31 | 250 | 4,57,538.26 | |

6.05 Community Development through Micro planning

Micro plan is a basic document prepared at each VSS level before commencing the project activities, followed by Revisit of the existing plan after completion of 4th Year of the project implementation. Active community participation was ensured during the preparation of Micro-plan and Revisit of Micro plan. Elaborate Participatory Rural Appraisal (PRA) tools are being used villagers, facilitated by Partner NGO Team Members, and Project Personnel while preparing the Micro Plan.

The Micro plan document prepared at each VSS was presented before the General Body of the respective VSSs for feedback and approval before sending it to Gram Sabha. The approved Micro Plans of each VSS were further approved Gram Sabha and deliberated upon in the planning meeting of the Panchayat Samitis for inclusion in the Perspective Plans of the respective Panchayats. Till date 1221 numbers of Micro Plans in 1211 VSSs and 10 EDCs have been formulated and approved in the respective Gram Sabhas and 355 Micro plans of 355 VSSs (Batch-I) have been revisited and modified as per the changing context and current needs of the community.

6.06 Developing Common Facility Centre, namely - VSS Building-cum-IGA Facilitation Centre:

VSS Building cum IGA Facilitation Centres have been created at all VSSs level to fulfil the need of the community to have a Common Facility Centre at each VSS during preparation of Micro plan /Village Development Plan. This is a useful asset to the villagers for conducting meetings, cultural programme, organizing health camps, using the building for storage of NTFP produces, using as drying yard, animal health camp, trainings etc. Till March 2023, a total of 1167 VSS Building cum IGA Facilitation Centre have been constructed and construction of remaining 44 buildings in Batch-III & IV is under progress.

6.07 Community Development through Inter-sectoral Convergence:

A well-defined institutional framework at different level has been envisaged in the project document for effective coordination with line departments for inter-sectoral convergence. The High-Power Committee (HPC) and the Governing Body of OFSDS is the apex entity, which issues appropriate directions to concerned line departments for optimal synergy with OFSDP-II and to ensure inter-sectoral convergence in the project areas of OFSDP-II.

In order to facilitate smooth implementation of inter-sectoral convergence programme under OFSDP-II, District Level Advisory Committee (DAC) under the Chairmanship of District Collector and Block Level Advisory Committee (BLAC) under the Chairmanship of Block Development Officers have been constituted. The senior officials of the Line Departments at district level and block level are the members of DAC & BLAC respectively. BLAC meetings are convened once in every month, whereas the DAC meeting is convened in every quarter to facilitate the implementation of different government schemes in the OFSDP-II project villages, as per the need identified in







Training on Fish Farming, Boudh Division

the Livelihood Development Plan. Various community development activities such as repair of approach roads and tube wells, cleaning of drains, fixing of street lights, animal and human health camps etc. are taken up at VSS level as Entry Point Activity achieved through convergence.

During the Financial Year 2022-23 a sum of Rs.9105.85 Lakhs have been mobilized covering 3.63 Lakh beneficiaries of 1.93 lakh households. Different type of works of Line Departments have been executed by the VSSs for IGA promotion. Detail is given in the table below.









Multiple income generation activities taken up in different VSSs of OFSDP-II

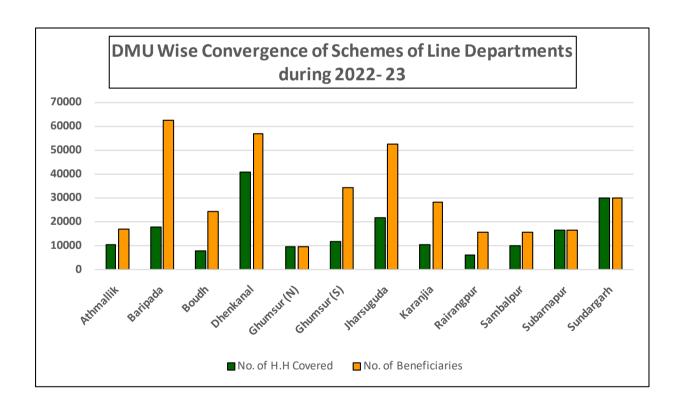


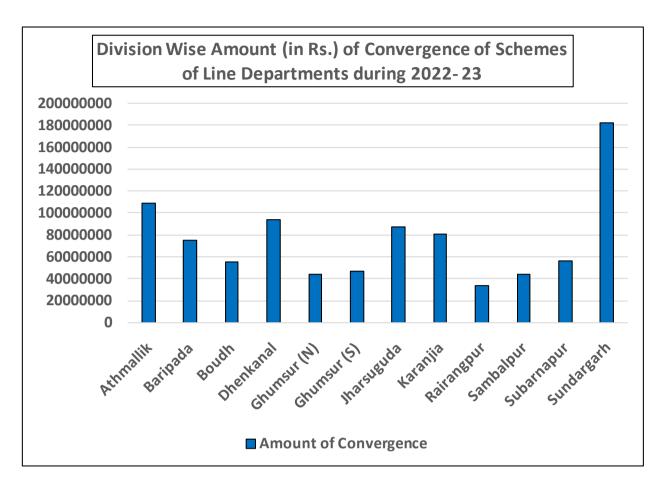


 $Harvesting\ of\ vegetables\ and\ selling\ activities\ of\ different\ VSS\ under\ liv lihood\ component\ of\ OFSDP-II$

DMU Wise Convergence During 2022-2023: (Amount in Lakhs)

| Name of DMU | No. of VSSs Covered | No. of H.H Covered | No. of Beneficiaries | Amount of Convergence |
|-------------|---------------------|--------------------|----------------------|-----------------------|
| Athmallik | 75 | 10635 | 17072 | 1092.04 |
| Baripada | 135 | 17623 | 62561 | 754.11 |
| Boudh | 71 | 7616 | 24522 | 553.18 |
| Dhenkanal | 150 | 40835 | 56942 | 941.27 |
| Ghumsur (N) | 100 | 9438 | 9782 | 445.02 |
| Ghumsur (S) | 65 | 11884 | 34361 | 470.10 |
| Jharsuguda | 88 | 21759 | 52539 | 875.54 |
| Karanjia | 80 | 10435 | 28364 | 810.17 |
| Rairangpur | 107 | 6213 | 15741 | 338.80 |
| Sambalpur | 100 | 10089 | 15769 | 444.84 |
| Subarnapur | 84 | 16455 | 16455 | 558.94 |
| Sundargarh | 156 | 29878 | 29878 | 1821.84 |
| Grand Total | 1211 | 1,92,860 | 3,63,986 | 9105.85 |

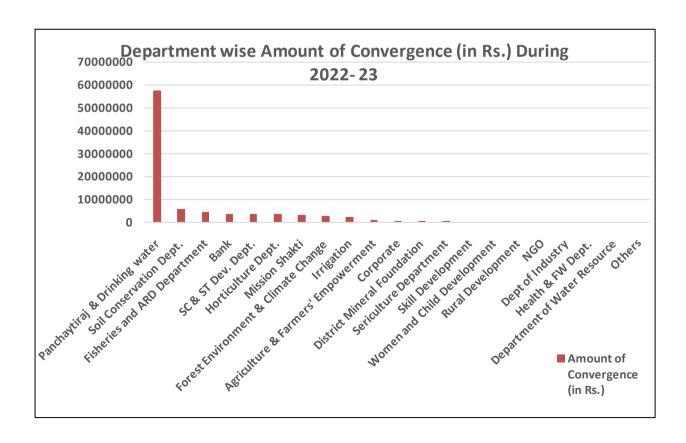


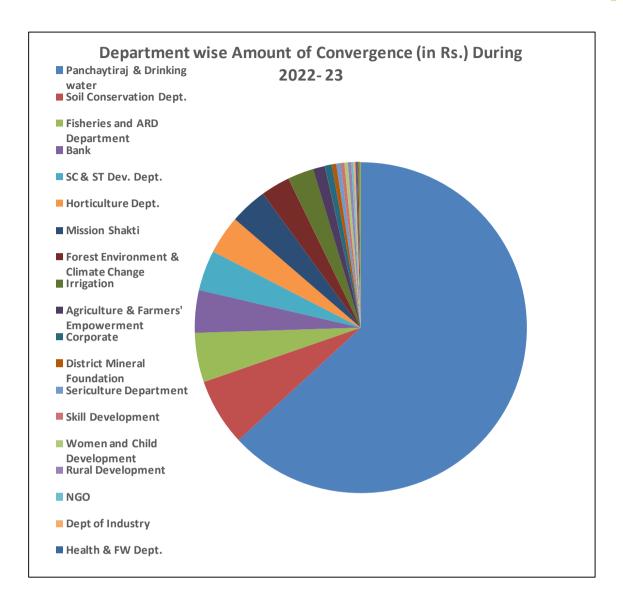


During the year under report, 1211 VSSs have been covered under convergence. Departments like Panchayati Raj & Drinking Water, Soil Conservation, SC & ST Dev., Women and Child Development, Horticulture, Fisheries & ARD, Health & Family Welfare, Irrigation, PWD etc. have made significant contribution through inter-sectoral convergence.

| Department Wise Convergence During 2022-2023 Under OFSDP-II | | | | | |
|---|-------------------------------|---|--|--|--|
| Department | Total Beneficiaries (In Nos.) | Amount of Convergence (Rupees in Lakh) | | | |
| Panchaytiraj & Drinking water | 268695 | 5751.21 | | | |
| Soil Conservation Dept. | 3640 | 595.13 | | | |
| Fisheries and ARD Department | 11353 | 437.11 | | | |
| Bank | 1877 | 376.68 | | | |
| SC & ST Dev. Dept. | 10475 | 359.23 | | | |
| Horticulture Dept. | 12290 | 342.36 | | | |
| Mission Shakti | 5482 | 330.71 | | | |
| Forest Environment & Climate Change | 18580 | 260.45 | | | |
| Irrigation | 1831 | 231.20 | | | |
| Agriculture & Farmers' Empowerment | 11415 | 104.82 | | | |
| Corporate | 1466 | 61.56 | | | |
| District Mineral Foundation | 589 | 39.21 | | | |

| Sericulture Department | 30 | 39.00 |
|--|---------|---------|
| | | |
| Skill Development | 828 | 32.61 |
| Women and Child Development | 3471 | 31.25 |
| Rural Development | 854 | 29.53 |
| NGO | 4265 | 18.76 |
| Dept of Industry | 166 | 18.22 |
| Health & FW Dept. | 4354 | 14.11 |
| Department of Water Resource | 1036 | 11.75 |
| Urban Development | 40 | 7.00 |
| Labour Deptt. | 45 | 4.00 |
| Ministry of Petrolium and Natrual GAS | 328 | 3.19 |
| MP/MLA LAD | 170 | 3.00 |
| Security & Empowerment of Persons With | 35 | 1.60 |
| Disabilities | | |
| Dept of Energy | 67 | 0.50 |
| Railway Dept. | 5 | 0.50 |
| Revenue & Disaster Management | 67 | 0.50 |
| Handloom & Textile Dept | 20 | 0.30 |
| Finance Dept. | 292 | 0.29 |
| Other | 20 | 0.09 |
| Education | 200 | 0.00 |
| Total | 36,3986 | 9105.85 |





The convergence initiatives can be grouped into different categories such as resource based, policy based, skill based, infrastructure based and service based. The P-NGO teams and field functionaries have played an important role in mobilising the community and facilitating the community development at the local level under the guidance of project personnel.

Various Livelihood initiatives like mushroom cultivation, mo-bagicha, sal seed selling, floriculture, vermin compost, vaccination of livestock, poultry, seeds distribution, selling of medicinal products, fish farming etc. were initiated through Inter-Sectoral Convergence.

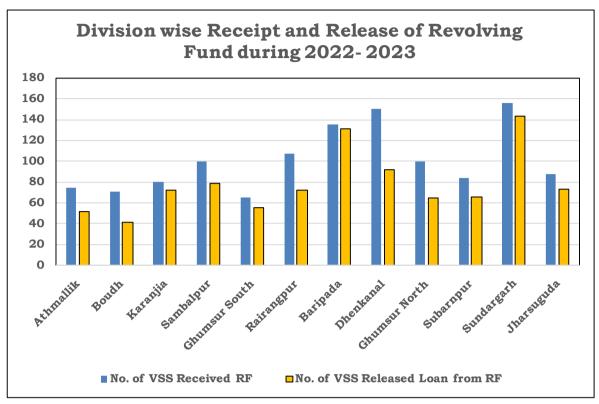
6.08 Provision of Revolving Funds to VSS:

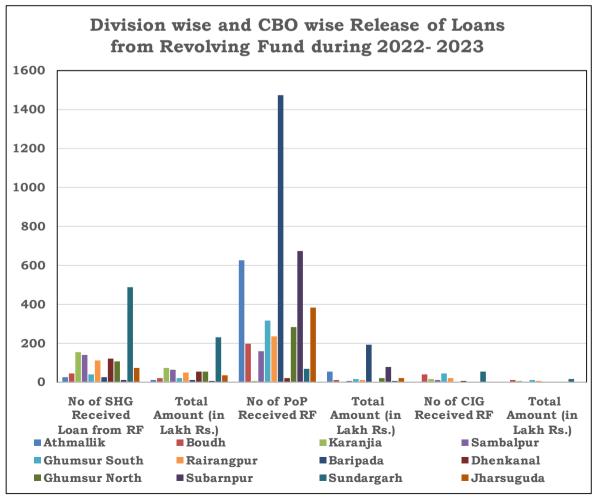
Revolving Fund (RF) is one-time grant provided to each VSS under the project to provide loan to the SHGs, CIGs and Poorest of Poor for undertaking IGAs to augment the family income. This fund is aimed to improve access to small scale finance required for investment towards IGAs. A detailed guideline has been prepared for effective use of Revolving Fund (RF). Training and capacity building programmes have been conducted for the project personnel to manage the fund effectively at each VSS. A Loan appraisal committee has been created in each project VSS to facilitate the preparation of the Business Plan and subsequently to verify it so that the same can be placed before the VSS for approval of loan. The Borrowing Entities like SHGs, CIGs and Poorest of Poor, with the assistance of P-NGO staff prepare the Business Plan to avail the loan from RF through VSS.

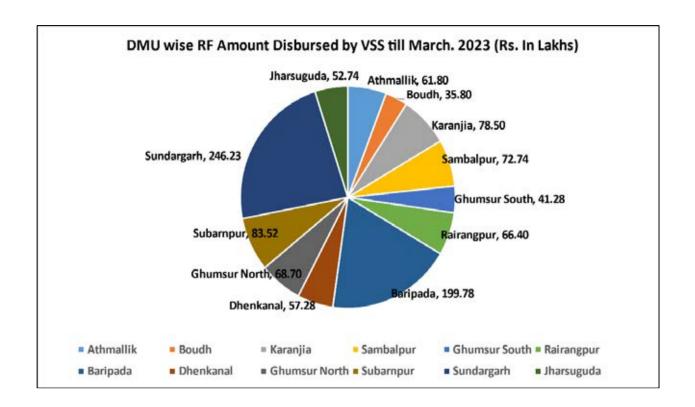




Market linkage of Dhatki flower through revolving fund activities







Division wise Released of Loan from Revolving Fund during 2022-2023)

| S. No | Name of DMU | Total Amount Disbursed to Borrowing Entities (in Lakhs Rs.) | No of SHG Received Loan from RF | Total Amount (in Lakh Rs.) | No of PoP Received RF | Total Amount (in Lakh Rs.) | No of CIG Received RF | Total Amount (in Lakh Rs.) | Repayment Amount (in Lakhs Rs.) |
|-------|-----------------------|--|---|-------------------------------------|--------------------------------|-------------------------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 1 | Athmallik | 61.80 | 25 | 8.59 | 625 | 53.21 | 0 | 0 | 21.35 |
| 2 | Boudh | 35.80 | 43 | 18.05 | 197 | 10.00 | 39 | 7.75 | 5.12 |
| 3 | Karanjia | 78.50 | 154 | 73.75 | 4 | 0.20 | 14 | 4.55 | 8.07 |
| 4 | Sambalpur | 72.74 | 139 | 62.75 | 160 | 7.99 | 10 | 2.00 | 26.26 |
| 5 | Ghumsur South | 41.28 | 36 | 16.83 | 312 | 15.85 | 43 | 8.60 | 10.76 |
| 6 | Rairangpur | 66.40 | 111 | 48.25 | 234 | 11.85 | 17 | 6.30 | 9.45 |
| 7 | Baripada | 199.78 | 26 | 11.43 | 1473 | 188.35 | 0 | 0.00 | 41.94 |
| 8 | Dhenkanal | 57.28 | 119 | 55.18 | 18 | 1.10 | 5 | 1.00 | 9.38 |
| 9 | Ghumsur North | 68.70 | 104 | 51.60 | 279 | 17.10 | 0 | 0.00 | 10.68 |
| 10 | Subarnpur | 83.52 | 13 | 4.45 | 674 | 77.87 | 3 | 1.20 | 10.37 |
| 11 | Sundargarh | 246.22 | 483 | 229.57 | 64 | 3.20 | 49 | 13.45 | 88.39 |
| 12 | Jharsuguda | 52.74 | 74 | 32.88 | 381 | 19.14 | 3 | 0.72 | 15.45 |
| Total | (47 Range/50 FMUs) | 1064.76 | 1327 | 613.34 | 4421 | 405.85 | 183 | 45.57 | 257.21 |

ସକାଳ-୫.୧.୨୦୨୩

ରୋଜଗାର ସୃଷ୍ଟି କରୁଛି ସାଗରପାଲି ବନସୁରକ୍ଷା ସମିତି

ପୁନରଗଡ଼, ୪୮୧(ସମିସ)

ଯୁକ୍ତ କଳପରିଚାଳନାର ସଫଳ ଦୃଷ୍ଟାକ୍ତ ଦେଉଛି ସାଗରପାଇଁ ବନ ସୁରକ୍ଷା ସମିତି। କାରଣ ଏହି ବନ ପୁରଖ ସମିତି ବହୁବିଧ ରୋଜଗାର ସୃଷ୍ଟି କରି ଗ୍ରାମବାସୀଙ୍କ ଜୀବନ ଜୀବିକାରେ ବିଶେଷ ଉଲ୍ଲତି ଆଣିବାରେ අවසුව දෙවෙම් අයදෙකුම් අවසුම් ଟାଙ୍ଗରପାଇଁ ବୃକ ଆଧୀନ ମଙ୍ଗବପୁର ପଞ୍ଚାରତର ମଙ୍ଗବପୁର ତାଳସ ସାମର ଏକ ପଡ଼ା ଗାମ । ମଙ୍ଗଗପୁରରୁ ସମ୍ପର୍ଶ ବିହ୍ଲିନ୍ନ ଭାବରେ ଦୀର୍ଘ ୫ କିଲୋମିଟର ଦରରେ ଥିଲେ ମଧ୍ୟ ଗାମଟି ରାଜସ ଗାମର ମାନ୍ୟତା ପାଇନାହିଁ। ଆଜକୁ ପ୍ରୟ ୨୦୦ ବର୍ଷ ପୂର୍ବେ ୧୮୧୮ ମସିହାରେ ବସତି ପ୍ରାପନ ହେଇଥିବା ଏହି ସାଗରପାଲି ଗ୍ରାମର ସମୁଦାୟ ପରିବାର ସଂଖ୍ୟା ୧୦୬ । ସମିଚିତ୍ର ଏଥିରେ ସାମିଲ କରାଯାଇଥିଲା । ଅଛନ୍ତି । ୧୯.୭.୫ ମସିହାରେ ସାଗର ଯୁବକ । ଗ୍ରମର ଅର୍ଦ୍ଧାଧିକ ପରିବାର କୃଷି ଉପରେ ସଂଘର ସଭ୍ୟ ସଭ୍ୟାମାନେ ଜଙ୍ଗଲ କାଟିକା ବିରୋଧରେ କଟକଣା ଜାରି ଜରି ଜଙ୍ଗଳ ସଙ୍ଗସହାଣଳ ଗୋଷୀ ମାଧ୍ୟମରେ ପୁରକ୍ଷା ପାଇଁ ନିସମାବଳୀ ପ୍ରସ୍ତୁତ କରିଥିଲେ ଗୋପାଳନ, ଜିଆଖର, ମାଣ୍ଡିଆ ଚାଷ, ରଥା ଏକ କନ ସୁରକ୍ଷା ସମିତିର ଗଠନ ହଳଦା ତାଷ, ଛତୁତାଷ, ମହୁତାଷ ଇତ୍ୟାଦି

ସାଗରପାଲି ବନ ସୁରକ୍ଷା ସମିତି ସ୍ତୁରରଗଡ଼ ବନଖଣ୍ଡରେ ଫଞ୍ଚୀକୃତ ହୋଇଥିଲା । ସେ ଦିନଠ ଗାମବାସୀଙ୍କ ସାମହିଳ ଉଦ୍ୟମ ଶମବାଳ, ଏକତା, ସହଭାଗିତା, ଠେଙ୍ଗାପାତି ଦ୍ୟବସ୍ଥା ହାରା ଏହି ଜଙ୍ଗଲ ପୁରକ୍ଷାସମିତି ଜଙ୍ଗଲ ସୁରଥାର ଏକ ଦୃଷ୍ଟାନ୍ତ ସୃଷ୍ଟି କରି ପାରିଛି । ୨୦୧୭ ଡିସେମ୍ବର ୧ ସୁନ୍ଦରଗଡ଼ କନଖଣ ଅଧାନ ଜଳକପୁର ଖେତ୍ର ପରିଚାଳନା ଏକକରେ ଓଡ଼ିଶା ବନାଞ୍ଚଳ ଉନ୍ନୟନ ପ୍ରକଳ୍ପର ହିତୀୟ ପର୍ଯ୍ୟାୟ କାର୍ଯ୍ୟକମ ଆଜନ ହେବାପରେ ସାଗରପାଇଁ ବନସ୍କରଣା

ଯଗ ବନ ପରିଚାଳନାର ସଫଳ ଦୃଷ୍ଟାନ୍ତ ଟିମ୍ଲିକର ବିଗାମ୍ବର ଉପାଧାୟଓ

ଉନ୍ନଣନ ଅଧିକାରୀ ମନ୍ତନାରଞ୍ଚଳ ମଲ୍ଲିକଙ୍କ ନିରନ୍ତର ଉଦ୍ୟମ, ସହଯୋଗ ହାରା ନିର୍ଭରଣାଳୀ ବନସରଥା ସମିତି ତରଫର ତାଷ, ୨୨ ଜଣ ତାଷୀ ମାଣ୍ଡିଆ ତାଷ କରି ଉପ୍ରକଟ ହୋଇଛନ୍ତି । ଏହଦ୍ୱବାଶ ୫୪ ତାଷ କରୁଥିବାବେଶକ ୩୪ ଜଣ ମହିଳା

ସହଯୋଗୀ ଅନଷାନ ସେବଳର

ଇଁଟର ଥାର ଜପାବନ କରି ନିଜର ଜୀବିକାକ ପୁଦ୍ରକ କରିବାରେ ସଫଳ ହୋଇଛନ୍ତି । ସର୍ଜ୍ୟସନ୍ତ୍ୟଙ୍କ ଅତ୍ୱାନ୍ତ ପରିଶମ ହାରା ଜୁଇଁ ସାଗରପାଲିର ୨୪ ଜଣ ମହିଳା ଜିଆଖଟ ଜୁଙ୍ଗରା ଫ୍ରେଖିଡ଼ ପାହାଜ ଯାହାଳି ୨୫ ବର୍ଷ ସମିତି ଯୁଦ୍ଧ ବନପରିନାଳନା ତଥା ନୂତନ ପଞ୍ଚଳଙ୍କଲ ପୂର୍ଣ୍ଣ ସବୁଳ ବନାନୀରେ ପରିଶତ ଟି ପରିବାର ନିଉମିତ ଭାବେ ପ୍ରତିବର୍ଷ ହଳଦୀ । ହୋଇପାରିଛି । ପ୍ରତରେଡ଼ । କଳାଷ୍ଟର ବନଖଣ ଅଧିକାରୀ ପ୍ରଦାପ ମିରାଶେଙ୍କ ବୋଲି ଆଞ୍ଚଳିକ ମୁଖ୍ୟ ବ ସଂରକ୍ଷକ ଜ

ପ୍ରତ୍ୟେକ ସଙ୍ଗ ସହାୟକ ଗୋଷୀ ପାଣିତ ସହ୍ରପ୍ରଯୋଗ କରି ବହୁବିଧ ଆଉଛିଚିକ ଏହି ସାଗରପାଲି କନ ପୁରକ୍ଷା ସମିତିର କାର୍ଯ୍ୟକ୍ରମରେ ନିୟୋଜିତ ହୋଇଛନ୍ତି । ଆସାମୀ ଦିନରେ ସାଗରପାଇଁ ବନ ପୁରକ୍ଷା ପୂର୍ବରୁ ଏକ ଲଣ୍ଡ ପାହାତ ଥିଲା ଅଳି ଏକ ଜୀବିଳା ସୁଞ୍ଜିହାରା ଜଙ୍ଗଲ ଉପରେ ନିର୍ଭରଣାକତା କମାଇବାରେ ସହାଯଳ ହେବାରେ ରାଜ୍ୟକ୍ତରରେ ଆବର୍ଣ ସାଳିକ କରିଥିଲେ । ୧୯୯୩-୯୪ ମସିହାରେ ରୋଜଗାର ଜିଜିକ ବାର୍ଯ୍ୟକ୍ରମ କରାଯାଇଛି । ଗୋଫଳନ ହାରା ପ୍ରତ୍ୟହ ୧୪୦-୧୫୦ ପରାମର୍ଣ ଓ ତୃତ୍ସାଧ୍ୟାନରେ ଗ୍ରମର ଅନୁଶ କୁମାର ମିଶ୍ର ଆଖା ପ୍ରକାଶ କରିଛନ୍ତି ।



ට සිටුව විසි ම් සෙමු විසාහි ବୃତ୍ତିରୁ ବର୍ତ୍ତମନ ଇଥାଧିକ ଟକୀ ରୋଜଗାର କରି ବୃତିକୁ ବଞ୍ଚଳ ගහට අද පුළුදුවීම්ද පුළුදුම් (මිෂයාගෘ පත්ප යන්පරිය ବୂର୍ତ୍ତମ ଅଞ୍ଚଳର ଆଦିବାସୀ ମହିଳାଙ୍କ ଏହି ସଫଳତା ପାଇଁ ଗୁଲୁହପୂର୍ତ୍ତ ଜୁମିକା ପ୍ରହଣକରିଛି ଓଡ଼ିଶା ବନାଞ୍ଚଳ ଜନ୍ନଣନ ପ୍ରକଳ୍ପ ୨ର ଆହର୍ଜନ ପାଣ୍ଡି। ପୂର୍ବରୁ ଏହି

ପୁନ୍ଦରଗଡ଼ ଜିଲ୍ଲାର ଦୁର୍ଗମ ଗ୍ରାମ ମାନଙ୍କଠାରୁ ଅନେକ ଯୁବକ ଯୁବତୀ ଜୀବିଳା ସନ୍ଧାନରେ ଅନ୍ୟ ଜିଲ୍ଲା ତଥା ରାଜ୍ୟକୁ ଯାଉଛନ୍ତି । ସବଡ଼େଶା ବୁକ ଅଧୀନ କର୍ଲାଘାଟି ବନସ୍ତରଥା ସମିତିର ୨୦ ମହିଳା ନିଜ କୌଳିକ ଦୃଷିକୁ ଏକ ବିକଳ୍ପ ଜୀବିକାର ପଥା ରାବେ ଗ୍ରହଣ କରି ଅନ୍ୟମାନଙ୍କ ପାଇଁ ଉଦାହରଣ ସାଜିଛନ୍ତି ।

ଦିନିପିତି ଧରି କରିଆସୁଥିବା ଶାକୁ ବ୍ୟବସାସକୁ ତୟନ କରିଛନ୍ତି । ଏଥି ନିମନ୍ତେ ଏହି ଯୋଷାଣ ମହିକାମାନଙ୍କୁ ବ୍ୟବସାଣିକ ସୋଳନା ପ୍ରଷ୍ମୃତି ଠାରୁ ଆରଣ କରି ବଳାର ଫସୋଗାକରଣ ପର୍ଯ୍ୟନ୍ତ ସେନକ ସହାରତା ପ୍ରତାନ କରି ଆସ୍କଥି । ଗୋଟିଏ ବର୍ଷ ମଧରେ ଏହି ଦୁଇ ସଙ୍ଗବହାରକ ପୋଷ ୧୬୫ ଇଥ ଟଙ୍କାର ଶାହୁ ବିକ୍ରି କରି

ଅନ୍ୟ ମହିହାମାନଙ୍କୁ ଦେବତ ସହ ସାଧନ ଓ ସାମିତ

ସଫସହାରକ ଗୋଷା ଗୁଡ଼ିକ

ଜାରତାର ମଧ୍ୟରେ ନିଜକ୍

ସାମାବଦ କରି ରଥଥଲେ ।

ମାନ ଏହେ ଆବର୍ଜନ ପାଣି

ସହାରତାରେ କର୍ଜାଯାହିର

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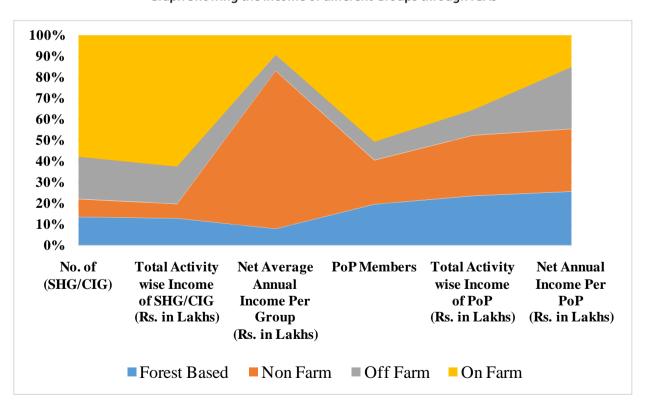
ବଳ ପୁରଷା ସମିତିର ଆବର୍ତ୍ତଳ ପାସିତ୍ର ୫୦ ବଳାର ଲେଖାଏଁ ରଣ ନେଇ ପରିଖେଧ କରି ପାରିଥବାବେତେ ମାରିଆ ମହିତା ଏହାଏବଡି ପ୍ରଥି ଅଟେ ୬୪ ହଳାର ଟଳୀ ରଣ ନେଇ ବ୍ୟବସାୟ କତ୍ରକର୍ତ୍ତି। ଆଲାମୀ ଦିନରେ ଶତ୍ର ବ୍ୟବସଣକୁ ଏକ ଆଲ୍ଲାଗାଡ୍ୟଲ୍ଲଗୀୟ କ୍ୟବସାୟରେ ପରିଶତ କରିବାକୁ ଇଥା ରଖିଛନ୍ତି ବୋଲି ମାରିଆ ମହିକା ବ୍ୟବହାଣକ ଗୋଷର ବ୍ୟାତିକା ବୃଥମ ପରେଙ୍ଗ କହିଛନ୍ତି ।



| Status of Utilisation of RF During (2022-23) | | | | |
|---|---------|--|--|--|
| Total no. of DMUs | 12 | | | |
| No. of FMUs | 48 | | | |
| No. of VSS where RF was released | 768 | | | |
| Total Amount Disbursed to Borrowing Entities (BEs) like SHG/CIG/PoP (Rs. in Lakh) | 1064.76 | | | |
| Total Amount repaid by BEs (Rs. in Lakh) | 257.21 | | | |
| No. of SHGs received Loan | 1127 | | | |
| No. of CIGs received Loan | 175 | | | |
| No. of PoPs received Loan | 4150 | | | |
| Total number of beneficiaries benefitted | 17,615 | | | |

Providing IGA options along with marketing support which can be taken up through the different parts of the year

Various income generation activities have been undertaken through convergence and through support of Revolving Funds. The activities have been categorised into four types viz. On farm, off farm, Non-farm and Forest based activities. During the year 2022-23, the comparative achievements are depicted in the graph and the table below:



Graph Showing the income of different Groups through IGAs

Net Annual Income from IGAs under OFSDP-II upto March, 2023 Through Convergence and Project Revolving Fund

| S. No. | Category of IGA | Activities undertaken | No. of (SHG/CIG) benefitted through IGA | Total Activity wise Income of SHG/ CIG (Rs. in Lakhs) | Net Average Annual Income Per Group (Rs. in Lakhs) | No. of PoP Members benefitted through IGA | Total Activity wise Income of PoP (Rs. in Lakhs) | Net Annual Income Per PoP (Rs. in Lakhs) |
|--------|--------------------|---|---|---|--|---|--|---|
| 1 | Forest Based | NTFP Collection and Marketing, Sal Leaf plates and bowl making, Bamboo Craft making, Broom collection and marketing, Mahua flower collection and selling | 250 | 132.96 | 0.53 | 567 | 179.35 | 0.32 |
| 2 | Non Farm | Grocery shop, Puffed Rice, Tiffin Stall, Shop of Garage Instruments, Pickles Making, Phenyle making, Rice Processing | 151 | 67.90 | 0.45 | 596 | 215.35 | 0.36 |
| 3 | Off Farm | Poultry, Goat rearing, Sheep rearing, Biofluc Fish farming, Dairy Farming, Piggery, Pisciculture | 367 | 182.24 | 0.50 | 255 | 91.69 | 0.36 |
| 4 | On Farm | Vegetable cultivation, Groundnut cultivation, Horticulture, Vermicompost preparation | 1043 | 632.06 | 0.61 | 1446 | 267 | 0.18 |
| TOTAL | | | 1811 | 1015.17 | 0.56 | 2864 | 753.14 | 0.26 |

The graph and the table indicate that the SHGs and CIGs have earned better income through On Farm and Non-Farm activities rather than through Forest Based activities. Further, the data shows that the income of forest fringe dwellers from Non-Timber Forest Products (NTFPs) is only upto 20% of the total income.

However, the Poorest of the Poor (PoP) people are still depending on Non-Timber Forest Products (NTFPs) and getting some income from collection and marketing of NTFP items.

6.10 **Value addition Through Establishment of Product Cluster:**

Creating opportunities for alternative Income Generation Activities (IGAs) for the targeted forest fringe dwelling communities is one of the key components of OFSDP-II. This helps in improving the income by providing sustained livelihood to the forest dependent community and reducing biotic pressure on forest significantly. Apart from small scale IGAs, one of the major components of the project is to establish Multi-Product Clusters in the project Divisions in order to ensure sustainable income for the community. Cluster approach is the effective measure to create long term opportunities for the SHGs, CIGs and Poorest of the Poor people in the VSS area for selling their products at a remunerative price.

As it would be difficult to take up processing, bulk marketing and retailing of the products at Vana Surakshya Samiti (VSS) level, OFSDP-II has strategically planned to promote Multi- Product Clusters for aggregation and value addition of the produces so as to ensure an efficient and remunerative marketing and thus enhancing the income level of the forest dependent communities.

Division wise List of Products identified for Proposed Multi Product Clusters

| Division | Range | Name of the Proposed Cluster Location | Name of the Major Product | Name of the other Products for Multi cluster |
|-------------|---------------------|--|------------------------------|---|
| Athamallik | Athamallik | Tangianisha | Ground nut | Mango, Bahada, Harida, Amla& Char |
| Baripada | Betonoti | Baidpur, Bartana | Sal Leaf | Honey, Harida, Bahada, Mahua seed (Tola), Bamboo |
| Dhenkanal | Dhenkanal | Hi-tech Nursery, | Cashew | Mango, Sal Leaf, Black Gram, Jack Fruit & Honey |
| Subarnapur | Ullunda | Matupali | Hill Broom | Sal leaf |
| Karanjia | Thakurmunda | Kendumundi | Sal Leaf | Myrobalans, Lemon, Tamarind |
| Rairangpur | Bisoi | Bartana | Sal Leaf | Honey, Harida, Bahada, Charaand others |
| Boudh | Boudh | Bamanda Central Nursery | NTFP & Pulses | Chara, Pulses, Tamarind |
| Sambalpur | Padiabaha, Dhama | Chamunda/Badmal/ Bhimkhoj | Sal Leaf | Tamarind, Bahada & Harida |
| Ghumsur (N) | Mujagada | Bhanja Nagar (Bana Vihar) | Sal Leaf | Cashew,Tamarind, Amla, Bahada, Harida |
| Ghumsur (S) | Buguda | Matajhari | Pulses | Cashew, Mango, Tamarind, Amla, Bahada, Harida |
| Sundargarh | Ujjalpur, Hemgiri | Hi tech Nursery, Ujjalpur | Sal Leaf | Mango, Char, Harida, Bahada |
| Jharsuguda | Kolabira, Bagdihi | Borpain/Ganjudihi/ Kukerama/Bhimjore | Lemongrass | Mango, Chilli, Harida, Bahada & Amla |

6.11 **Activities taken up in Sal leaf Cluster:**

Sal leaf collection, processing and marketing is one of the major IGAs of the forest fringe dwellers. Collective marketing of value-added Sal leaf products has become a focused livelihood intervention in Baripada, Karanjia and Rairangpur DMU. Establishment of Sal leaf Clusters were undertaken in the project villages during 2022-23 by involving VSSs, SHGs, Common Interest Groups (CIGs) and Poorest of Poor (PoP) members. Three Multi product clusters with Sal leaf processing and value addition as a major activity have been initiated at Karanjia, Rairangpur and Baripada Forest Divisions of Mayurbhanj District. Cluster buildings were constructed along with required equipment / machineries and electricity facility at the product cluster units for high level processing of Sal leaf plates. Regular social mobilization for improved Sal leaf cluster operation is being taken care of by the LRC Cluster Managers. Training on machine stitching of Sal leaf has been imparted to 250 women members. Apart from this, establishment of two more clusters in Boudh and Ghumsur South Forest Divisions are under progress. Each product cluster is proposed to take up the processing and marketing of one major product and few other potential products to ensure sustainable income for the forest dwellers. Production or value addition detail of Sal leaf is provided below:

| | Production Status of Sal Leaf Cluster Under OFSDP-II (2022-23) | | | | | | | | | | | | |
|-----------|--|-------------------------|--------------------|---|-----------------------------|----------------------------|---------------------|----------------------------------|------|---------------------------|----------------------------------|-----------------------|------------------------------------|
| | | the Multi Raw Materials | | Production Status (In Numbers) Total Production | | Selling S | status (In Numbers) | | | | Stock at Cluster (In Numbers) | | |
| S. No. | Name of the Multi Product Cluster | | | | | | | Selling Price/ piece (In Rs.) | | Total Sales (In Rs. | Materials in Stock | | Number of persons benefitted |
| | | Khali | Pali (2 Leaves) | No. of Plates Produced | No. of Bowls Produced | Khali/ Pressed Khali | Bowl | Khali | Bowl | | Khali | Pali (2 Leaves) | benefitted |
| 1 | Baripada | 17300 | 14000 | 4269 | 3750 | 4269 | 1350 | 4.00 & 4.50 | 0.7 | 19088 | 0 | 2400 | 33 |
| 2 | Rairangpur | 0 | 458000 | 0 | 8400 | 0 | 1500 | 0 | 0.8 | 1200 | 0 | 432800 | 44 |
| 3 | Karanjia | 7700 | 17600 | 6350 | 8800 | 6350 | 8800 | 4.00 & 4.50 | 0.6 | 12235 | 2000 | 7000 | 12 |
| TOT | AL | 25000 | 489600 | 10619 | 20950 | 10619 | 11650 | 0 | 0 | 32,523 | 2000 | 442200 | 89 |
| | Total Production of Leaf Plates and Cups (in Nos.) = | | | 31569 | | | | | | | | | |
| | Total Sale of Cluster = Rs. 32,523.00 | | | | | | | | | | | | |
| | Total perso | ns bene | fitted | 89 | | | | | | | | | |

6.12 Participation of VSSs/ SHGs in Herbal Fair at Bhubaneswar

The Odisha Forestry Sector Development Society (OFSDS) participated in the 15th State Level Kalinga Herbal Fair- 2023 organized by State Medicinal Plant Board, Government of Odisha from 10th February to 16th February 2023. The exhibition-cum-sale counter in the 15th Kalinga Herbal Fair – 2023 had witnessed participation of VSS and SHGs from thirteen Territorial Forest Divisions of OFSDP-II and AJY being implemented under Odisha Forestry Sector Development Society. The OFSDS stalls were visited by Honourable Minister, Department of Forest, Environment and Climate Change, Government of Odisha, Shri Pradeep Kumar Amat and Sri Debidutta Biswal, IFS, Principal Chief Conservator of Forests, HoFF, Govt of Odisha, and Dr. Meeta Biswal, IFS, PCCF (Projects) and Project Director, Odisha Forestry Sector Development Project.

This was a fair with a major thrust on organic based herbal products for health and fitness of human life. The VSSs were chosen from the identified Herbal Cluster of OFSDS. Priority was given to showcase the herbal products of the Self-Help Groups functioning under OFSDP-II and AJY herbal clusters.

Along with herbal products, OFSDS also ensured display of project activities and achievements at the exhibition. As many as 18 SHGs supported by Ama Jangala Yojana (AJY) and OFSDP-II, had participated in the event. Total 37 SHG members representing the Vana Surakhya Samitis of OFSDP-II and AJY Divisions participated during the seven-day exhibition.

The Odisha Forestry Sector Development Society (OFSDS) also participated in the Adivasi Mela 2023 from 20th February to 1st March 2023. The exhibition-cum-sale counter had witnessed participation of eleven Territorial Forest Divisions of OFSDP-II and AJY being implemented by Odisha Forestry Sector Development Society. In total, a sale of Rs.10.56 Lakhs was achieved by the participants. Participating in such exhibitions at State level has been an encouraging experience for the SHG and CIG members.

Chapter 7

Innovations under OFSDP-II

7.01 Introduction

The forest sector is perceived as being traditionally conservative and reluctant to adopt changes, even when these can be beneficial. This is a natural consequence of a sector that tends to operate over relatively long time periods. However, to compete successfully in a rapidly globalizing world, the forest sector needs to be innovative. Government policies play an important role in encouraging innovation in the forest sector. Transformative innovations occur by involving different actors in addition to those dominating the sector today, and there is already evidence of such innovations taking place.

Transformative innovations are also in the interest of governments that have used the forest sector to encourage rural development. These innovations may be stimulated as the crises facing the forest sectors in individual countries deepen. To do so, effective partnerships between all the interested parties are needed: government, industry, academia, and non-governmental organizations. Apart from collaboration amongst different entities, cross cutting issues and interventions need to be addressed.

OFSDS, through its Project, namely- OFSDP- II, has come to evolve many such transformative innovations which have been collated in this chapter.

The challenges faced while conceptualizing and implementing transformative innovations are narrated below:

- Lack of innovation strategies
- Impractical expectations for innovation
- Unempowered innovation teams
- Weak innovation culture
- Lack of managerial support
- Resistance to change
- Lack of internal and external collaboration
- Difficulty in transitioning from one phase to the next
- Futile innovation toolbox

These challenges were overcome by conceptualization of ideas, immaculate planning, effective capacity building, concentrated implementation and rigorous concurrent monitoring and evaluation and the cycle continues from one milestone to another with regular documentation.

7.02 Revisit of Microplans

Village level Micro Plan is a blueprint of long term (ten years in the instant case) comprehensive village development plan, which is need based and site specific, commensurate to available resources. The Micro Plan prepared under OFSDP-II through the VSS is aimed at enhancing forest ecosystem along with sustainable livelihood of local people through sustainable forest management for the people, of the people and by the people under the aegis of JFM Resolution of Govt of Odisha.

Village level Micro Plans have been prepared for all 1211 VSS covered under OFSDP-II with active participation / involvement of local people. As per the JFM Resolution, the Micro Plans have been prepared for a period of 10 years indicating the local needs and addressing the issues for fulfilment of requirements of rural people.

However, under the project guidelines, Revisit of the Micro Plans prepared for the villages / VSS has been planned on the 5th year i.e. on completion of 4 years of operations with the objective discussed in Chapter 3.

7.02.01 Implementation process:

OFSDP-II was launched in the year 2017-18 with preparatory works and practical implementation of activities in the Batch-I VSSs was carried out in 2018-19. So, the revisit of Micro Plans of 355 VSSs of Batch-I was taken up in 2022-23 covering all 12 Forest Divisions (DMUs). The entire revisit exercise of Micro Plans comprised the following stages:

- Preparation of 'Handbook on Micro Plan Re-visit', consisting of detailed formats to capture data with respect current geographical, demographical, social, and economic conditions as well as information related to all key-project components from each VSS area. The handbook was published in both English and Odia (local language) and circulated to all DMU, FMU for reference during revisit of micro plans.
- Orientation training was organized at Bhubaneswar to familiarize the all the DMU Chiefs and SMSs of DMU on the formats as well as the process of micro plan re-visit.
- Further, two-day training programme was conducted by the team of SMPs of PMU and PMC experts at all DMU headquarters to orient the FMU and PNGO staff on the formats as well as the process of micro plan
- Preparation of revised micro plans was carried out with full community participation i.e. VSS members, Animators, PNGO Staff, FMU staff etc., in all 355 VSSs of Batch-I, by using the revised formats as well as PRA exercise.
- The activities already carried out in the VSS, existing problems faced and probable solutions, interventions required for overall development of village in general and covering all sections of people (PoPs, CIGs, SHGs, Weaker sections etc.) was fully documented and planned for next five years.
- The draft revised micro plans, prepared at DMU level, were scrutinized at PMU level by the SPMs and PMC experts. The feedback reports were discussed in detail by the PMC experts with the DMU, FMU and PNGO staff, including the Member-Secretaries of concerned VSS in the review meetings organised at each DMU to ensure that all the corrections / discrepancies in data entry are carried out in the final version of the revised micro plans.
- The Micro Plans (Revised) were first approved by the General Body meeting of the VSS followed by approval from the concerned Palli Sabha / Gram Sabha making them FRA compliant.

7.02.2 Special features / uniqueness of Re-visit of Micro plan under OFSDP-II:

Though the preparation of micro plan for each VSS and implementing the forest management and community development activities as prescribed in the micro plan is a common practice under JFM Resolution, re-visit and mid-term review and modification of micro plan is a unique process adopted by OFSDP-II. The special features of re-visit of micro plan are:

- i. It is totally a participatory process in which the community members (VSS members) are involved in bothdata collection as well as perspective planning, paving way to bottom-up planning process in the project.
- Inclusion of crosscutting project components like Gender Mainstreaming (GM) & Gender Action Plan (GAP), ii. Environmental & Social Management Framework (ESMF) and Community based Monitoring, Reporting and Verification (CMRV) process.

- iii. Provision for planning convergence activities and enabling the community to access the benefits of various govt. welfare schemes in collaboration with line departments.
- iv. Scope for the community to assess its own progress enabled through the micro plan and make mid-way corrections and modifications in its perspective plan.
- v. Strengthens the community institutions like VSS, CIGs, PoPs and SHGs and promotes community's collective planning and action.
- vi. As it is an inclusive process, all sections of the community are involved in the preparation of the revised micro plan. Thus, it ensures community ownership of the plan.
- vii. Approval of the Revisit Microplan Document by the Palli Sabha incorporates the village into the PRI development process,

7.02.3 Lessons learnt / Benefits:

- From this exercise of revisiting the Micro Plans of Batch-I VSSs under the project, it is observed that, even within a span of five years of formulation of Micro Plan, there are many changes in the social, economic and environmental issues in the village.
- Planning and addressing the current issues of the locality encourages people to be part of the process and brings a sense of responsiveness among them to the local issues.
- As the local people are involved in collection of village level data as well as planning in addressing the
 issues, it helps them to tackle / solve the problems on their own which works in sustainable management
 of villages.
- It helps / empowers the villagers to coordinate with all line department officials for convergence of activities bringing overall development of village.

7.02.4 Collateral Benefits:

Revisiting of the Micro Plans in all 1211 VSSs covered under the project is a mandate under OFSDP-II and would be completed in the remaining Batches in the subsequent years. Morever, the process of revisiting the Village Level Plans prepared / formulated under different departments / schemes ensures peoples' involvement in planning and execution of developmental schemes fulfilling the aspirations of rural communities.

7.03 Gender Mainstreaming

7.03.1 Concept of Gender Mainstreaming (GM)

Gender mainstreaming has been widely recognized across the nations as a key-concept as well as a tool to ensure equality and equity in gender participation with respect to social / community development, particularly in developing countries. All the developmental projects, including those in forestry sector, adopt gender mainstreaming strategies to archive adequate and meaningful participation men and women beneficiaries in project activities and equitable access to project benefits.

Gender mainstreaming approach primarily recognizes gender (men & women) as the key-stakeholders in natural resource management and development sectors and aims to attain equality and equity in terms of gender participation, contribution, resource accessibility, benefit sharing and so on while they are getting involved in the process of social change / development. Specifically, it implies inclusion of men and women stakeholders in equal terms in the process of development management. This means that though the needs and priorities of men and women stakeholders in development may differ, they must be given equal consideration while planning,

implementation and monitoring the community development interventions. In the existing socio-economic context, gender mainstreaming can only be possible through rigorous social and economic empowerment and building the capacity of women in management of livelihood support activities so that they attain the equal status and treated at par with men in all aspects of rural life. Gender mainstreaming envisages sensitization of both men and women towards their equal social responsibilities and mutually supportive functions for their own community betterment.

The JFM program which has been rigorously implemented in the state of Odisha since early 90s has helped to build robust community-based organizations / institutions in the forms of VSSs, SHGs, CIGs, Palli Sabha etc. with adequate provisions for active women participation in most villages of the state, including those under OFSDP-II.

7.03.2 Gender Mainstreaming in OFSDP-II

The major objective of OFSDP-II is to archive sustainable forest management with community participation along with providing diversified livelihood opportunities for the economic well-being of the forest dependent communities. In this developmental process, special focus is given to the crucial social process of gender mainstreaming by the project to ensure equitable sharing of project benefits among the key-stakeholders without any gender discrimination.

Gender mainstreaming under OFSDP-II is an important cross-cutting component, in the sense that it is applicable across all other major project components and that too at all levels of project management / implementation units, right from VSS to FMU, DMU and PMU. At the village level, VSS is the key-community based organization responsible for implementing the gender mainstreaming strategies with the active association and technical support from the FMU, which is the project management unit at Forest Range level. The village level micro plan and annual plans prepared by the VSS, apart from plans for implementation of activities / interventions pertaining to different components of the project, also contains exclusive plan of activities to achieve gender mainstreaming at VSS / village level, termed as 'Gender Action Plan (GAP)'

The gender mainstreaming strategies formulated under OFSDP-II strive to achieve gender mainstreaming across all project components within the broad framework of JFM spelled out in the JFM Resolution 2011 of Govt. of Odisha, which aims to achieve community and gender participation in forest protection, its sustainable management, livelihood promotion and community development activities. The gender mainstreaming strategy under OFSDP-II is designed incorporating number of gender-oriented actions such as

- gender analysis to understand the gender specific issues, needs and priorities
- generation and utilization of gender segregated data for designing largely forest based livelihood and development interventions
- ensuring equal and effective participation of men and women in planning, implementation, monitoring and evaluation
- facilitating the process of gender empowerment through capacity building of men and women for making best use of project interventions and achieving better standard of living.

The OFSDP-II guidelines clearly spell out how to integrate the above gender specific actions to be integrated across all the components of the project. According to this guideline, the gender action plan, developed as a part of gender mainstreaming strategy is to address the need for creating scope for the greater participation of men and women in the decision-making process, reduce the gender-gap in accessing the information, funds, services, control over natural resources and equitable distribution of project benefits. As recommended in the project document, gender action plan has been formulated at all levels of the project. The gender action plan for the project management levels have been developed by PMU in consultation with DMUs and FMUs; whereas the gender action plan for each VSS has been prepared during the microplanning exercise and incorporated in the final micro plan document.

7.03.3 Addressing Issues of Transgenders in Odisha

OFSDP-II, under its cross-cutting component of Gender mainstreaming, apart from equality and equity issues related to the participation of men and women stakeholders in the project activities, also had plans to address the issues associated with the gender identity of transgender community such as discrimination, persistence of stigma, lack of educational facilities, unemployment, lack of shelter, supportive medical facilities, problems relating to marriage, property, livelihood-insecurity etc. which are to be addressed sensitively. In this respect, concise effort, in collaboration with the VSSs was to be taken-up to collect relevant and reliable data related to demography, socio-psychological status, education and economic status, and livelihood status and opportunities of transgender. The need was felt by the project management for increasing the participation level of transgender community in the special welfare schemes introduced by the Govt. of Odisha to achieve the economic and social empowerment of transgender communities so as to enable them to lead a dignified life with sustained income. However, although the need to address these issues was felt and recognized, the lack of data and information on the gender was not available. Hence, the project implementing agencies were sensitized so that necessary interventions can be included once this data and policy become available.

7.03.4 Progress made in Gender Mainstreaming under OFSDP-II

Gender mainstreaming has a special focus in Odisha Forestry sector Development Project, Phase-II (OFSDP-II) and is being implemented at all levels of the project i.e., PMU, DMU, FMU, PNGO, VSS and SHG levels as a key project component. Gender mainstreaming which is a process of social transition towards attaining gender equity and equality in community development initiatives, is not an isolated component, but an integrated activity carried out along with all other project components. As prescribed in the strategy document titled 'Gender Mainstreaming Strategy under OFSDP, Phase-II (2019)', the Gender Action Plan (GAP) with respect to different components and different management levels of the project is being implemented since the inception of the project.

Specifically, the progress made with respect to gender mainstreaming under the project during the year the year 2022-23 has been detailed below:

7.03.41 A Gender Mainstreaming at VSS Level through Micro Plan Revisit

The micro plan, in principle, serves as an instrument ensuring gender balance in its development interventions in terms of equality and equity in managing and using the community resources and subsequent sharing of usufructs and other benefits. The micro plan, with the involvement of Women Working Group (WWG), facilitates in capturing the gender concerns / issues and reflects them in the Gender Action Plan (GAP) of the micro plan document. GAP in the micro plan includes focused interventions which suit the needs of women, by particularly reducing work-drudgery and by increasing their participation in community institutions and governance.

During the year under report, the process of re-visit of micro plans was taken-up in the 355 VSSs of Batch-I. During the re-visit process, the micro plans which were prepared at the initial stages of project implementation were reviewed with broad gender perspectives like - gender analysis, gender needs and priorities, likely impacts of the activities and project components on women and men, gender responsive budgeting and subsequent preparation for annual plan. The draft revised micro plan, with sections on compiled gender related responses in the relevant section were finally approved by the General Body of VSS and subsequently by the Gram Sabha/ Palli Sabha.

7.03.4.2. B Incorporation of Gender Related Formats in the Handbook for Micro Plan Revision

A comprehensive 'Framework (Criteria & Indicators) for VSS Level Assessment of Micro Plan with reference to Gender Mainstreaming and Development under OFSDP-II and other gender related formats were prepared by the Project Management Unit (PMU) in collaboration with Project Management Consultants (PMC) and the same in English and Odia versions were included in the Handbook for Micro Plan Revision. These formats were meant to elicit exhaustive gender-segregated data and to formulate and incorporate gender action plan in the revised micro plan of each VSS. The following gender related formats were included in the Handbook for Micro Plan Revision:

- i. Gender involvement in daily routine works
- ii. Gender based participation in planning process, access and control over resources.
- iii. Gender Resource Map
- iv. Format for compilation of gender related responses at VSS level
- Assessment of budget allocation and expenditure in micro plan as per Gender Action Plan ٧.

7.03.4.3 C Capacity Building in Gender Mainstreaming

During the year under report, following training programs with the focus on gender mainstreaming were conducted:

- i. An orientation training on crosscutting components of the project, including gender mainstreaming was organized for the DMU Chiefs and DMU-SMSs before taking-up the micro plan re-visit process in the Batch-I VSS areas. The training session was conducted by PMU and PMC jointly at Bhubaneswar on 19th April 2022. The training was attended by all DMU Chiefs and DMU-SMSs.
- A two-day orientation training program was organized for the DMU Chiefs and DMU level SMSs on the ii. formats and process of re-visit of micro plan during 19-20 May 2022 at XIM University, Bhubaneswar. The technical session on gender related formats was conducted as a part of this training program.
- Following the above orientation training program, series of capacity building training programs on the iii. field level use of revised / new formats (inclusive of gender related formats) included in the Hand book for micro plan revision for the DMU/FMU/PNGO staff were conducted at all DMU headquarters during the period from May 24 to June 11, 2022 by the team comprising the Resource Persons from PMU, PMC and respective DMU (DMU Chiefs & SMSs).

The trained staff of DMU/FMU/PNGO, in turn conducted the trainings for the field staff, VSS and SHG members in the use of the prescribed formats during the micro plan re-visit process.

7.03.4.4 D Review of Revised Micro Plans Prepared by DMUs

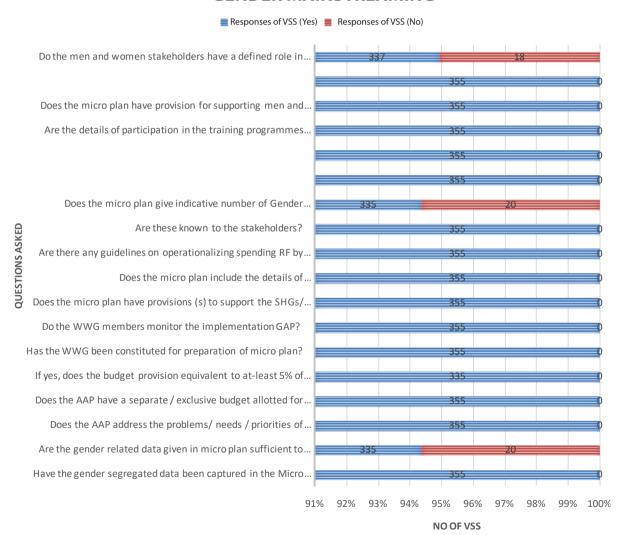
The sample Revised micro plans prepared and sent by the DMUs were reviewed by the PMU officials and the Experts of PMC. The feedback report prepared by the experts with respect to all sections of Revised micro plan, including the Gender mainstreaming was shared with respective DMUs for carrying out the corrections / modification suggested in the Revised micro plans. Apart from sharing written feedback, the PMC Experts also conducted review meetings in all DMU headquarters with the presence of DMU Chiefs, SMSs, FMU Coordinators, PNGO staff and VSS secretaries. These review meetings helped to clarify all doubts /misunderstandings raised by DMU and field staff with respect to different chapters of revised micro plans, particularly those related to cross cutting components like gender mainstreaming and properly carry out the corrections in the drafts of revised micro plans.

7.03.4.5. E Analysis of Gender Related Data Captured through Revised Micro Plans

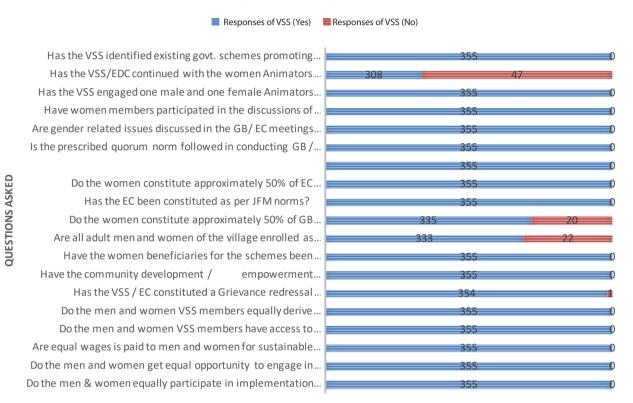
The data /information related to the status of gender mainstreaming at VSS level were captured through the 'Format for Compilation of Gender related responses at VSS level', included in the Handbook of Micro Plan Revision. The format contained 11 broad categories of gender mainstreaming actions envisaged at VSS level. Each of these gender related actions were subjected to several criteria which were measured through 37 specific questions related to gender responses expected to be complied at VSS level.

The data pertaining to the existing status of gender mainstreaming (in terms of Yes /No responses to the 37 questions) at 355 VSSs of Batch-1 of 12 Forest Divisions are presented below in graphical form.

CUMULATIVE RESPONSES TO THE QUESTIONNARE GENDER MAINSTREAMING



CUMULATIVE RESPONSES TO THE QUESTIONNARE GENDER MAINSTREAMING



80% 82% 84% 86% 88% 90% 92% 94% 96% 98% 100%

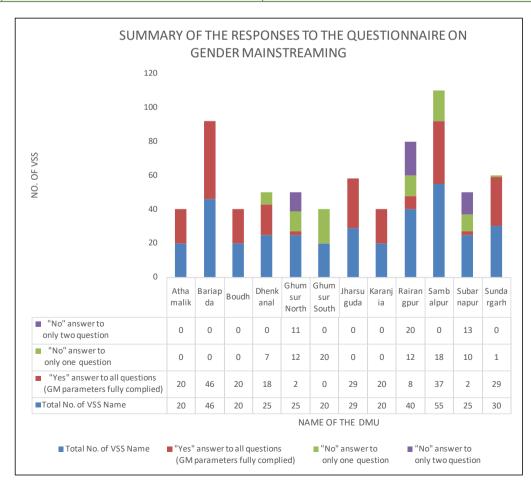
NO OF VSS

Summary of VSS Responses to GM Actions as per the Format

| Number of VSSs given 'Yes' response to GM questions (Extent of Compliance of prescribed GM parameters) | | | | | | | |
|--|--|--|--|--|--|--|--|
| 100% 97.30% 94.59% | | | | | | | |
| ('Yes' response to all questions) | ('Yes' response to all questions, except one question) | ('Yes' response to all questions, except two questions) | | | | | |
| 231 | 80 | 44 | | | | | |
| (65.07%) | (22.53%) | (12.39%) | | | | | |

Summary of DMU wise Non-Compliance of Gender Responses by VSSs

| S. No | The question / Specific GM related action to which 'Negative' (No) response given | No of VSSs (FMU / DMU wise) |
|-------|---|--|
| 1 | Are the gender related data given in micro plan sufficient to draw implementable GAP? | 15 VSSs under Buguda FMU of Ghumsur -South DMU |
| 2 | Does the budget provision equivalent to atleast 5% of micro plan budget? | 14 VSSs under Bahalda FMU of Rairangpur DMU |
| 3 | Does the micro plan give indicative number of Gender awareness trainings to be organized for VSS members (men & women)? | 15 VSSs of Bahalda FMU of Rairangpur DMU |
| 4 | Do the men and women stakeholders have a defined role in various activities related to product Clusters? | 12 VSSs under Sadar FMU of Sambalpur DMU |
| 5 | Are all adult men and women of the village enrolled as members of GB of VSS? | 18 VSSs under Mujagada FMU of Ghumsur-North DMU |
| 6 | Do the women constitute approximately 50% of GB membership? | 15 VSSs under Sonepur FMU of Sonepur DMU |
| 7 | Has the VSS/EDC continued with the women Animators after two years based on satisfactory performance? | In total 35 VSSs (Under Dhenkanal FMU (7) of Dhenkanal DMU; 12 VSSs under Mujagad FMU of Ghumsur-North DMU; 12 VSSs under Badampahar FMU of Rairangpur DMU; 16 VSSs under Sonepur FMU of Subarnapur DMU) |



7.04.F Inference derived from the analysis of data pertaining to Gender Mainstreaming (GM) at VSS level:

The analysis / interpretation of above-mentioned gender related data, represented in graphical and tabular forms indicate the following trend with respect to gender mainstreaming at VSS level under the project:

- i. Almost all the VSSs of Batch-1 are fully 'Gender Responsive', as they comply with most of the gender mainstreaming actions envisaged at VSS level.
- ii. Majority (65.07%) VSSs have fully complied the GM related actions, reflected through the positive responses to all 37 GM related questions in the format.
- In the rest of the VSSs, all GM related actions have been complied and reflected through the positive iii. responses to all GM related questions, except one question (in 22.53% VSSs) and two questions (in 12.39% VSSs).
- In total following seven GM specific actions (questions) have not been fully complied (negatively responded) iv. by 124 VSSs out of 355 VSSs (35.00%) of Batch-I. the guestions are given below:
 - Are the gender related data given in micro plan sufficient to draw implementable GAP?
 - Does the budget provision equivalent to at-least 5% of micro plan budget?
 - Does the micro plan give indicative number of Gender awareness trainings to be organized for VSS members (men & women)?
 - Do the men and women stakeholders have a defined role in various activities related to product clusters?
 - Are all adult men and women of the village enrolled as members of GB of VSS?
 - Do the women constitute approximately 50% of GB membership?
 - Has the VSS/EDC continued with the women Animators after two years based on satisfactory performance.

Amongst the above GM related questions, the last one received the negative response from maximum number of VSSs.

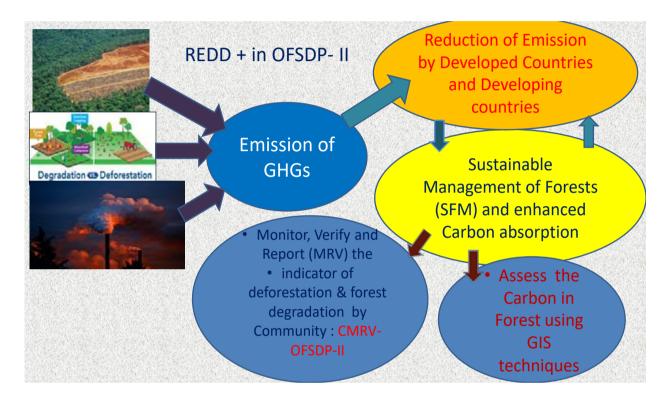
- v. DMU wise GM analysis reveals the following trend in complying GM actions by VSSs under different DMUs
 - Out of 12 DMUs, the VSSs under six number of DMUs viz. Athmallik, Baripada, Boudh, Jharsuguda, Karanjia and Sundargarh have fully complied the GM related actions.
 - Though no VSS under Ghumsur-South DMU has fully complied the GM related actions, all 20 VSSs have fulfilled 97.30% GM actions.
 - In case of other DMUs, Ghumsur-North and Subarnapur follow more or less same trend in fulfilling GM actions.
 - The Rairangpur DMU has 40 VSSs under Batch-1. Out of these, only 8 VSSs fulfill 100% GM actions. Among rest, 12 VSSs show 97.30% and 20 VSSs show 94.59% response to GM related actions.

In overall assessment, all the 355 VSSs of Batch-1 of all 12 DMUs show a very high positive response towards fulfilling actions related to gender mainstreaming and thus providing good scope for equal as well as equitable gender participation in all community developmental and forest management activities as envisaged in their respective micro plans. It is expected that the Revised micro plans prepared under the project would further strengthen this positive trend in gender mainstreaming at community level.

7.05 Community based Monitoring, Reporting & verification (CMRV) and REDD + readiness

7.05.1 Concept of REDD+ (Reducing Emission from Deforestation and Forest Degradation)

REDD+ is a financing model negotiated under the UNFCCC to reduce greenhouse gas emissions from deforestation and forest degradation in developing countries. These emissions are mainly due to various factors like deforestation, degradation, industrialization, and various factors contributing to the greenhouse gases causing global warming.



Deforestation - when forests are converted to non-forest uses, such as agriculture. industrialization and road and infrastructure construction.

Forest degradation - when forest ecosystems lose their capacity to provide important goods and services to people and nature.

In the JICA assisted Sustainable Forest Management Projects, the basic requirements to qualify for earning the carbon credits through REDD + mechanism is full filled in many ways.

Additionality ("not Business as usual"), SFM with community participation, environmental and social safeguards, equity are the basic parameters that are judged while preparing the REDD + projects. Hence, JICA assisted project may be eligible for preparing the REDD + project and there by earning the carbon credits to the project for the community.

The Monitoring, Reporting and Verification (MRV) is an important component of REDD + implementation. It is important to recognize the involvement of the rights of the forest dependent community and ensure the participation of community in SFM. The community-based monitoring and Reporting and Verification (CMRV) is a highly impactful tool for qualifying the REDD + Strategy at UNFCCC and National level.

In OFSDP-II, the CMRV is being implemented in all 1211 VSSs of all four batches. These VSS are the institutions comprising of forest dependents communities who are actively involved in implementing sustainable forest

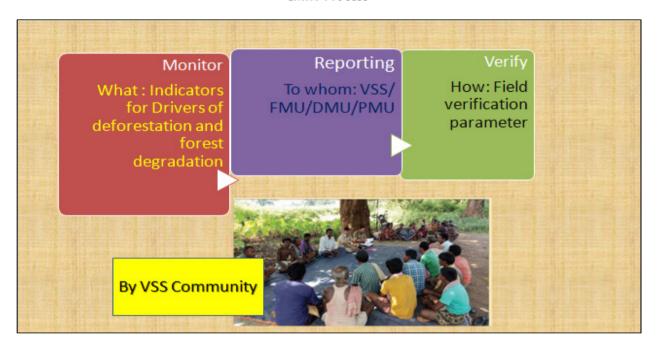
management initiatives in the adjoining assigned forest areas and livelihood promotion for the forest fringe dwelling communities involved. The involvement of the communities is maximised for implementing the CMRV using capacity building of the all-stake holders, including communities.

7.05.2 VSS based CMRV

The steps of CMRV implementation are as under:

- Identification of the Drivers of Deforestation and Forest Degradation
- Ranking of the Drivers
- Designing participatory strategy for mitigation of these Drivers so that the goals of Sustainable Forest Management are achieved.
- Concurrent Monitoring of the outputs or effects of SFM on Drivers of degradations on annual basis.

CMRV Process



Hence, the processes of Identification of Drivers, Strategy to mitigate the drivers, Measure and Monitor the effects, Report and Verify them by the community constitute Community Based Monitoring, Reporting and Verification (CMRV). This has been incorporated at the level of micro planning to mitigate the drivers. The possible drivers identified in case of OFSDP-II are given below:

- 1 Illicit removal / smuggling of timber and fuel wood
- 2 **Uncontrolled Grazing**
- 3 Uncontrolled Exploitation of wood
- 4 Encroachments
- 5 Forest Fire
- 6 Soil Erosion
- 7 Fodder Collection and Sale
- 8 NTFP Collection
- 9 Natural Causes- like Cyclone, Diseases and Pests etc.
- 10 Poverty alleviation Issues

These drivers have been identified by the forest fringe dwelling communities and the ranking with suggested measures to address the drivers and monitor the effects as a part of the steps of CMRV. To achieve this, intensive training programs were conducted at PMU/DMU/ FMU level where the DMU Chief, SMSs PNGOs were the participants. The participants were in fact the master trainers who would train the community at VSS level.

A new chapter on CMRV was included in the Handbook of Micro Plan Revisit and also a book on the guidelines was issued. Both these booklets highlight the following key aspects of CMRV implementation under the project with community participation.

- The micro planning is the basic tool for addressing the identification and addressing the Drivers of Deforestation and Forest Degradation (DDFD)
- At the stage of the micro planning, the exercise of DDFD identification and mitigation measures were conducted.
- Ranking of the DDFD by VSS community with the help of PNGOs/ SMS/ other project staff
- Identification of DDFD mitigation measures
- Implementation of Mitigation Measures
- Measure the effects, monitor, report to the various levels and verify at the implementation site i.e. VSS assigned area.
- Orientation of the Community on CMRV: Importance of REDD+ was explained by the project personnel in simple terms to the GB members of the VSS
- Formation of community based Sustainable Forest Management Monitoring Group (SFMMG) constituted by Executive Committee of the VSS/EDC.
- Orientation of the Members of Executive Committee to function as the SFMMG on following aspects:

7.05.3 Roles and Responsibilities of Sustainable Forest Management Monitoring Group (SFMMG) towards **CMRV**

- Identification of Drivers of Deforestation and Forest Degradation at VSS level
- Ranking of Drivers of Deforestation and Forest Degradation
- Assessment of the Magnitude of the Drivers of Deforestation and Forest Degradation
- Frequency of Monitoring:- Annual
- Preparation of Report Card at VSS Level
- After the identification, ranking of drivers of deforestation and forest degradation on the Rating Scale (High-3, Moderate-2 and Low-1) was done.
- The Annual Performance Report Card (based on color code performance rating system of High-Green, Moderate-Yellow, Low-Red given below) for each VSS/ EDC was made.
- Various formats for measuring the performance of VSS on different dimensions of management of the Drivers of Forest Degradation were introduced in Micro plan revisit (Chapter - 9)
- The effect of the addressing the drivers were numerically numbered and the total number obtained were scored with maximum marks of 50
- The ranking of the VSS based on the obtained marks were color coded as Red, Yellow and Green as given in the following table.



High: (marks obtained = 45 and above) use green color code. The VSS is performing well to address the drivers of degradation can be an example for other VSS



Moderate: (marks obtained between 40 to 44) Use Yellow Color code. The VSS is not performing satisfactorily. There is scope to improve the rating. Analysis is to be made for the cause of average performance and coarse correction is to be made



Low: (Marks Obtained less than less than 40 Marks) Use Red Color code. The VSS is not performing well. Poor Performance. Needs immediate attention, Situation analysis is to be made and immediate course correction is to be taken up. Call GB /EC to rectify the management and fact finding and corrections.

Based on the above ranking at VSS level the data of the all VSS were shared by the VSS to Field Management Units.

7.05.4 Self Help Group (SHG) Based CMRV

In order to reduce the dependence on forest and augment the income of the forest fringe communities, the Self-Help Groups (SHGs) are mobilized at VSS level. This is an important component for improving the SFM with the reducing the dependence on Forests in forest fringe villages.

The rating in terms of CMRV performance is done at each SHG level through Focussed Group Discussions (FGDs) with the following parameters:

- Regular meetings of SHGs 0
- Membership Status of SHGs (BPL) 0
- o Regular record Keeping (Minutes register, Pass Book etc.as per the prescribed list)
- Internal savings has started and the contributions are made to SHG fund O
- Involvement of Members in IGAs O
- Training on Sustainable Practices for IGA 0
- Loan Availability from Revolving Fund 0
- Repayment of loan taken from Revolving Fund O
- Default in Repayment of Loan taken from other Sources 0
- Any Other Item with the approval of SHG for scoring. (This will strengthen the Capacity of SHG for self-O evaluation)

The above criteria are numerically rated and scored based on the scoring the SHGs would be rated with colour coding as following



Score: Total: Maximum Marks 21

High = (marks obtained = 16 and above) use green color (performed better in IGA try to score more, can be used as an example for other SHGs)



Moderate = (marks Obtained 12 to 16 Use Yellow Color): Efforts to improve the rating in next monitoring be analyzing and resolving the problem)



Low = (Marks Obtained less than 12 Marks use color code red) Poor Performance Needs in depth analysis to study the main cause of poor performance

7.05.5 Findings of VSS Level CMRV

The VSS wise identification and ranking of the Drivers of Deforestation and Forest Degradation (DFDD) and the result of their mitigation measures were collated Division wise to develop a report card of status of implementation of mitigation measures, which is shown in the table given below:

| S. No. | DMU | VSS Approved | VSS Reported | Green | Yellow | Red |
|--------|---------------|--------------|--------------|-------|--------|-----|
| 1 | Athamalik | 20 | 20 | 19 | 1 | 0 |
| 2 | Baripada | 46 | 46 | 10 | 4 | 32 |
| 3 | Boudh | 20 | 20 | 17 | 3 | 0 |
| 4 | Dhenkanal | 25 | 25 | 11 | 13 | 1 |
| 5 | Ghumsur North | 25 | 25 | 1 | 23 | 1 |
| 6 | Ghumsur South | 20 | 20 | 16 | 4 | 0 |
| 7 | Jharsuguda | 29 | 29 | 9 | 18 | 2 |
| 8 | Karanjia | 20 | 20 | 0 | 20 | 0 |
| 9 | Rairangpur | 40 | 40 | 4 | 28 | 8 |
| 10 | Sambalpur | 55 | 55 | 29 | 24 | 2 |
| 11 | Subarnapur | 25 | 25 | 25 | 0 | 0 |
| 12 | Sundargarh | 30 | 30 | 20 | 10 | 0 |
| | Total: | 355 | 355 | 161 | 148 | 46 |

The results highlight the weak areas where the inputs have to be identified. This Report card works as an important tool for the managers at all levels to identify the areas of added interventions. The annual collation of data and its subsequent review will bring out the improvements through this CMRV Tool.

7.06 Environmental and Social Management Safeguard Framework (ESMSF) and Scheduled Tribe and Forest Dependent Planning Framework (STFDPF)

7.06.1 Concept and Rationale of ESMSF & STFDPF

Environmental and Social Management Safeguards (ESMS) is a framework consisting of a set of policies, procedures, tools and internal capacity to identify and manage the environmental and social risks being faced by the key-stakeholders like local communities, organizations and individual beneficiaries due to project interventions. The framework facilitates in screening the project components, categorize them based on their potential environmental and social risk and apply relevant environmental and social mitigation measures and monitor the project's environmental and social performance.

As per the JICA Guidelines (2010), internalization and institutional framework are the prerequisite for initiating measures for managing the environmental and social considerations and their impacts arising due to implementation of developmental projects, particularly in the context of developing nations / economies. The OFSDP II project is categorized as "Financial Intermediary (FI)" in accordance with the JICA guidelines (2010) which means that the project would not exhibit any significant negative impact on environmental and social dimensions. However, under this project, a broad framework on Environmental and Social Management System Framework (ESMSF) and a specific framework on Scheduled Tribe and Forest Dependents Plan Framework (STFDPF) is mandated.

Any development project executed particularly in the habitats of indigenous communities with the assistance of multinational financial assistance must follow the "Indigenous Peoples' Planning Framework" in accordance with the World Bank's Operational Policy 4.10 which is also followed under JICA Guidelines. Indigenous people is defined as Scheduled Tribes by the Indian Constitution and therefore, the Scheduled Tribe and Forest Dependents' Planning Framework (STFDPF) is prepared under OFSDP – II so as to safeguard the development / livelihood / social interests or concerns of Scheduled tribes and other forest dependents living in the project area.

7.06.2 ESMSF and STFDPF under OFSDP-II

Similar to any of the forest management projects implemented in a participatory mode across the country, OFSDP-II also focusses mainly on the improvement of biodiversity, wildlife conservation, sustainable forest management, soil and moisture conservation, etc. In that way, it is a positive development in the direction of forest conservation and sustainable management. However, the other side of this project intervention also mandates some development of infrastructural facilities for the betterment of community life such as construction of VSS buildings, small community facilities, roads within the villages and forest areas, running small machines and equipment under income generating activities, though may not be in a major way, but still cause few small environmental and social risks. The ESMSF and STFDP frameworks, therefore, act as an instrument in providing necessary guidance and management process to achieve environmentally sound and socially acceptable project implementation during the project period. The frameworks also help to establish a process for environmental and social safeguards (particularly related to ST & FD communities) which will permit the PMU to identify, assess and mitigate the negative impacts of the project interventions.

The micro-plan is the participatory planning tool at the grassroot level and it would be used to visualize the implementation of the project and to develop the indicators to assess its possible impacts. The broad checklists for assessing and monitoring the safeguard measures related to environmental and social management as well as the developmental and social concerns of the Scheduled Tribe and Forest Dependent communities have been integrated into the set of revised Micro-formats to be used for the re-visit of micro plan under the project.

7.06.3 Key objectives of ESMSF under OFSDP-II

The key objectives of ESMSF are:

- To provide practical guidance for identification, planning and implementing the environmental and social management measures across different components of the project and
- To enhance the project's positive environmental and social impacts and avoid or otherwise mitigate associated negative impacts.

7.06. 4 Key objectives of STFDPF under OFSDP-II

The key objectives of STFDPF are:

- To ascertain that the project does not inadvertently induce disempowerment, or increase disparities between the tribal and other communities, and
- To propose ways for minimizing and mitigating adverse impacts on tribal households and their livelihoods

7.06.5 Progress made in Implementing ESMSF & STFDPF under OFSDP-II

ESMSF and STFDPF are essential cross-cutting components aligned with the project activities and are to be followed through the entire project cycle. The use / implementation of both the frameworks support the environment and social compliance with applicable laws and regulations as well as with the requirements of relevant JICA policies on environment and social aspects. Implementation of both the frameworks is monitored in the Project. ESMSF /STFDPF are monitored through progress reports with structured tools and its results are integrated into the MIS of OFSDP II. Periodic monitoring of the possible impacts was also followed during the revisit of micro plans. Specifically, the progress made with respect to the implementation of ESMS and STFDP frameworks under the project during the year the year 2022-23 has been detailed as under:

7.06.5.1 Incorporation of ESMSF & STFDPF Related Formats in the Hand Book for Micro Plan Revision

Following listed ESMSF & STFDPF related formats were prepared and included in the Hand Book for Micro Plan Revision, both in English and Odia versions in order to elicit exhaustive information needed for monitoring the implementation of environmental and social (with particular respect to ST&FD communities) related safeguards at VSS level and accordingly to formulate the mitigation measures in collaboration with the VSSs.

- vi. Framework for Environmental Safeguards at VSS / EDC Level
- vii. Framework for Social Safeguards at VSS / EDC Level
- viii. Applicability of ESMSF and STFDPF
- ix. STFDPF: Monitoring items, Indicators, means and Frequency of Verification & Responsibility Framework
- x. Format for Assessment of STFDPF Safeguards at VSS Level

Relevant data on ESMSF and STFDPF were collected from VSS level through these formats during the process of micro plan revisit and the same are captured through MIS portal at PMU level for meaningful analysis and initiate appropriate remedial actions.

7.06.5.2Capacity Building in Implementation / Monitoring of ESMS and STFDP Safeguard Frameworks at VSS Level

- i. A detailed off-line orientation training on crosscutting components of the project, including ESMSF & STFDPF was conducted for the DMU Chiefs and DMU-SMSs before taking-up the micro plan re-visit process in the first batch of VSS areas. Accordingly, the training module along with PPT on ESMSF and STFDPF was prepared and the training session was conducted by PMU and PMC jointly at Bhubaneswar on 19th April 2022. The training was attended by all DMU Chiefs and DMU-SMSs.
- ii. A two-day orientation training program was organized for the DMU Chiefs and DMU level SMSs on the formats and process of re-visit of micro plan during 19th and 20th May 2022 at XIM university, Bhubaneswar. The technical session on ESMSF & STFDPF related formats was conducted as a part of this training program.
- ill. Following the above orientation training program, series of capacity building training programs on the field level use of revised / new formats (inclusive of ESMSF & STFDPF related formats) included in the Hand book for micro plan revision for the DMU/FMU/PNGO staff were conducted at all DMU headquarters during the period from May 24 to June 11, 2022 by the team comprising the resource persons from PMU, PMC and respective DMU (DMU Chiefs & SMSs).

The trained staff of DMU/FMU/PNGO, in turn conducted the trainings for the FMU level field staff, VSS and SHG members in the use of the prescribed formats during the micro plan re-visit process.

7.06.5.3 Review of Revised Micro Plans Prepared by DMUs

The sample Revised micro plans prepared and sent by the DMUs were reviewed by the PMU officials as well as the Experts of PMC. The feedback report prepared by the experts with respect to all sections of Revised micro plan, including the ESMSF and STFDPF was shared with respective DMUs for carrying out the corrections / modification suggested in the Revised micro plans. Apart from sharing written feedback, the PMC Experts also conducted review meetings in all DMU headquarters with the presence of DMU Chiefs, SMSs, FMU Coordinators, PNGO staff and VSS secretaries. These review meetings helped to clarify all doubts /misunderstandings raised by DMU and field staff with respect to different chapters of revised micro plans, particularly those of cross cutting components like ESMSF and STFDPF and properly carry out the corrections in the drafts of revised micro plans.

Chapter 8

Capacity Building Initiatives

8.01 Introduction

Capacity building means assessing and establishing resources needed to fulfil a mission or achieve a goal. It is widely recognized that project management professional groups, national and local governments need a range of tools to effectively manage their various programs and projects.

Capacity building approaches purposefully minimize an over-reliance on outside experts as sources of knowledge, resources, and solutions to community issues. By preventing a dependency relationship on outsiders from forming, capacity building encourages local people to take action on local issues themselves.

Development projects of different types mainly aim to alleviate poverty and ameliorate the livelihoods of local people. One of the strategies commonly used is to focus on organizations and build from their existing capacities in order to improve their living standards or try to build new organizations to work in a common project. Social and human capitals are two key components of these organizations and they might be crucial to the success of the actions that they accomplish. Both can be considered as part of the social capacity of the local organization. This capacity can be enforced with development projects through capacity building. This term means much more than training activities as it includes not only human resource development but also organizational and institutional development. Capacity and capacity building concepts, as well as capacity measurements in this context are thus, extremely important to build a framework to implement the the interventions and effectively plan the actions to be undertaken by the projects to succeed.

8.02 **Progress of Capacity Building**

The year 2022-23 was the sixth year of implementation of Odisha Forestry Sector Development Project, Phase-II. Initial interventions such as constitution and strengthening of VSSs, survey, demarcation and posting of pillars, soil and moisture conservation interventions, plantations etc. have been largely covered in the previous years. During the year, focus of interventions was largely on promotion of Income Generating Activities through the Community Based Organisations (CBOs), Livelihood Initiatives at Community level and establishment and operationalization of Multi Product Clusters to facilitate marketing of potential produces available at the communities at remunerative price. The capacity building inputs for the year 2022-23 were largely focused on promotion of IGA activities and to facilitate the Community Based Organisations, namely- the Self Help Group (SHGs), Common Interest Groups (CIG) and Poorest of Poor Households (PoPs) to traverse the business growth trajectory.

Similarly, capacity building training for the community representatives on Sustainable Forest Protection & Management, Fire Protection and Management, implementation of Community based Monitoring, Reporting & Verification to achieve the REDD+ Readiness, Gender Mainstreaming, Environmental and Social Management System Framework (ESMSF), Schedule Tribe and Forest Dependant Plan Framework etc. were also organised during the reporting year. One of the important initiatives taken up during the reporting year was Revisit of Micro Plans of Batch-I VSSs scheduled to be done after completion of four years of preparation of initial micro plans i.e., during 2018-19.

Skill enhancement trainings to facilitate Farm based, off Farm based, Non-Farm based and NTFP based livelihood interventions through the SHGs, CIGs and PoPs were also mobilized from different Government Schemes of other line Departments. The capacity building trainings conducted with other line Departments include income generating activities through agriculture, horticulture, back yard poultry, beekeeping, mushroom cultivation, dairy farming and management, Goat rearing, Pisci-cululture, Pickle making etc.

Important trainings conducted under Odisha Forestry Sector Development Project, Phase-II during the year 2022-23 are given below:

8.02.1 Capacity Building Training Initiatives at PMU level:

A. Training of Trainers on Revisit of Micro Plan:

A "Training of Trainers" on Revisit of Micro Plan was conducted for two days in collaboration with Xavier Institute of Management University, Bhubaneswar on 19th and 20th May, 2023. A comprehensive document for Revisit of Micro Plan at VSS level was prepared jointly by the officials of PMU and the Experts from PMC, OFSDP-II. The DFO cum DMU Chiefs, Subject Matter Specialists from all Project Divisions, Officials from PMU & PMC were trained as Master Trainers, who were entrusted to take up the training programme for the Division level and FMU level field functionaries of their respective Divisions.

The objectives of Re-visit of Micro plan were:

- To review the status of implementation of components proposed in the micro plan document.
- To capture changing needs of the community and try to address the same.
- To include components those were not reflected in the previous micro plan.
- To re-evaluate the relevance of the works which were in the previous plan but not taken up /addressed under the present-day scenario and to readjust the same.

The Course Module for the above training was prepared by the in-house officials and experts of PMU & PMC based on the Re-visit of Micro Plan Document prepared. A total of 12 thematic Chapters on Re-visit of Micro Plan were covered in 8 sessions by the officials of PMU and PMC under the overall guidance of PCCF (Projects) & Project Director, OFSDS. The details of staff trained were as below:

| Participants | Numbers |
|--|---------|
| DFO cum DMU Chiefs | 12 |
| Subject Matter Specialists (Livelihood, Rural Finance & Marketing) | 11 |
| Subject Matter Specialists (M&E, MIS/GIS & REDD+) | 11 |
| Cluster Managers, PMU, OFSDS | 04 |
| FB&FF Experts, PMU, OFSDS | 01 |
| State Programme Managers, PMU, OFSDS | 04 |
| Dy. Project Directors, PMU, OFSDS | 02 |
| PMC Experts, OFSDP-II | 04 |
| Total | 49 |



Revisit of Micro Plan

B. Training on Advance Course on Good Governance and Transparency through RTI:

Four officials from Project Management Unit, OFSDP-II had participated in two days on- line training on Advance Course on Good Governance and Transparency through RTI organised by National Pondicherry Council, an autonomous organization under Ministry of Commerce and Industry, Govt. of India from 15th to 16th February, 2023.

The objective of the training was to promote Good Governance, Transparency and accountability among Public Servants and to contain corruption. Such initiative also helps the public authorities to streamline their information system and office productivity.

C. Training on Gender Mainstreaming, ESMSF, STFDPF & CMRV Guidelines under OFSDP-II

Capacity Building training on the guidelines formulated on implementation of Gender Mainstreaming, Environmental & Social Management System Framework (ESMSF), Schedule Tribe and Forest Dependants Plan Framework (STFDPF) & Community based Monitoring, Reporting & Verification (CMRV) etc. was convened 19th April 2022. The Regional Chief Conservator of Forests (RCCFs), DFO-cum-DMU Chiefs, Subject Matter Specialists, (Livelihood, GIS/MIS & REDD+) and the officials from Project Management Unit and PMC of OFSDP-II were attended the training.

The objective of this State level Capacity Building Training was to orient the participants on implementation of different frameworks and policies like Gender mainstreaming, Environment and Social Management Safeguard Framework, ST and Forest Dependent Planning Framework and Community based Monitoring, Reporting and Verification process. The conceptual framework of the above interventions was explained to the participants, which would be required to be captured during the Re-visit of Micro Plans of each VSS. Coverage of the contents in each Technical Sessions were as below:

Session-I: Gender Mainstreaming

- Gender Policy Perspectives as per Sustainable Development Goal in Global context.
- United Nation's meaning of Gender Mainstreaming

- National and State Gender Policy & Latest initiatives taken by Govt. of Odisha for the welfare of Transgender.
- The need of Gender Mainstreaming, Gender Inequality and Gender Equity
- Objectives of Gender Mainstreaming at Macro level and in Project context
- Strategies of Gender Mainstreaming through Gender Analysis, Gender Action plan and Gender Budgeting
- Key activities in Gender Mainstreaming

Session-II: Environmental and Social Management System Framework (ESMSF) in the context of OFSDP-II

- Concept & Relevance of ESMSF and STFDPF in the context of OFSDP II
- JICA Policy Guidelines related to ESMSF and STFDPF and Project Categorization as per JICA Policy Framework
- Social and Environmental Vulnerabilities under OFSDP II
- Procedures & Tools for implementations of ESMSF & STFDPF
- Formats on Monitoring the Environmental & Social Impact Assessment at VSS level and Mitigation Measures
- Management of Social Impacts for Scheduled Tribes & Institutional Support System

Session-III: Community Based Monitoring, Verification and Reporting in OFSDP-II

- Concept and need of CMRV & REDD+ Concept
- Role of Forest in REDD + & India National REDD Plus Strategy-2018
- Reference Level, Reference Emission Level National Forest Reference Level
- MRV and CMRV in context of OFSDP-II
- Mitigation Measures For Sustainable Forest Management with the help of Communities (VSS)
- Drivers of Degradation
- Action to be taken for CMRV implementation



Cross Cutting Training

D. Training on Arc GIS Desktop Foundation Course by ESRI India:

Four participants from GIS Cell, PMU, OFSDP-II attended an online 5 days Capacity Building Training on Arc GIS Desktop Foundation Course convened by Esri India Training programme (ESRI), India from 16th to 20th May, 2022. Following the installation of the ArcGIS pro Software in the GIS Cell, OFSDP-II, it was decided that the officials of OFSDP-II working on GIS Platform are to be oriented on the software, which would capacitate them for optimal use of the software for preparation of required maps for the project. The topics covered in the five days training programme include:

| Day-1 & 2 | Day-3 to 5 |
|-----------------------------------|--|
| 1. The ArcGIS Platform | 1. Discover, Use, make and Share map |
| 2. The basics of GIS | 2. Integrating Data, Managing map Layers |
| 3. Understanding GIS Data | 3. Displaying data, Working with tabular data |
| 4. Acquiring & Selection GIS Data | 4. Creating & Editing data, Labelling Features |
| 5. Interacting with Maps | 5. Designing map layout |
| 6. Spatial Analysis | 6. Evaluating Data Analysis |
| 7. Sharing Results | 7. Solving Spatial problem |
| | 8. Sharing Geographical Information |

E. Sameekshya: Achieving Transformation through Multi-Product Cluster Initiatives- An Inception Workshop

Promotion of Sustainable Livelihoods is one of the key objectives of Odisha Forestry Sector Development Project, Phase-II, which not only contributes significantly in improving the socio-economic conditions of the forest dependent communities, but also assist in reducing biotic pressure on forest significantly. Under OFSDP-II, concept of Sustainable Livelihood has been envisaged to go beyond the conventional definitions and approaches of poverty eradication in forest fringe areas. Promotion of small Income Generating Activities (IGAs) by involving women Self Help Groups (SHGs), Common Interest Groups (CIGs) and Poorest of Poor (PoP) is being promoted under OFSDP-II. The project has developed strategies and processes to leverage resources for livelihood promotion through inter sectoral convergence of schemes of line Departments.

Sameekshya: Achieving Transformation through Multi- Product Cluster Initiative- An Inception Workshop was organised by the Odisha Forestry Sector Development Society (OFSDS) on 17th August, 2022 in collaboration with the Management and Marketing Support Agency (MMSA), a Consortium of Kalinga Institute of Industrial Technology and Technology Business Incubator (KIIT-TBI) Bhubaneswar, Bhubaneswar City Knowledge Innovation Cluster (BCKIC), Bhubaneswar and Indian Institute of Entrepreneurship (IIE), Guwahati in the Auditorium Campus 11 of KIIT University, Bhubaneswar. The objective of the Sameekshya was to collaborate with different social entrepreneurs, who are willing to work with OFSDS on establishment & institutionalization of Multi-Product Clusters in Project Divisions.

The workshop was inaugurated by Additional Chief Secretary, Shri Satyabrata Sahu, IAS, Department of Forest, Environment & Climate Change, Government of Odisha in presence of the Principal Chief Conservator of Forests and Head of Forestry Force, Odisha, Shri Debidutta Biswal, IFS, the Principal Chief Conservator of Forests (Projects) and Project Director, OFSDS Dr. Meeta Biswal, IFS, Chief Executive Officer, KIIT-TBI, Dr. Mrutyunjaya Suar and other Social Entrepreneurs from different States of India.

The social entrepreneurs willing to work in the sector were represented by Mr. Ayan Dutta, Industree Foundation, Bangalore, Mr. Deepak Mishra, Dabur-Baitarni Initiatives, Bhubaneswar, Dr. Dipak Sahu, Kanak Bioscience & Research Pvt. Ltd., Mr. Ramesh Ch. Biswal, Villa Mart, Dr. Muyeed Ahmed. S, Biotherm Flavours and Fragrances LLP, Sagar Chanana, Rasaa, Creations and Innovations Pvt. Ltd., Dr. Jayant Nayanrao Jakate, Sanskriti Samvardhan Mandal and Mrs. Shyama Jha, Millet Magic Foundation.

The workshop was attended by senior forest officials of Odisha, all the RCCFs, DFOs-cum-Divisional Management Unit Chiefs of Project Divisions, Officials from Project Management Unit and partner- NGOs of OFSDP, Phase –II.

During the Technical Sessions representatives of the Social Enablers highlighted on the areas of their work in promoting the small entrepreneurship with the Community Based Organisations (CBOs) and the possible Scope of Collaboration with OFSDS.

The officials who attended from Project Divisions interacted with the Representatives of Social Enablers on possible areas of promotion of Income generating Activities through the Self help groups, Common Interest Groups and Poorest of Poor of the Project VSSs through Cluster Mode.



Sameekshya

F. Participation in IUFRO-ICFRE Symposium:

Officers from Odisha Forestry Sector Development Society attended the IUFRO-ICFRE Symposium on "Intersectoral Cooperation for Resilient Landscapes" held on 29th and 30th March, 2023 in Dehradun. Sri Swayam Mallick, IFS, Dy. Project Director, OFSDS made a detailed presentation in the IUFRO-ICFRE Symposium on "Forest Landscape Restoration and Livelihood Promotion through Inter-sectoral Convergence: Learnings from Odisha.

G. Coordinating the Exposure Visits of the Officials of JICA Assisted Projects in India.

Based on the request of the Chief Project Directors of JICA Assisted Forestry Projects of India from Nagaland and Himachal Pradesh, the exposure visit of officials of both the State to the project sites of Odisha Forestry Sector Development Project, Phase-II were organized during the reporting year.

The exposure visit of the officials of Nagaland Forest Management Project were covered in two batches during 20th – 21st April, 2022 and 5th – 6th September, 2022. A total of 19 Senior level Officials and 25 numbers of Field level officials from Nagaland Forest Management Project interacted with the project VSSs of Dhenkanal DMU, OFSDP-II. Project Interventions such as Sustainable Forest Management, Participatory Processes, Forest Fire Protection & Management by Communities, Farm Forestry Plantations, Optimal use of VSS building cum IGA Facilitation Centre, Livelihood Promotion through Inter-sectoral Convergence, Promotion of Income Generating Activities through the Self help Groups, Common Interest groups and Poorest of Poor Households etc. covered during the exposure visit.

Similarly, the exposure visits of the officials of JICA Assisted "Project for improvement of Himachal Pradesh Forest Eco-systems Management & Livelihoods" of Himachal Pradesh in two batches to the project VSSs of OFSDP-II were coordinated. The first batch with 7 officials of PIHPFEM&L Project were sent for exposure in the project VSSs of Athmallik & Subarnapur Divisions from 12th - 17th September, 2022. The second batch with 8 officials were sent for exposure in the project VSSs of Baripada & Rairangpur Divisions from 17th – 22nd October, 2022. Interventions on Sustainable Forest Management and Livelihood Promotions though Inter sectoral Convergence with line departments were shown during the exposure visit.

H. Experience Sharing meeting with IFS Probationer 2021-23 on the projects implemented under OFSDS:

The experience of OFSDS was shared with the IFS Probationers during the "Thematic Tour-III on Eco-restoration Community participation, Wildlife Management, Coastal Ecosystem in Eastern and North Eastern India of IFS Probationers for 2021-23 Course" on 27th November, 2022 at Nandankanan, Bhubaneswar. The probationers were briefed on different activities being implemented under different projects of OFSDS through a power-point presentation.

8.02. 2. Capacity Building Training Initiatives at DMU level:

A. Capacity Building Training on Revisit of Micro Plan at DMU level:

Following the Training of Trainers on Revisit of Micro Plan at state level, a detailed Capacity Building Plan for field functionaries of FMU, PNGO Team, Animators etc. of each DMU was worked-out. A total of 664 field staff were oriented on the objectives of revisiting the Micro plans of each VSSs after four years as given below:

| Division | | Participan | ts | Resource Persons | Total |
|--------------|-----|-------------|------------------|------------------|-------|
| Division | DMU | FMUs/ P-NGO | Member Secretary | from PMU & DMU | Total |
| Athmallik | 3 | 24 | 8 | 7 | 42 |
| Baripada | 3 | 48 | 11 | 7 | 69 |
| Boudh | 3 | 24 | 12 | 7 | 46 |
| Dhenkanal | 3 | 48 | 11 | 7 | 69 |
| Ghusmsur (N) | 3 | 32 | 12 | 7 | 54 |
| Ghumsur (S) | 3 | 24 | 10 | 7 | 44 |
| Jharsuguda | 3 | 24 | 18 | 7 | 52 |
| Rairangpur | 3 | 40 | 14 | 7 | 64 |
| Karanjia | 3 | 32 | 18 | 7 | 60 |
| Sambalpur | 3 | 32 | 22 | 7 | 64 |
| Subarnapur | 3 | 24 | 10 | 7 | 44 |
| Sundergarh | 3 | 40 | 06 | 7 | 56 |
| Total | 36 | 392 | 152 | 84 | 664 |

The participants were oriented on the processes to be taken up for revisiting the Micro Plan at VSS level. Chapter wise formats prepared to capture required information for Revisit Micro Plans were discussed at large to ensure correct / relevant information are collected for effective planning purpose. Subsequent to trainings conducted at respective DMU level, the trained field staff facilitated the Working Group members and Women Working group members of each Batch-I 355 number of VSSs in revisiting the Micro Plans following the Participatory Rural Appraisal Processes.



Revisit of Micro Plan at DMU level

B. Technical Skill Building Training on Maintenance of Machines installed in Sal Leaf Clusters under OFSDP-II:

Three Sal Leaf Clusters have been established under OFSDP-II in the project Divisions, namely- Karanjia Division, Rairangpur Division & Baripada Division in Mayurbhanj District. These clusters have also been equipped with different machineries for making of stitched and pressed leaf plates and cups of different size by the nominated SHG members trained by the project. However, it was observed that due to lack of basic skill and knowledge for minor repair of the sal leaf pressing machineries installed, the functioning of the Clusters remains unproductive for a substantial period till the technical people are mobilized for the repairing of small defects of the machines installed.

Accordingly, it was decided that the local youths, who are of 10th Pass with certain knowledge and understanding in mechanical & electrical aspects of the machine and willing to be associated would be oriented on basic repairing aspects of the machines through M/s Eloquent Technology, who had supplied the machineries. Five youths including one animator from each Cluster were identified by the respective Divisions and they were oriented on the basic repair of the machineries by the Technical Personnel of M/s Eloquent Technology at the respective Cluster Sites. While imparting the skill training, the machineries installed at respective Clusters were also repaired and made functional.

C. Training on Inter-Sectoral Convergence:

Community Development and Promotion of Livelihood of the forest fringe dwelling communities have been one of the major mandate of JICA assisted Odisha Forestry Sector Development Project, Phase-II. Most importantly, the Community Development and Promotion of Livelihood are being taken up through convergence with the Schemes & Programmes of other line departments through convergence.

To facilitate the inter-sectoral convergence with line departments, the holistic development needs identified by the communities are shared at District Advisory Committee Meeting under the Chairmanship of District Collector of each District and at Block level Advisory Committee Meetings under the Chairmanship of Block Development Officers of Blocks covered under the OFSDP-II regularly. Following the discussion at District level and Block

level, the officials from line departments organised Orientation Programmes at Division level and Range level to sensitize the project personnel on different Schemes and Programmes and the procedures to avail the benefits of their respective departments by the beneficiaries. About 12 numbers of Capacity Building Trainings for the field functionaries of OFSDP-II on inter-sectoral convergence were organised during the reporting year.

8.0.3. **Capacity Building Initiatives at FMU level:**

A. **Community Mobilization at VSS level:**

By the end of 2021-22, Odisha Forestry Sector Development Project, Phase-II had achieved the target of covering 1211 VSSs and 10 EDCs under the project. Adequate Capacity Building Trainings have been imparted in the initial years to ensure community participation both in spirit and in action for implementing the project interventions. The major modules covered in community mobilisation include institution building, community participation in holistic planning processes, executing and monitoring of project interventions, clarity on roles and responsibilities of different stakeholders and the strategies and approaches for augmenting Govt, schemes and programme for comprehensive community development in each VSS/EDC.

In order to ensure continuity of the community participation not only for implementing the interventions, the people of each VSSs were regularly also motivated by the project personnel in different forums/ meetings / trainings for protection and maintenance of the assets created under the sustainability framework. The field staff of OFSDP-II including the members from P-NGO Team contributed significantly in community mobilisation at regular basis.



Community Mobilization

B. Capacity Building Training for the Working Group and Women Working Groups on Revisit of Micro Plan:

The members of Working Group and Women Working Groups of each Batch-I VSSs of OFSDP-II were trained on the processes of Revisiting the Micro Plan documents prepared by them during the 1st year of implementation of project. The DMU & FMU level officials trained on Revisit of Micro Plan were the Resource Persons to orient the Working Group and Women Working Groups on Revisiting of Micro-plan. A total of 89 batches of training were conducted covering about 4260 participants from 355 numbers of Batch-I VSSs during 2022-23.

The objective of the said training was to orient the members of Working Group and Women Working Groups on rationale of revisiting of Micro Plan after four years of completion of the initial plan. They were also explained the participatory processes and tools to be used for collection of information pertaining to all chapters of Micro plan for revisiting the Micro Plans. Each chapter of the document on Revisit of Micro Plan were explained to the members to ensure correct and relevant data are collected, analysed and the existing micro plans are revisited and approved in their respective Pallisabha / Gramsabha.



TRG of Working Groups & Women Working Groups

C. Training on Forest Fire Control & Management:

Protection of Forest from Forest Fire round the year has been one of the major interventions under the OFSDP-II. The fire incidences in the forest are particularly high during the summer. The VSSs covered under OFSDP-II are being oriented regularly to protect forest from forest fire. During the reporting year, the DFO cum DMU Chiefs have identified the vulnerable sites which are prone to forest fire and requested PMU, OFSDS for allocation of fund for supply of fire instruments like fire blowers to the VSSs for control and management of forest fire. Further, sensitization trainings, theme based cultural programme, rally, street play, wall painting, posters display etc., on forest fire control & management were conducted for all VSSs covered under OFSDP-II.





D. Framers Field School Training cum Exposure Visit on Ground-nut Cultivation & Harvesting.

Groundnut is a major seasonal crop being harvested in different parts of Athmallik. Considering the potential of Groundnut in the project VSSs in Athmallik a Framers Field School cum Exposure Visit was organised in collaboration with OUAT and KVK, Angul. About 30 framers from three project villages namely Aida, Pataka & Titigaon of Athmallik Range were sent for Framers Field School cum Exposure Visit on Ground-nut Cultivation & Harvesting during the reporting year. OUAT, Bhubaneswar agreed to provide certified seed to the interested farmers, whereas KVK, Angul were associated to augment required capacity building inputs to the farmers for cultivation of groundnut. M/s Back to Village, a social enabler of MMSA under OFSDS were associated for overall handholding support to the farmers during the cultivation period.

E. Mobilization of Communities on Farm Forestry Plantations:

Plantation outside the forest area under Farm Forestry Component of OFSDP-II is under progress. During 2022-23 a total of 2769 ha of area covered in the patta land of 5734 beneficiaries from the project VSSs under Farm Forestry Plantation component. A cumulative progress under this component has been achieved by covering 6887 ha of land and 15159 beneficiaries against the project target of 10,000 ha.

With an objective to achieve the farm forestry target of the project special community mobilization drive was initiated across the 1211 VSSs to mobilize the farmers having suitable patta land, other than their agricultural land for undertaking farm forestry plantations.

Special orientation meetings were convened in each VSSs to explore the possibilities of additional beneficiaries willing to take up farm forestry plantation in their patta land. The DFO cum DMU Chief were also given liberty to identify new model of farm forestry plantation, based on the need and requirements expressed by the farmers in the project VSSs and to submit a detailed proposal in the line of the five different Farm Forestry model are under practice in OFSDP-II.

Later based on the need of the farmers of project VSSs, a special capacity building orientation programme and membership drive was initiated in collaboration with the J K Paper Mill, Odisha and MbGreen, Bhubaneswar, Odisha for finalization of farmers and details of land for undertaking pulp wood plantation through convergence. All potential VSSs from 12 Project Divisions were covered by J K Paper Mill, Rayagada, Odisha and MbGreen, Bhubaneswar in coordination with the project staff of respective Divisions during the reporting year. The list of farmers willing to participate in farm forestry plantation is under preparation.





F. Training of Loan Appraisal Committee (LRC) on the Guideline of Revolving Fund & Management:

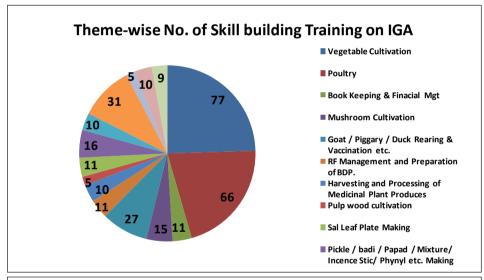
Promotion of Income Generation Activities by the Community Based Organisations (CBOs) from the project VSSs, namely- Self Help Groups, Common Interest Groups, Poorest of Poor Households were the major focus of interventions of OFSDP-II during 2022-23.

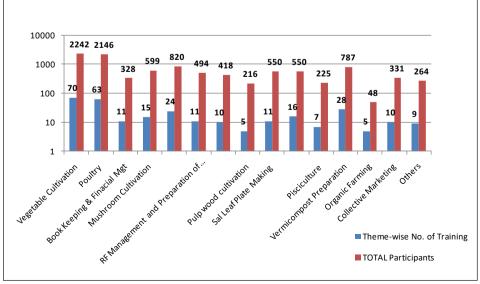
The project personnel from all 12 Project Divisions were oriented on the "Opertionalization of Revolving Fund Guideline of OFSDP-II" formulated by PMU with the assistance of Project Management Consultants for effective implementation of the same at field level. In turn, the Loan Appraisal Committee constituted at VSS level to facilitate the preparation of Business Development Plan by the Borrowing Entities were trained on the guideline of Revolving Fund and their role & responsibilities to facilitate preparation of Business Plan and its scrutiny to recommend the VSSs far sanction of the proposal based on its merit.

G. Training on Skill Development Programme on IGA through Convergence:

The Borrowing Entities particularly the selected members of Self Help Groups, Common Interest Groups and Poorest of Poor Households from the project villages have been augmented with skill development training programme to take up viable Income Generating Activities at VSS level. Based on the interest shown by the members at VSS level, skill training on different thematic aspects were organised during 2022-23. The thematic skill based training programme conducted for the Borrowing Entities include Vegetable Cultivation, Organic Farming, Dairy Management, Rearing and vaccination of small ruminants including poultry, Goatary, Duck rearing, Piggery etc, Pisci-culture, Api-culture, Mushrum Cultivation, Sal Leaf Plate Making, Bamboo Craft, Making of Badi, Papad, Pickle, Phynyl, Incense Stick, Preparation of Vermi Compost etc. Moreover, training on Book keeping & Financial Management, Collective Marketing etc., were also conducted during the reporting year. The Division wise skill building training on IGA conducted during 2022-23 is as below:

| CL No. | Division | No of Thomas | No of Tune | Participants | | |
|--------|---------------|--------------|-------------|--------------|--------|-------|
| Sl. No | Division | No of Themes | No of Trgs. | Male | Female | Total |
| 1 | Athmallik | 6 | 33 | 363 | 634 | 997 |
| 2 | Baripada | 6 | 19 | 105 | 885 | 990 |
| 3 | Boudh | 3 | 22 | 33 | 727 | 760 |
| 4 | Dhenkanal | 5 | 10 | 186 | 212 | 398 |
| 5 | Ghumsur North | 6 | 23 | 307 | 390 | 697 |
| 6 | Ghumsur South | 16 | 39 | 422 | 639 | 1061 |
| 7 | Jharsuguda | 2 | 2 | 16 | 74 | 90 |
| 8 | Karanjia | 9 | 9 | 74 | 413 | 487 |
| 9 | Rairangpur | 12 | 41 | 305 | 1192 | 1497 |
| 10 | Sambalpur | 6 | 8 | 146 | 125 | 271 |
| 11 | Subarnapur | 5 | 11 | 332 | 104 | 436 |
| 12 | Sundergarh | 5 | 97 | 17 | 2965 | 2982 |
| Total | | | 314 | 2306 | 8360 | 10666 |











Capacity building training programme (CBT) undertaken in different VSSs of OFSDP-II





8.02.4. Exposure Visits of Primary Stakeholders on IGA:

Exposure Visits for Self Help Group, Common Interest Groups & Poorest of Poor Household members from project VSSs, who are actively associated in different Income Generating Activities were organized to nearby VSS areas to show the best practices on Vegetable Cultivation, Rearing & Management of Small Ruminants, Preparation of Vermi Compost, Groundnut Cultivation etc. Some of the exposure visits were coordinated in collaboration with reputed institutions of Odisha including Odisha University of Agriculture & Technology, Krushi Vigyan Kendra, National Horticulture and Development Foundation etc. About 895 members from 35 numbers of borrowing entities were sent for exposure visit.

The feedback received from the members who went for exposure visit were highly encouraging. The peer group influence worked extensively to enhance the commitment of the participants to adopt the best practices seen else-where. The learnings of the primary stakeholders from the exposure visits reported to be highly useful and were aptly adapted suitably by the beneficiaries.

Capacity Building Trainings during 2022-23

| Themes of training | Level of Training | Trainings (In Nos) | Participants | |
|---|-------------------|--------------------|--------------|--|
| CBT on Cross Cutting Issues on Gender Mainstreaming, CMRV, ESMSF & STPDPF | | | | |
| CBT on Revisit of Micro Plan | | | | |
| Training on Arc GIS Desktop Foundation Course by ESRI India | | | | |
| Sameekshya: Achieving Transformation through Multi-Product Cluster Initiatives- An Inception Workshop | PMU level | 06 | 224 | |
| Training on Advance Course on Good Governance and Transparency through RTI | | | | |
| Participation in IUFRO-ICFRE Symposium | | | | |
| CBT on Revisit of Micro Plan | | | 1101 | |
| Training of Operation & Maintenance of Sal Leaf Clusters in Mayurbhanj District | DMU Level | 26 | | |
| Training on Inter-Sectoral Convergence | | | | |
| Training of Operation and Management of Revolving Fund | | | | |
| Training of Working Group & Women Working Group on Revisit of Micro Plan | | | | |
| Training on Forest Fire Control & Management | | | | |
| Training on Farm Forestry Plantation | | | | |
| Community Mobilisation of VSS members on Implementation modalities of OFSDP-II for Batch-IV VSSs | FMU Level | 508 | 19019 | |
| Training on Skill Programme on IGA through Convergence | | | | |
| Exposure Visits of Primary Stakeholders to oversee Income Group Activities | | | | |
| Total- 2022-23 | | 540 | 20,344 | |

Chapter 9

Coordination and Supporting Activities:

Periodical meetings related to project-oriented policy issues, planning, coordination, collaborations, review of progress/ implementation etc., at different levels of project management were conducted during the year under report for better coordination and to provide support to the entire team of OFSDP-II.

9.01 **Meeting of High-Power Committee (HPC)**

The High- Power Committee (HPC) of OFSDS is the highest decisions making body of the Society, It is chaired by the Chief Secretary with the Additional Chief Secretary, Forest and Environment Department as the Vice Chairman and plays a significant role in making policy level decisions in connection with the operational management and implementation of the project. HPC also facilitates coordination between different line departments and OFSDP-II for optimal and successful inter-sectoral convergence so as to ensure the benefits of various poverty alleviation schemes / programmes adequately reach the needy households in the remote forest fringe villages under the project. In view of this coordination role of HPC, senior officers at Principal Secretary / Commissioner-cum-Secretary levels from different govt. Departments such as Finance, Agriculture and Farmer's Empowerment, Revenue and Disaster Management, Panchayati Raj and Drinking Water, ST and SC Development, Rural Development, Women and Child Development, Mission Shakti, Health and Family Welfare, Principal Chief Conservator of Forests and HoFF and Principal Chief Conservator of Forests (Wildlife)-cum-Chief Wildlife Warden, Odisha etc. are the members of the Committee.

The HPC meetings under the Chairmanship of Chief Secretary, Odisha were organized on six monthly basis during the year under report. While reviewing the progress of work, the HPC also discussed about the challenges, issues relating to project implementation, inter-sectoral convergence etc., were also discussed during the meetings.

Governing Body Meeting of OFSDS

The Governing Body (GB) of OFSDS is the decision-making body for OFSDP-II as per the Society Registration Act, 1860. The Governing Body authorises the PMU for day-to-day functioning, supporting the PMU in approval of budget and annual plan of operation and other suggestions. It rigorously reviews the project progress vis-à-vis annual plans at least once every quarter. During 2022-23, two GB Meetings were organised at the State level.

PMU level Review Meetings 9.03

Usually, quarterly Review Meetings with the Divisional Forest Officers are organized at PMU level to track physical and financial achievements vis-a-vis the plan for the corresponding quarter. During the year under report, component wise physical and financial progress made by each DMU was being reviewed under the Chairmanship of PCCF (Projects) & Project Director. Decisions taken in the meeting were noted and the proceedings of the meeting were regularly communicated to all concerned Circle RCCFs and DMU Chiefs for information and timely action at DMU and FMU levels.

DMU level Meetings 9.04

Monthly review cum P-NGO Coordination Committee Meeting was held in every month at each Divisional Management Unit to monitor the progress of work vis-a-vis the plan. This meeting was conducted to review the plan of action of previous month and prepare the action plan for the next month for the project personnel and the P-NGO team.

9.05 **FMU level Meetings**

Fortnightly meetings were regularly organised at FMU level with the project staff and the P-NGO team under the chairmanship of respective FMU Chiefs of OFSDP-II to track the progress and to take necessary decisions for timely execution of project. This meeting served as a good platform to meticulously plan and execute the activities at VSS level.

VSS level Meetings 9.06

VSS level Executive Committee meetings were regularly conducted in each VSS under OFSDP-II. Concurrent monitoring at VSS level was taken up to ensure timely implementation of the project comments. Required inputs were rendered by PMU to the DMUs and FMUs as and when required for smooth and timely implementation of project interventions at respective VSS level. It has been decided that at least two Executive Committee meetings in each month shall be conducted at VSS level to take necessary decision for smooth implementation of project.

Number of meetings conducted at different levels during 2022-23

| Name of the Meeting | No of Meetings Conducted |
|------------------------------|--------------------------|
| High Power Committee Meeting | 1 Nos. |
| Governing Body Meeting | 2 Nos. |
| PMU Review Meetings | 2 Nos. |
| DMU level Review Meeting | 90 Nos. |
| FMU level Meetings | 667 Nos. |
| VSS Meetings | 26410 Nos. |
| Total Number of Meetings | 27,172 Nos. |

Inter-Sectoral Coordination Committee Meetings

Inter-sectoral Coordination Committee meetings were organized at block level during every month under the chairmanship of Block Development Officer (BDO) of the respective Blocks. The FMU Chief was the Member-Convenor and block level officers of different departments attended the meeting as members. This forum was established to review and plan the community development activities to implement inter-sectoral convergence activities with other line departments at VSS level.

District Advisory Committee Meeting 9.08

District Advisory Committee (DAC) meeting was also organised for Intersectoral coordination. The meeting was chaired by the Collector and District Magistrate. Divisional Forest Officer of the concerned Division Head Quarter was the member convenor of the meeting. Senior officials of other line Departments are the member of the DAC. These meetings were conducted on fortnightly basis or once in every two months as per the availability of the Collector and other senior officials of line departments. This forum helped the project to ensure optimal coordination with other line departments for taking up the Convergence activities identified by the villagers during micro planning processes.

Number of BLAC & DAC meetings organized during the year 2022-23

| Name of the meeting | No of Meetings conducted during 2022-23 |
|--|---|
| District Advisory Committee Meeting | 22 |
| Block level Coordination Committee Meeting | 323 |

Chapter 10

Communication & Knowledge Management

10.01 Communication Strategy in OFSDP-II

A communication strategy is the critical process bridging the situation analysis and the implementation of a social and behaviour change communication (SBCC) program. It is a dynamic plan that strategizes how an SBCC program will attain its vision and align with the objective of the organisation and overall strategy of the organisation's programme implementation plan. Effective communication strategies use a systematic process of behavioural change and theories of human interaction to design and implement outreach activities that encourage desirable and sustainable social and behaviour change.

In the context of OFSDP-II, the communication strategy formulated is multi layered and dynamic approach. It uses all the communication tools to engage all the project stakeholders for project implementation. The strategy has been helpful in involving project functionaries towards achieving the development objectives by engaging strategies and functional communications during the period of project implementation. It also in mobilising local communities for successful implementation of the programme.

The communication strategy and the plan are integrated in the Annual Plan of OFSDP-II based on the information needs of the target groups viz. project functionaries at PMU, DMU and FMU levels and the local community at VSS level. The information and communication activities are planned, customised and implemented as per the feltneed at different project management level. OFSDP-II has engaged all the communication verticals of institutional communication, documentation and digital communication platforms to disseminate the real time information about the project to all of its targeted stakeholders.

As per the project document, mainly, three forms of project communication are being followed for project management of OFSDP-II. They are -

- a) Information Management,
- b) Internal Communication, and
- c) External Communication.

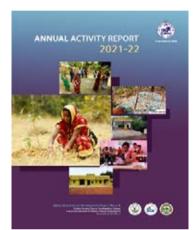
10.02 Knowledge Management

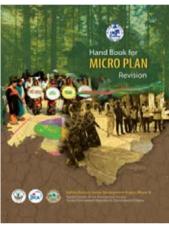
PMU of OFSDP-II has been following the approved Process Documentation Strategy and in principle follows the Knowledge Management methods to gather and disseminate information. Knowledge Management strategy under OFSDP-II creates / develops the properly organized, stored, shared, and analysed information system for project management, using defined methodologies. Disclosures through website, publications in the forms of Booklet, Guideline, Newsletter flyers and Documentations through short films and Visual Documentaries are made to ensure information flow to all stakeholders seamlessly. OFSDP-II has formulated a Process Documentation Strategy Guideline which describes the channels of communication, concepts and steps of documentation process, activities, outputs and responsibility centres for the understanding of project functionaries.

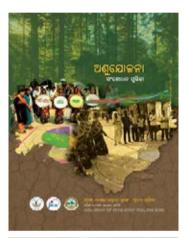
10.03 Publications during 2022-23

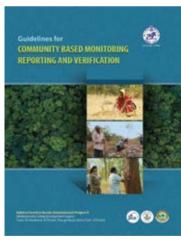
Following publications were made during the year 2022-23

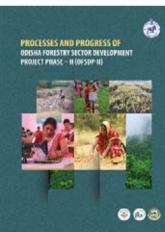
- 1. Annual Activity Report of OFSDP, Phase-II 2021-22.
- 2. Hand Book for Revisit of Micro Plan (English)
- 3. Hand Book for Revisit of Micro Plan (Odia)
- 4. Guidelines for Community Based Monitoring Reporting and Verification (CMRV)
- 5. Bhitarkanika Conservation Area Health Report Card 2021
- 6. Processes and Progress of Odisha Forestry Sector Development Project, Phase-II (OFSDP-II)
- 7. Banayana Vol-6, Issue-1, April-June 2022 Edition
- 8. Banayana Vol-6, Issue-2, July-Sept 2022 Edition
- 9. Banayana Vol-6, Issue-3, Oct-Dec 2022 Edition
- 10. Banayana Vol-5, Issue-4, Jan-Mar 2023 Edition





















10.04 Documentaries produced during 2022-23

Visual Documentation on the OFSDP-II activities was taken up by PMU to collate and present the project activities to different and larger audience. PMU with the assistance of PMC has produced three different versions of visual documentary on OFSDP-II activities. It also supported the Visual Documentation of JICA on OFSDP-II project divisions.

- 1. Beyond the last mile: An endeavour to empower communities in forest resource management (Long Documentary)
- 2. Beyond the last mile: An endeavour to empower communities in forest resource management (Short stories)
- Women in Power: Odisha Forestry Sector Development Project (JICA Documentary)



Beyond the last mile: An endeavour to empower communities in forest resource management (Long Documentary)



Beyond the last mile: An endeavour to empower communities in forest resource management (Short stories)



Women in Power: Odisha Forestry Sector Development Project (JICA Documentary)

10.05 Annual Review Meeting of OFSDP, Phase -II (SAMEEKSHYA):

OFSDS has formulated a distinctive mechanism to monitor the progress of the mandated activities of the schemes running under the society. This is a part of the monitoring activities through MIS tools to measure the real needs, inputs, evaluations and outcomes through participatory interactions with project stakeholders at the grass root level. The Sameekshya has been established as a platform to deliberate upon the project implementation issues and to engage all concerned to thrive for achieving the twin objectives of the Society.

During the year 2022, Sameekshya Meetings were organised at the Divisional level of OFSDP-II, to mobilize the scope of convergence with other line Departments and help the community groups in augmenting the benefit of the flagship programme in collaboration with the local administration.

The Sameekshya meetings were organized at the Divisional level of OFSDP-II to disseminate the project objectives and sensitize the local administration and other institutional stakeholders at large to leverage the benefit from the integrated planning. All the efforts and contributions of institutions were channelized to positively impact the livelihood of the forest fringe communities by undertaking and provisioning community programmes under convergence. PMU, OFSDP-II had ensured that all the convergence programmes were planned and proposed by the community at initial level through the Micro Plan preparation stage. The line departments also got an opportunity to review their own engagement with a large chunk of their stakeholders and partners with their development programmes. Some selective successful programmes of integration were also discussed at different divisional management units to enable cross learning and emulating as far as possible.

10.05.1 DMU LEVL SAMEEKSHYA

All the 12 Divisions of OFSDP-II had organised the DMU level Sameekshya in different timeline for the Financial Year of 2022-23. In the year 2022-23 following meetings are organized at different level.

DMU LEVEL SAMEEKSHYA Meetings held during 2022-23

| S. No. | Name of the DMU | Date of DMU level Sameekshya | Venue | No of Participants |
|--------|-----------------|------------------------------|------------------------------------|--------------------|
| 1 | Athamallik | 21.06.2022 | NALCO Training Centre Auditorum | 78 |
| 2 | Baripada | 13.07.2022 | SANKALP Conference Hall | 140 |
| 3 | Boudh | 17.06.2022 | BN Pur Nursery | 112 |
| 4 | Dhenkanal | 22.06.2022 | Kapilash FMU Campus | 128 |
| 5 | Jharsuguda | 3.3.2022 | Micro Continental Hotel | 125 |
| 6 | Ghumusur-South | 5.8.2022 | Mega Nursery, Khariaguda | 206 |
| 7 | Ghumusur-North | 17.06.2022 | Lalsingi Training Centre | 163 |
| 8 | Karanjia | 10.06.2022 | DMU Conference Hall | 116 |
| 9 | Rairangpur | 28.06.2022 | ITDA Conference Hall | 85 |
| 10 | Subarnapur | 10.08.2022 | Town Hall | 227 |
| 11 | Sundargarh | 21.03.2022 | Bikash Bhawan | 210 |
| 12 | Sambalpur | 26.10.2022 | RCCF Conference Hall | 82 |

10.05.2 STATE LEVEL SAMEEKSHYA 2022 - 23:

The Odisha Forestry Sector Development Society (OFSDS) organized State Level Sameekshya as one day programme. The one-day inception workshop called Sameekshya: Achieving Transformation through Multi Product Cluster Initiatives was organised on 17th August 2022 at Bhubaneswar. The workshop was organized in collaboration with Consortium of Kalinga Institute of Industrial Technology and Technology Business Incubator (KIIT- TBI) Bhubaneswar, Bhubaneswar City Knowledge Innovation Cluster (BCKIC), Bhubaneswar and Indian Institute of Entrepreneurship (IIE), Guwahati.

The Additional Chief Secretary, Shri Satyabrata Sahu, IAS, Department of Forest, Environment & Climate Change, Government of Odisha inaugurated the workshop as the Chief Guest. The Principal Chief Conservator of Forests and Head of Forestry Force, Odisha, Shri Debidutta Biswal, IFS, was the Guest of Honour. Other dignitaries who participated in the workshop were Dr. Meeta Biswal, IFS, Principal Chief Conservator of Forests (Projects) and Project Director, OFSDS and Dr. Mrutyunjaya Suar, Chief Executive Officer, KIIT-TBI. Shri Sudhanshu Sekhar Khora, IFS, Deputy Project Director (CME&S) offered Vote of thanks on this occasion.

RCCFs of Six Circles, DFO-cum-DMU Chief of OFSDS Project Divisions, officials of PMU, PMC and MMSA all participated in the programme.

State level Sameekshya Meeting:

















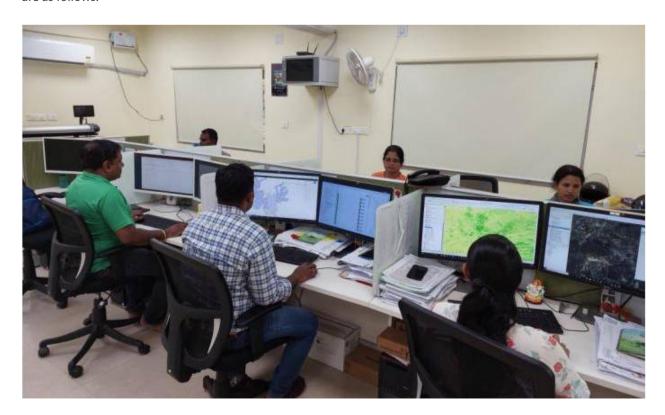
Chapter 11

Geomatic Centre, OFSDS

11.01 Introduction

The Geomatic Centre in Odisha Forestry Sector Development Society (OFSDS) has been established with an objective to strengthen the Strategic Planning and Monitoring and Evaluation of activities being implemented in different projects. The Geomatics Centre is involved in designing and developing Geographic Information System (GIS) solutions and preparing Management Information System (MIS) reports that facilitates in advanced planning and effective implementation of all activities of Odisha Forestry Sector Development Project, Phase-II (OFSDP-II), Ama Jangala Yojana (AJY) and OFSDS-OMBADC Livelihood Projects. Moreover, the Geomatic centre of OFSDS has also contributed in formulating and operationalising the integrated MIS & GIS System of different components in the projects. The Centre of OFSDS is consistently under operation for more than 16 years and the functioning of GIS Centre and use of technology in implementation of project intervention has been appreciated by JICA in different forum and it has been recorded in the Impact Assessment Report of JICA as one of the best initiatives of Odisha Forestry Sector Development Project, Phase-I (OFSDP-I).

The Geomatic Centre has a sophisticated GIS lab and Software development Cell with high end workstations and advanced equipments. A team of 7 personnel having diversified knowledge in the domain of Image Processing and Remote Sensing, GIS, Environment and Climate Change Analysis, Software Development and Research and Development are working in the Centre. The Geomatic Centre maintains a Data Centre in its premises to host all the MIS/GIS Application Systems and website. High speed network support system has been established in the office with support from BSNL and STPI to provide 24X7 services. The primary activities of the Geomatic Centre are as follows.



11.02 Activities in Geomatics Centre

GIS and Remote Sensing based planning support-

- Procurement and Processing of satellite imageries and spatial data.
- Preparation of Thematic Maps, Base Maps, Forest Cover Maps, Forest Types Maps etc. to facilitate the officials for planning the forestry interventions and livelihood programme etc.
- Development of GIS based Applications for decision support system.
- Forest Cover Change analysis to assess the impact

Spatial & Non-Spatial Data Management -

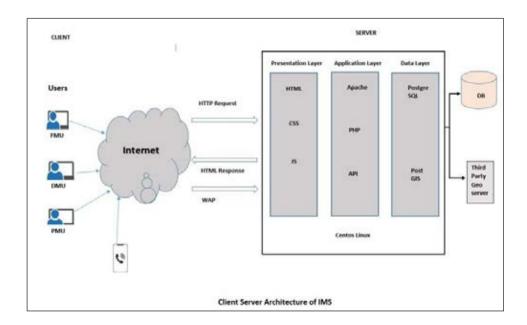
- Creation of baseline information and baseline thematic maps with the high-resolution satellite imageries and Spatial data procured from NRSC and FSI, ORSAC, FITGC etc. for analysis and for planning on implementation of Community managed Monitoring, Reporting & Verification- REDD+ Readiness under OFSDP-II.
- Archiving for spatial database for change analysis of project interventions periodically.
- Formulating integrated MIS & GIS based Monitoring system for planning and concurrent monitoring of project activities to facilitate timely corrections and effective implementation.
- Concurrent data validation and verification

Application Development-

- Development of project / component specific MIS/GIS Applications System by in-house team.
- Formulation of different modules, sub modules on different project components
- Facilitate in formulating simple data collection tools and interfaces for uploading the information at field level.
- Integration of innovative tool and applications for data consistency and correctness in the entry modules
- Generating and providing MIS reports and dynamic information as and when required.
- Establishing robust linkage of Mobile App Application to the IMS Database of OFSDP-II

Capacity Building-

- Preparing User manuals for the modules developed.
- Standard Operating Procedure (SOP) prepared for analysis and implementation of CMRV-REDD+ Readiness
- Augmenting timely training and handholding support to Project officials and field staff for optimal use of IMS



Application for planning and monitoring of project interventions.

 Capacity Building Training to conduct Ground Truthing for assessment of Ground stock and Forest Canopy Density under CMRV.

Research and Development

- Studying research papers and understanding advanced technology relevant to Forest Canopy Density and Forest Types
- Developing methodology for spatial analysis and map preparation

IT Support-

- Maintenance of IT infrastructure of PMU.
- Development and Maintenance of official website.
- Maintenance of Data Centre (Server Room) of OFSDS by in-house experts of OFSDS
- Procurement of required items through Government e Portal (GeM) platform
- Augment support to the project officials for preparation of thematic charts, analysis and report generation by use of data through Microsoft Excel etc.
- Augmenting required support in HR Management, Recruitment Processes etc.

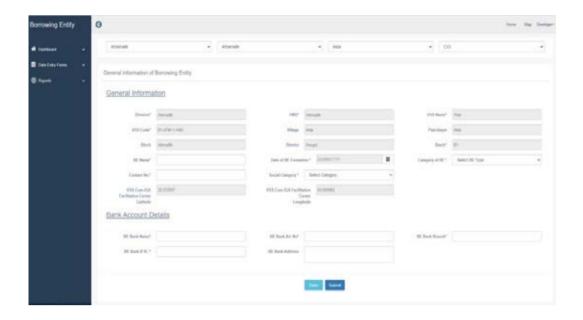
11.03 Remote Sensing and GIS Technology-

Satellite imageries have been procured from NRSC and are analysed to prepare different thematic Maps to facilitate planning & implementation of project interventions particularly on plantation, changes in canopy density etc. as given below:

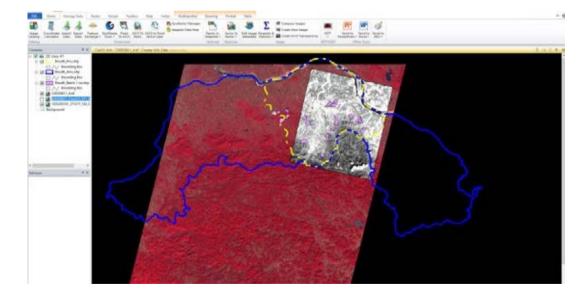
Details of Satellite Imagery procured

| S. No | Satellite Imageries | Year | Quantity in Nos. | Processing |
|-------|---------------------------------|-----------|------------------|----------------------------|
| 1 | Resource Sat-I LISS IV of 5.8 m | 2021 | 62 | Layer Stacking, NDVI, FCD, |
| | resolution | | | Supervised Classification |
| 2. | Pan Chromatic Cartosat-I of 2.5 | 2015-2019 | 143 | Pan Sharpening |





Out of 66 nos. of LISS IV imageries covering, entire state of Odisha, 62 nos. of cloud free LISS IV imageries (with 5.8m resolution) of 2021-22 have been procured from NRSC, Hyderabad. The satellite imageries have been processed for layer stacking and NDVI has been executed. These imageries are being used for analysing the Forest Cover Change in Batch-I VSS area across the OFSDP-II Divisions. Further, 143 nos. of Cartosat-I imageries of 2.5 resolution for the period from 2015-2019 i.e prior to project implementation, have been procured from NRSC, Hyderabad to facilitate in analysing the ground situation in the scale of 1:5000. This analysis is facilitating in the implementation of Community based Monitoring, Reporting & Verifications (CMRV) and Biomass Study for REDD+ activity of the OFSDP-II Project.

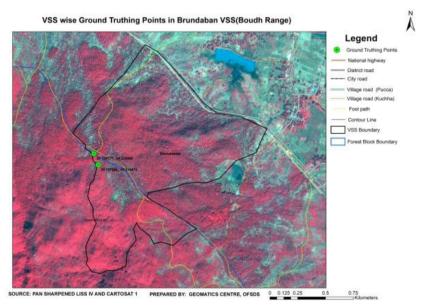


Cartosat-I imageries and LISS IV imageries of same dates have been merged & pan-sharpened using High Pass Filter (HPF) and Hyperspherical Colour Space (HCS) Resolution Merge techniques of Erdas Imagine Software to obtain the multispectral imageries of 2.5 resolution. All the available imageries covering the project area have been merged and stored in the database. The Forest Cover Density is determined from the merged imageries for the VSS assigned area referring the FSI Data, NDVI, FCD, Google Earth and etc. and are classified into 8 Density Classes as follows:

| Canopy Density Classes (in %) | Description |
|-------------------------------|-------------|
| 0-10 | Scrub |
| 10-20 | Open-I |
| 20-30 | Open-II |
| 30-40 | Open-III |
| 40-50 | MDF-I |
| 50-60 | MDF-II |
| 60-70 | MDF-III |
| >70 | Very Dense |

The Forest Canopy Density class has been digitized for all 777 VSS of Batch-I and Batch-II. An Atlas consisting Base Maps and Forest Cover Density with Treatment Maps in the Scale of 1:5000 of each VSS assigned area is being prepared by super imposing the VSS assigned area polygon over the multispectral imageries of 2.5 resolution.

| | Status of Forest Canopy Density Classification in VSS Assigned Area, OFSDP-II | | | | | |
|--------|---|-----------|--------|--------|------------------------|--|
| S. No. | Name of Division | Total VSS | B1 VSS | B2 VSS | Digitization Completed | |
| 1 | Athmallik | 75 | 20 | 25 | 45 | |
| 2 | Baripada | 135 | 46 | 70 | 116 | |
| 3 | Boudh | 71 | 20 | 20 | 40 | |
| 4 | Dhenkanal | 150 | 25 | 27 | 52 | |
| 5 | Gh. North | 100 | 25 | 24 | 49 | |
| 6 | Gh. South | 65 | 20 | 20 | 40 | |
| 7 | Jharsuguda | 88 | 29 | 51 | 80 | |
| 8 | Karanjia | 80 | 20 | 20 | 40 | |
| 9 | Rairangpur | 107 | 40 | 60 | 100 | |
| 10 | Sambalpur | 100 | 55 | 20 | 75 | |
| 11 | Subarnapur | 84 | 25 | 25 | 50 | |
| 12 | Sundargarh | 156 | 30 | 60 | 90 | |
| | | 1211 | 355 | 422 | 777 | |



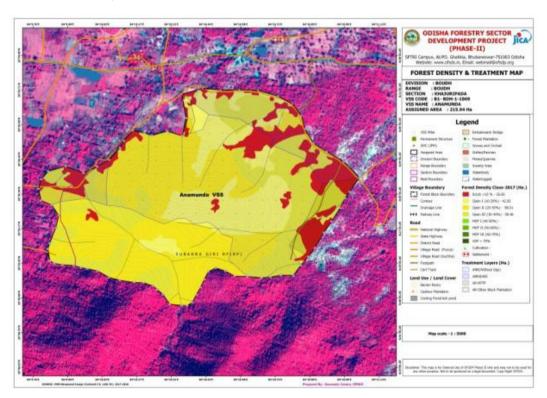
The digitization of the Forest Density Class is executed in ArcGIS 10.2 Advanced Desktop application. The Open and Moderately Dense area are examined minutely from Google Earth Pro and polygons are extracted. AVI, BSI and CSI of FCD computations are carried out on LISS-IV imageries and referred for digitization.

11.04 Map Preparation-

The Forest Density and Forest Type maps were prepared for 5 Project Divisions namely Dhenkanal, Baripada, Boudh, Gh. North and Sundargarh and Ground Truthing of the same at respective sites executed for implementation of CMRV- REDD+ Readiness under OFSDP-II.

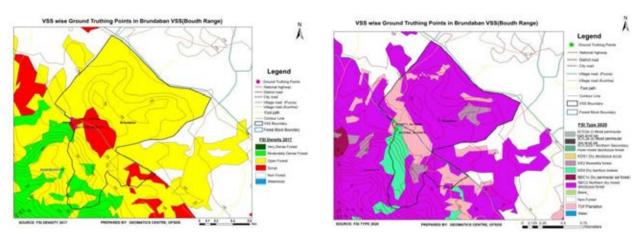
Different maps with the locations of the VSSs, super imposed with the facilities / provision like road, drainage system, distance etc. were prepared for the potential VSSs / EDCs to facilitate planning and implementation of different Income Generating Activities through the Borrowing entities (SHGs, CIGs and PoPs) taken up under the project. Maps prepared for the above initiatives during the reporting year include VSS wise Sal Leaf (Dwipatree) Cluster Map for three Project Divisions of Mayurbhanj, Pulse Cluster for Ghumsur South, Brahmi Plantation Cluster for Athmallik and Boudh Project Divisions.

A map showing the EDC locations of Badrama Range of Bamra Wildlife Division was prepared for taking up aromatic Rice Cultivation under Satoyama Initiative.



11.05 Preparation of Reports in MIS Domain

The MIS reports are generated on weekly basis to review the data entry progress and followed up with the field officials to complete the data entry. Further, the target and achievement for all treatments are being compiled on weekly basis and reported to respective sections at PMU. The CMRV report Card of Batch-I VSS has been generated and analysed to understand the strengths and weaknesses in the VSS. Similarly, The Gender Mainstreaming data captured under are being analysed by the concerned Experts of PMC & PMU. Validation in term consistency and accuracy of data is being conducted regularly at PMU level.

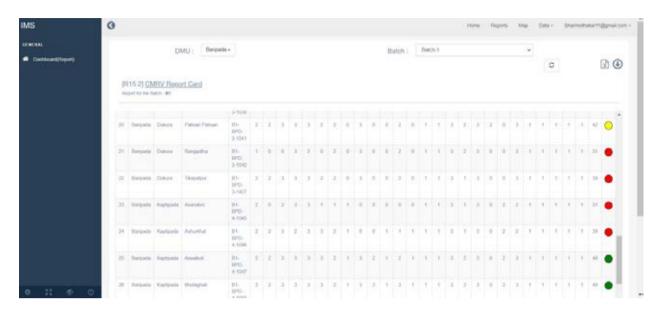




11.06 Application development

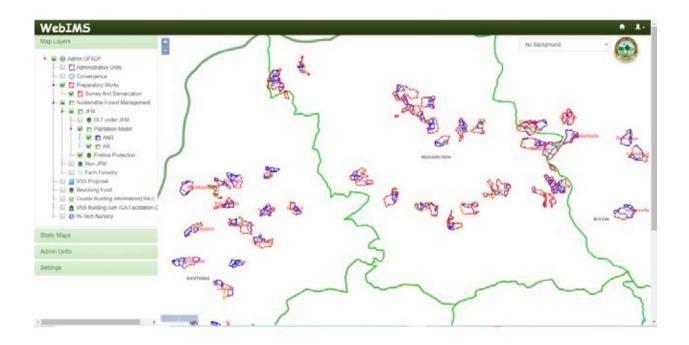
New modules that have been developed and linked in IMS portal are:

- 1. **CMRV Report Card** This module is developed to collect CMRV data and generate the CMRV status in form of Report card for each VSS. The module has been designed based on the Chapter -9 of Revisit of Microplan Document.
- 2. **Gender Mainstreaming** The module is developed to collect the data and generate the report on Gender Mainstreaming adopted in VSSs.



- 3. **ESMSF** Similarly, a module with four forms has been developed to collect data on Environment Safeguards, Social Safeguards, Assessment and Applicability of ESMSF.
- 4. **VSS Building cum IGA Facilitation Centre-** A module has been developed to show the locations of all VSS Building along with information on assets available.
- 5. **Farm Forestry** The Model wise Farm Forestry module has been developed & linked in IMS to monitor the various plantations outside forest area.
- 6. **Online Application Module** A module for online submission and receipt of application form was developed for Recruitment and Tender Processes.
- 7. **Potential Product Availability Module** for capturing the primary producer wise availability of potential produces, quantity, status of current value addition & market situation etc. prepared and uploaded.
- 8. APIs were developed for retrieving information on Farm Forestry and Capacity Building of PMU for the Mobile App-OFSDP-II.
- 9. APIs were developed to link up ANR & AR Treatments Sites under JFM activities in OFMS Portal, the MIS/GIS portal of the State Forest Headquarters, Odisha.





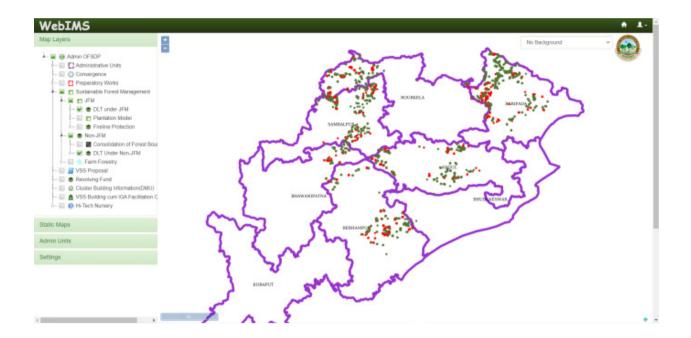
11.07 Monitoring and Evaluation

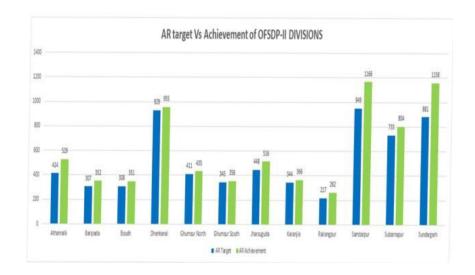
A total 125612 Ha assigned area of 1211 VSS of 12 Divisions under OFSDP-II has been surveyed, demarcated and pillar posted. The GPS coordinates of the pillars posted resulted in 1552 number of patches. The polygons of 1552 patches of VSS assigned area generated from WebGIS of IMS Portal have been cross checked and verified.

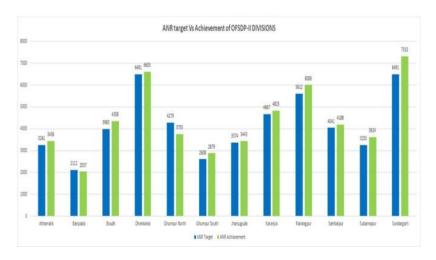
The treatment information is downloaded from the IMS portal and compiled for Target accomplishment. The ANR treatments includes ANR without Gap, ANR @ 200, ANR @ 400, ANR @ 800 plantations. Component wise data is verified against the target and achievements. Similarly, verification is done for each AR treatment i.e Fuel Fodder, NTFP and Block Plantations. A total 59718.88 Ha Treatments in 3488 sites of ANR (2336 sites) & AR (1152 sites) have been verified. The DLT Treatments of both JFM and Non JFM are being verified. The GPS location of each activity is cross checked with Google and verified. Simultaneously, the verification of data uploaded for other treatment modules of Consolidation of Forest Boundary, Establishment of Fire line is in progress.

In order to analyse the Forest Cover of area assigned to the VSSs of Batch-I under OFSDP-II, Temporal Satellite data i.e Resourcesat 2 LISS-IV of the year 2017 and 2021 are being used for mapping and monitoring the assigned area. The ISFR 2017 data and ISFR 2021 data are also being used for Batch-I VSS.

The GIS Centre of OFSDS is contributing significantly for effective implementation of project interventions of all projects being implemented under OFSDS. Required support is also being made to Monitoring Sections of the project with latest updated information for report generation and sending the same to different quarters including Government.







Chapter 12

Financial Management

12.01 Budget and Expenditure:

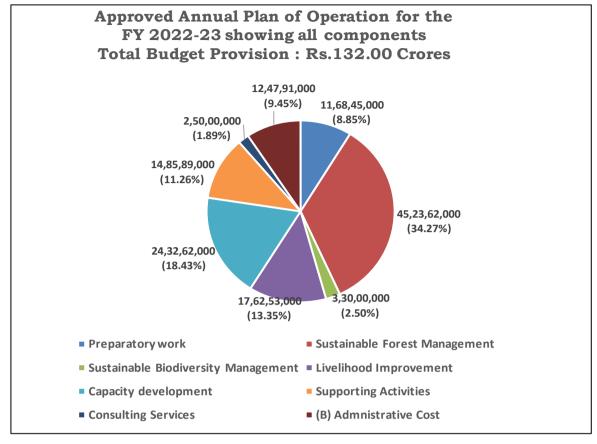
A budget of Rs. 132.00 Crores was approved in the 18th Meeting of the High Power Committee held on 19th August, 2022. Out of the approved budget, an amount of Rs. 105.60 Crores was received from Forest, Environment and Climate Change Department, Government of Odisha for the Financial Year 2022-23.

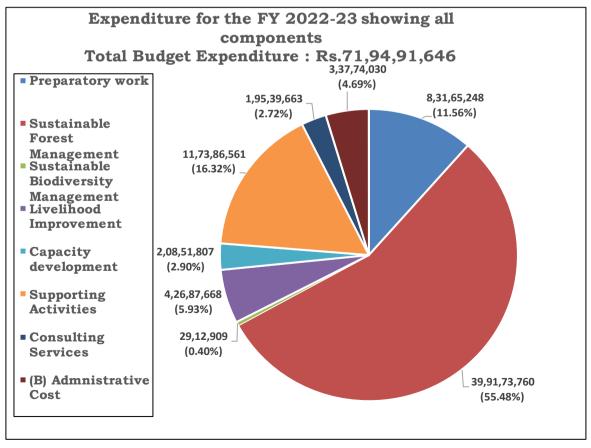
The total expenditure incurred during the year was Rs. 71.95 Crores. Components wise Funds Proposed, Funds Received and Expenditure incurred during 2022-23 is given below:

Funds Proposed, Funds Received and Expenditure during the Financial Year 2022-23 Name of the Project: Odisha Forestry Sector Development Project Phase-II

(ID-P257)

| Item of Work | | Budget Provision | Fund Received From FE&CC Dept., Govt. of Odisha | Budget Surrender | Total Expenditure |
|--------------|--------------------------------------|---------------------|---|---------------------|------------------------------------|
| (A) F | orest Ecosystem and Community Develo | pment | | | |
| 1 | Preparatory Work | 11,68,45,000 | | | 8,31,65,248 |
| 2 | Sustainable Forest Management | 45,23,62,000 | 105.60 Crores | 26.40 Crores | 39,91,73,760 |
| 3 | Sustainable Biodiversity Management | 3,30,00,000 | | | 29,12,909 |
| 4 | Livelihood Improvement | 17,62,53,000 | | | 4,26,87,668 |
| 5 | Capacity Development | 24,32,62,000 | | | 2,08,51,807 |
| 6 | Supporting Activities | 14,85,89,000 | | | 11,73,86,561 |
| 7 | Consulting Services | 2,50,00,000 | | | 1,95,39,663 |
| Total(A): | | 1,19,53,11,000 | | | 68,57,17,616 |
| (B) | Administrative Cost (State Share) | 12,47,91,000 | | | 3,37,74,030 |
| Grand Total: | | 1,32,01,02,000 | 105.60 Crore | 26.40 Crore | 71,94,91,646 or 71.95 crores |

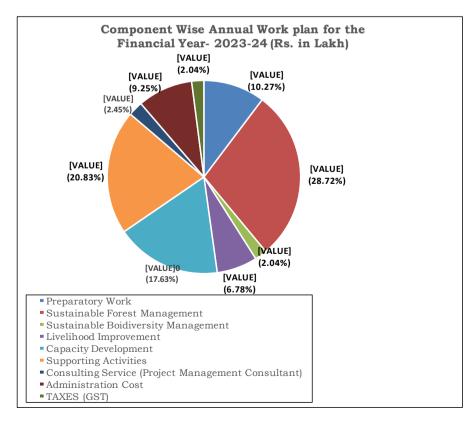




12.02 Annual Work Plan and Budget for 2023-24:

The Annual Work Plan of the year 2023-24 was prepared keeping in mind the continuity of work in 1211 VSSs of Batch-I, II, III & IV as per the project schedule. The Annual Work Plan and Budget for - 2023-24 is placed below:

| Annual Work Plan for the Financial Year- 2023-24 | | | | | |
|--|---------------------|--|--|--|--|
| ODISHA FORESTRY SECTOR DEVELOPMENT PROJECT, PHASE-II | | | | | |
| SUMMARY (INR in Lakhs) | | | | | |
| COMPONENT | Amount in Rs. Lakhs | | | | |
| (A) Programme Expenditure | | | | | |
| Preparatory Works | 755.71 | | | | |
| Sustainable Forest Management | 2,114.12 | | | | |
| Sustainable Biodiversity Management | 150.00 | | | | |
| Livelihood Improvement | 499.31 | | | | |
| Capacity Development | 1,298.20 | | | | |
| Supporting Activities | 1,533.67 | | | | |
| Consulting Services (Project Management Consultant) | 180.00 | | | | |
| TOTAL (A) | 6,531.01 | | | | |
| (B) State Share | | | | | |
| Administration Cost | 680.71 | | | | |
| TAXES (GST) | 150.00 | | | | |
| TOTAL (B) | 830.71 | | | | |
| GRAND TOTAL Rs.in Lakhs (A+B) | 7,361.72 | | | | |
| GRAND TOTAL Rs.in Crore | 73.62 | | | | |



Summary of Budget Receipt, Expenditure and Reimbursement

The overall budget received and expenditure incurred for the project during the financial year 2022-23 is given below:

| | Summary of Receipt and Expenditure & Reimbursement Claim during 2022-23 | | | | |
|---|---|--------|--|--|--|
| | Funds Received & Expenditure Amount (Rs. In Crore) | | | | |
| Α | Opening Balance as on 01.04.2022 | 51.10 | | | |
| В | Funds Received from Forest, Environment and Climate Change Deptt., Govt. of Odisha during 2022-23 | 105.60 | | | |
| С | Less, expenditure made during F.Y 2022-23 | 71.95 | | | |
| D | Closing balance as on 31.03.2023 (D=A+B-C) | 84.75 | | | |

12.04 Re-imbursement Claims

The Funds received as Re-imbursement Claims from JICA is summarized below:

| | Reimbursement claims | | |
|---|--|-------|--|
| Α | Reimbursement Claim due as on 01.04.2022 | -1.97 | |
| В | Reimbursement Claim submitted for disbursement during the Financial Year 2022- 23 | 67.18 | |
| С | Less, Reimbursement Claim received upto 31.03.2023 | 58.55 | |
| D | Reimbursement Claim due but not received up-to 31.03.2023 (D=A+B-C) | 6.66 | |



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