

**Orissa Forestry Sector Development Project**  
Forest & Environment Department  
Govt. of Orissa





# Process Documentation

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## A b b r e v i a t i o n s . . . . .

ANR	Assisted Natural Regeneration	JICA	Japan International Cooperation Agency
APC	Agriculture Production Commissioner	JPD	Joint Project Director
BPL	Below Poverty Line	M&E	Monitoring & Evaluation
CAMPA	COMPensatory Afforestation program	MIS	Management Information System
CF	Conservator of Forests	MoEF	Ministry of Environment and Forest
CCF	Chief Conservator of Forests	MoU	Memorandum of Understanding
DAC	District Advisory Committee	NGO	Non-Government Organization
DEO	Data Entry Operator	NRM	Natural Resource Management
DFO	Divisional Forest Officer	NTFP	Non-Timber Forest Product
DGPS	Differential Global Positioning System	OFS	Orissa Forest Service
DMU	Divisional Management Unit	OFSDP	Orissa Forestry Sector Development Project
DPD	Deputy Project Director	OFSDS	Orissa Forestry Sector Development Society
EDCs	Eco Development Committees	PCCF	Principal Chief Conservator of Forests
EPA	Entry Point Activity	PD	Project Director
F&E Dept	Forest and Environment Department	PMU	Project Management Unit
FD	Forest Department	PRA	Participatory Rural Appraisal
FDA	Forest Development Agency	SFTRI	State Forest Training and Research Institute
FEO	Forest Extension Officer	SHG	Self Help Group
FMU	Field Management Unit	ST/SC	Scheduled Tribes and Scheduled Castes
FRO	Forest Range Officer	ToR	Terms of Reference
FY	Financial Year	ToT	Training of Trainers
GB	Governing Body	VFDF	Village Forest Development Fund
GC	General Consultant	VFW	Village Forest Worker
GIS	Geographical Information System	VHF	Very High Frequency
GPS	Global Positioning System	VSS	Vana Samarakshan Samiti
HPC	High Power Committee	WL Divn	Wildlife Division
HRD	Human Resource Development	WORLP	Western Orissa Rural Livelihood Project
IAS	Indian Administrative Service	XIM	Xavier Institute of Management
IEC	Information, Education and Communication		
IFS	Indian Forest Service		
IGA	Income Generation Activity		
JFM	Joint Forest Management		

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# 1. Backdrop

Orissa Forest Sector Development Project (OFSDP), funded by Japan International Cooperation Agency (JICA) is the first major foreign-funded forestry project in the State of Orissa located at east coast of Republic of India, after the Social Forestry Project funded by Swedish SIDA during the 1980s. The project was launched during 2006-07. The State Government constituted Orissa Forestry Sector Development Society as an Autonomous Organization, registered under the Registration of Societies Act, in the Forest and Environment Department for smooth implementation of the project. Society mode institutional mechanism, first of its type in the country, facilitated evolution of innovative approaches for project interventions.

In this document an attempt is made to compile the main features of these innovations and new ideas for the benefit of development practitioners such as NGO workers, consultants, researchers, government officials and decisions makers, who are associated with participatory, forest management in India, and other parts of the world.

This process document is also going to provide insight for further fine tuning of different processes.

Recently (from 2009-10), sizeable funds has become available in the Indian forestry sector under the CAMPA to compensate developmental deforestation. Innovations of OFSDP may be helpful in providing greater insight to the planners of these programs for effective interventional delivery.



## 2. Overview of the Project

### Objective & Approach

The Project aims at Restoration of degraded forests and Livelihood promotion of the resident community by promoting sustainable forest management and community/ tribal development, with larger goals of improving environment and alleviating poverty. With this overall objective, the basic approach is:

- a) To protect the existing dense natural forests, with their biodiversity.
- b) To restore the vigor of natural regeneration through appropriate treatment.
- c) To improve crown density of degraded forests, through reforestation and afforestation.
- d) To promote alternative livelihood options to reduce dependence on the forests.
- e) To enhance the capacity of stakeholders, for sustainable forest management and technological up-gradation in forestry.

### Componential Target

Towards achievement of the above, the project had provisioned following major components/ sub-components.

- a) Restoration of Degraded Forests : 196,000 hectares
- b) Coastal Plantation : 2,810 hectares
  - i. Mangrove : 2160
  - ii. Casurina : 650
- c) Community/Tribal Development : 2,275 VSSs, 4,550 SHGs
- d) Biodiversity Conservation : Ecotourism development 5 sites, Establishment of 5 Community Reserves/ Heritage sites
- e) Support Activities: Baseline survey, GIS mapping, capacity building, research, publicity, MIS, project monitoring, etc.

### Componential Investments

The total duration of the project is seven years starting from 2006-07 with the total project cost of ₹ 6598 million, with the following broad break up:

Sl.	Component	Projected cost million ₹
1	Restoration of Degraded Forests (JFM & Non JFM mode)	2601
2	Coastal Plantation	129
3	Biodiversity Management	126
4	Community/Tribal Development including Capacity Building of VSSs	1227
5	Supporting Activities	700
6	Consulting Service	207
7	Price escalation & Physical contingency	433
8	Administrative Cost	1001
9	Interest during construction	174

**Project Area**

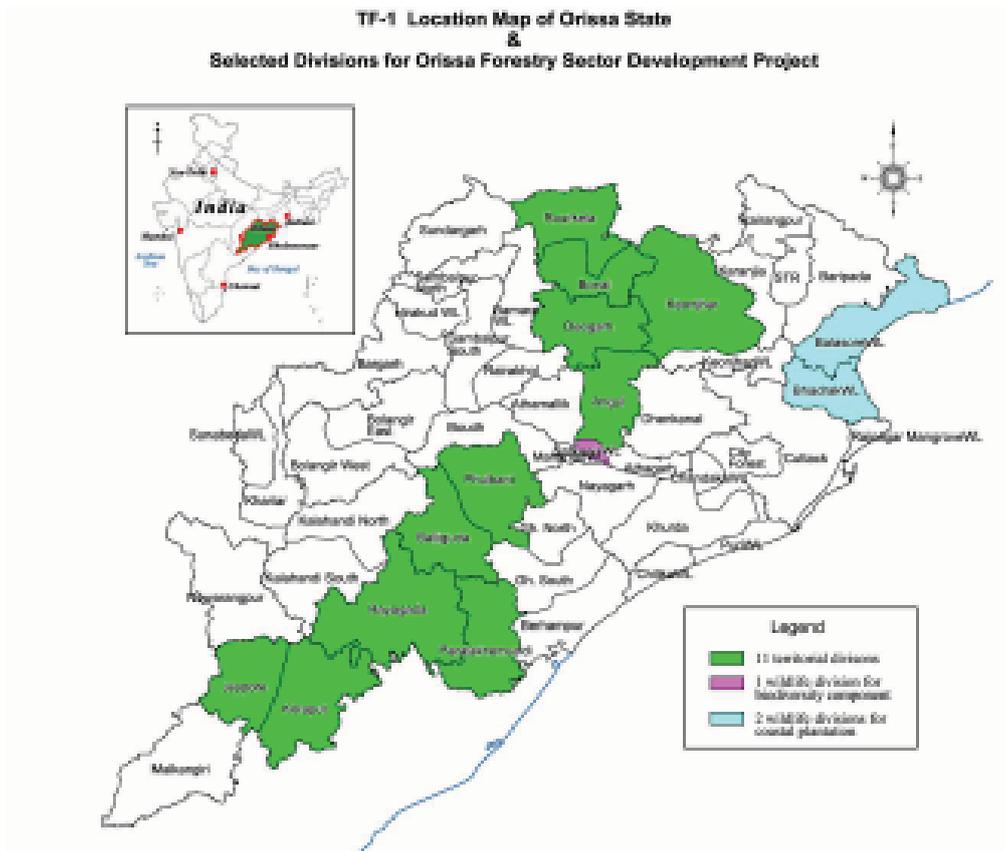
During project formulation, the districts to be covered were carefully selected based on various key indicators relating to forest degradation and socio-economic condition of the area.

The project covers 11 Forest divisions, 3 Wildlife divisions out of 51 divisions in Orissa. The 14 Divisions fall in 10 administrative districts as given in table below:

Divisions	District
Angul	Angul
Balliguda	Kandhamal
Bonai	Sundargarh
Deogarh	Deogarh and Angul
Jeypore	Koraput
Keonjhar	Keonjhar
Koraput	Koraput
Parlakhemundi	Gajapati
Phulbani	Kandhamal
Rayagada	Rayagada
Rourkela	Sundargarh
Satkosia WL	Angul
Balasore WL	Balasore
Bhadrak WL	Bhadrak

Total forest area in the project divisions is about 21,600 km<sup>2</sup>. The total degraded forest in these divisions is about 15,050 km<sup>2</sup>, which is about 70% of the forest area.

Four notified protected areas, namely Satkosia Gorge, Kotgarh, Kuldiha, and Lakheri valley lie in the Project area. These sanctuaries are home to Asian elephants, Tigers, Leopards, Gaur, Sambar, Spotted deer, Sloth bear etc. and many plant species. There are many villages inside and on the periphery of these sanctuaries.



## 3. Administrative and managerial innovations

### 3.1 Society mode Project Execution

#### Project Imperatives

Fast decision making for time bound achievements required greater autonomy.

#### Process Adopted

PMU under the Society, directly managing the project with "corporate-like" management style, with less hierarchy, simpler procedures and reciprocal communication.

#### Lessons Learnt

- Faster decision making and actions were realized to a great extent.
- Effort was required for effective coordination with the Department to mobilize the field officials while they were under administrative control of the Department.
- Organizational innovations shall have to be accompanied with administrative and operational infrastructure improvements.

Project Management Unit (PMU) has been facilitating execution of OFSDP. PMU was created by the State Government as Autonomous Society registered under the Society Registration Act 1960 within the Forest and Environment Department, Government of Orissa. The following table shows the overall organizational structure of OFSDP:

#### State-Level: Project Management Unit (PMU)

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>☛ High Power Committee headed by Chief Secretary of Government of Orissa           <ul style="list-style-type: none"> <li>- Meets twice a year and approves budget, expenditure &amp; addresses aspects of convergence with other departments.</li> </ul> </li> <li>☛ Governing Body chaired by APC-cum-Additional Chief Secretary           <ul style="list-style-type: none"> <li>- Monitors the activities of the Project through quarterly reviews.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>☛ Project Director, OFSDP, is the ex-officio CEO of OFSDS, heads the PMU at State level.           <ul style="list-style-type: none"> <li>- Manages day-to-day project affairs</li> </ul> </li> <li>☛ District Level District Advisory Committee headed by District Magistrate           <ul style="list-style-type: none"> <li>- Meets Bi-monthly to facilitate inter-departmental synergy for OFSDP</li> </ul> </li> </ul> |
|---|---|

**Division Level :**

- ☛ Divisional Management Unit (DMU) headed by DFO, who is ex-officio DMU Chief
  - Day-to-day project management at the Division level

**Range Level**

- ☛ Field Management Unit (FMU) headed by Range Officer, who is ex-officio FMU Chief. A partner NGO team is assigned to each FMU during crucial period of three years.
  - Supervising and Monitoring project activities at the village level
  - Executing project work for non-JFM project components.

**Village Level**

- ☛ Vana Samrakshyana Samiti (VSS) and Self-Help Group (SHG) are the project implementers at the village-level with the assistance from VSS Animator
  - Preparation of comprehensive forest / village micro plans and implementation with facilitation from frontline officials of Forest Department.

**Major advantages of the society mode of project implementation can be summarized as under:**

- PMU prepares its annual plan using project budget heads that were in line with the project components and sub-components. It allows the project to manage its financial discipline.
- Once the project fund is released to the Society from the Forest Department, Project Director and other senior officers are authorized to decide on fund utilization as per Accounting Procedure and procurement policy created by the Society, in compliance with the annual plan approved by the Governing Body. It allows timely fund release to the DMUs / FMUs / VSSs for execution of various works.
- PMU officers, being on deputation to the Society, are available full-time for the project.

The financial power of the DFO-cum-DMU Chiefs to sanction estimates was enhanced to Rs. 500,000 (from 100,000 as DFO of the Department). This allowed faster approval of the proposals from VSS at the field level and timely work execution or procurement of goods.

Adequate project monitoring and innovations needed to be supported by sufficient project staff and infrastructure at all levels. The major strengthening of project staff and infrastructure vis-à-vis regular departmental structure and facilities is summarized in the table below:



Level	Staff Strengthening	Infrastructure
PMU	<ul style="list-style-type: none"> <li>● GC with a group of international and national experts was engaged.</li> <li>● Some Deputy Project Directors (DPDs) with expertise in specific fields (other than forests) were recruited from open market on annual contract basis.</li> <li>● Technical Professionals (GIS/MIS, Accounts Manager) were recruited from the open market on annual contract basis.</li> <li>● Administrative support personnel were engaged through service provider.</li> </ul>	<ul style="list-style-type: none"> <li>● A number of vehicles were procured.</li> <li>● SFTRI building was renovated, along with computers, furnitures &amp; communication equipments.</li> <li>● GIS laboratory was established at the PMU.</li> </ul>

Level	Staff Strengthening	Infrastructure
DMU	<ul style="list-style-type: none"> <li>● 5 Field Extension Officers (FEOs) were kept exclusively for OFSDP in each division through redeployment from non-project divisions (except some of the DMUs).</li> <li>● One Field level Expert of GC was assigned at each DMU.</li> <li>● 3-4 Data entry operators (DEOs) were engaged through service provider.</li> </ul>	<ul style="list-style-type: none"> <li>● A vehicle and a number of motor cycles were procured per DMU.</li> <li>● DMU extension building constructed along with logistical support.</li> <li>● Computer / communication</li> </ul>
FMU	<ul style="list-style-type: none"> <li>● 2 Data entry operators (DEOs) were engaged through service providers.</li> <li>● Partner NGO Team with a Team Leader &amp; two Development Officers (DOs) was engaged for a period of initial three years.</li> </ul>	<ul style="list-style-type: none"> <li>● Motor cycles were procured.</li> <li>● FMU extension building in addition to Range Office building was constructed with logistical support</li> <li>● Computer / communication equipment provided.</li> </ul>
VSS	<ul style="list-style-type: none"> <li>● A local educated youth (from the village) was engaged as VSS Animator by the respective VSS.</li> </ul>	<ul style="list-style-type: none"> <li>● VSS office building with meeting hall was constructed, along with furniture in every VSS</li> </ul>



## 3.2 Partnership with NGOs

### Project Imperative

Since major activities were to be implemented through JFM approach & considering the wider ramifications where project had to be implemented through the grassroots intervention after comprehensive village level micro-planning, engagement of local NGOs for supporting community level activities was a major decision.

### Process Adopted

Partner NGOs at the field level, as additional input to the Project for addressing social engineering aspects under the Project.

### Lessons Learnt

At the beginning, a series of focused meetings and orientations between NGOs and the project was required (one orientation would not be sufficient).

- Selection of appropriate NGOs shall be assisted by external experts and then contracting.
- Each agreement / contract with NGO shall be sufficiently large enough to attract established, capable NGOs for bidding and NGO Chief Functionaries during the implementation.
- An adequate support and supervising mechanism is required within the project.

It was the first attempt for the Orissa Forest Department to partner with NGOs in a large scale. Major responsibilities of NGOs were -

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>a) Assisting FMU in implementation process of different forestry and livelihood interventions.</li> <li>b) Sensitization of local communities, formation/revitalization of VSSs and their capacity building.</li> <li>c) Selection of animators for VSSs and training programs for community members</li> <li>d) Facilitating Preparation of comprehensive micro plans for target villages by the respective VSS and plans and estimates for EPA, IGA, LLI.</li> </ul> | <ul style="list-style-type: none"> <li>b) Techno managerial support in execution of plans and projects</li> <li>c) Identification / selection / upgradation of SHGs, BDS support and exploring market access for micro-enterprise development.</li> <li>d) Implementing / supporting livelihood (basic needs) programs</li> <li>e) Any other works ancillary and necessary to the execution of project.</li> </ul> |
|---|--|

### Key Processes of Partnership with NGOs

- Based on the prescribed Scope of Work, an NGO was engaged for each FMU to provide a team of one Team Leader and 2-4 numbers of Development Officers (DOs).



- ☛ As per the agreement, the project paid NGOs prescribed fees for the services of team members, which include their monthly salary and travel costs (lump sum).
- ☛ "NGO-GO Collaboration Guideline" was developed by the project, which served as a manual for day-to-day operations of NGOs.
- ☛ NGO team members (Team Leader and DOs) were asked to establish their office near the FMU office. NGO team members (Team Leader and DOs) and Member Secretary of VSS (Forester) worked together either at the FMU office or field. Regular appraisal was done by FMU Chief.
- ☛ Partner NGO submitted monthly, quarterly and annual reports, in which plans and achievements were indicated. This facilitated better coordination between NGO and FMU.
- ☛ Monthly Review Meeting at DMU levels with NGO team members / NGO Chief Functionaries.
- ☛ Performance of NGOs was monitored and assessed regularly by the project through questionnaire survey to the concerned project staff and document review.

### Challenges Faced -

- ☛ Initially, coordination between FMU and NGO team was challenging because the Department was not used to work with NGOs, and NGOs did not know how to work in accordance with Terms of Reference and team-up with government officials. After a series of orientations and meetings facilitated by PMU and interactions between NGO and FMU, the coordination between the two improved.
- ☛ Another key challenge was the support from NGO Chief Functionaries to their teams at the field level. The agreement was made with NGO as an organization, not with

individual NGO teams. OFSDP expected that NGOs as organizations would bring their institutional experiences and knowledge to the project. In some cases, NGO Chief Functionaries supported their NGO teams insufficiently, that led to inadequate services by NGO teams at the field level initially. In some cases, NGO Chief Functionaries did not provide proper logistics support to their teams (such as proper office space, motorcycles, etc.).

- ☛ The economy in Orissa was growing at a fast pace while implementing the project, and job opportunities to young professionals increased dramatically. A lot of NGO team members left for higher benefits, and qualified replacements were difficult to find.

Despite of challenges and difficulties above, partner NGOs contributed to OFSDP and left significant positive impact on the project.

### NGOs' Major Contributions to OFSDP

- ☛ Villagers' participation and sensitization were facilitated.
- ☛ Through elaborate micro planning non-forestry aspects were incorporated, in addition to forestry aspects.
- ☛ NGOs successfully completed assessment of existing SHGs, formation of new SHGs, initiated the process of preparation of SHG business plans and facilitated implementation of IGA by SHGs.
- ☛ Convergence with other line departments, PRIs and other schemes were facilitated by several NGOs.
- ☛ Work culture in project FMUs underwent a gradual change due to working in collaboration with NGOs and simultaneous sensitization towards community level development process.

## 3.3 General Consultancy

### Project Imperative

Project mode interventions are basically designed to take care of specific developmental needs and generally require support from external experts. It was decided to engage full-fledged consultancy service to provide technical and managerial support to the project with concurrent monitoring of field activities.

### Process Adopted

Group of subject experts through general consultancy for technical support and facilitating project monitoring at the PMU and DMU levels were engaged.

### Lessons Learnt

- For a multi-dimensional project, inputs of external experts is very useful.
- Internal quality control within GC team is critical.
- Integration of GC services into the project mandate is important for maximizing its inputs.
- Field-level experts were found to be extremely effective and useful in providing support for project implementation in DMUs.

Project engaged General Consultants (GC) at the state level. GC comprised of a group of international and national experts who extended technical assistance to the project and organized capacity building of project staff.

☛ GC consisted of 3 consortium partners, Nippon Koei Co. Ltd., Japan (lead firm), NR International Ltd., UK and Sutra Consulting Pvt. Ltd. GC established its office at Bhubaneswar, Orissa.

☛ GC's specialists include:

- Community Development Specialists (International and National)
- Livelihood Improvement Specialist (National)
- Monitoring & Evaluation Specialists (International and National)
- Capacity Building Specialist (National)

- MIS and GIS Specialists (both National)
- Biodiversity Conservation Specialists (International and National)
- Mangrove Specialist (International)
- Field-level Experts (12)

☛ GC started its services on 13<sup>th</sup> December 2007 for 3 years with a total of 39.64 man month for International experts and 159.71 man months for National experts.

☛ The National Community Development expert worked as the Team Leader and Resident Project Manager for overall coordination with GC experts and with the PMU.



### Key support by General Consultants:

- ☛ Technical support to Project in process adoption, implementation and improvements as per requirement.
- ☛ Assistance in organizing State/ National level and international training, exposure visits of EB members.
- ☛ Preparation of draft guidelines, manuals, plans, reports, IEC materials, etc.
- ☛ Regular reports (monthly, quarterly and annual) submission to PMU.
- ☛ Provide handholding support to the field personnel on behalf of PMU. Field-level Experts (FLEs) assisted the DMUs with the guidance of National/International experts.
- ☛ Facilitated communications among project staff at different levels through orientations, workshops, meetings, etc.
- ☛ GC were facilitated to maintain certain level of independence for independent feed back for project monitoring. At the same time, GC was integrated into the project through coordination with PMU.
- ☛ Two consortium partners (Nippon Koei and NR International) provided additional inputs through senior advisors once in a quarter on an average.

## 3.4. Quality control and standardization of project processes

### Project Imperative

While the project areas and sites were widespread, quality control and standardization of project processes had to be ensured.

### Process Adopted

A series of manuals, handbooks, orders and formats were evolved and circulated to DMUs/ FMUs for guidance in project implementation, documentation and reporting.

### Lessons Learnt

- Guidelines in forms of manuals, handbooks and formats are useful for standardization and also quality control.
- The guidelines must be 'user friendly', for the target users and unambiguous.
- Circulating printed guidelines to the field staff is not sufficient. Orientations, explanation, continuous guidance and monitoring are required.
- The guidelines need to be updated and revised considering the interventional efficacy and hence the efficiency.

It is inevitable that project sites are diffused and remote for a participatory, community-based forest development project. OFSDP targeted 2,275 forest-fringe villages in ten (10) Districts. All sites were managed by VSSs/EDCs in the villages under the assistance from 71 Field Management Unit (FMUs) and 14 Division Management Units (DMUs).

Because of large number, and spread of project sites and offices, the standardization of project works was quite a challenge for OFSDP.

Project Management Unit (PMU) prepared a number of manuals, guidelines and formats for standardizing the project operations.

### Major Guidelines and Manual Prepared

- Project Memorandum 2006
- Operation Manual
- VSS Management Manual
- OFSDP Accounting Procedure
- VSS Micro Plan Preparation Handbook
- NGO-GO Collaboration Guidelines
- Guidelines for NGO Reporting
- Guidelines for Entry Point Activity
- IGA Framework Paper
- Pilot IGA Guideline
- Guideline for Grounding IGA
- Guideline for Refined Assisted Natural Regeneration (ANR)
- Micro-plan Handbook for Mangrove Areas
- Technical Manual for Mangrove Restoration

- Conceptual Framework for Eco-development including community based Eco-tourism and its application in Satkosia Gorge Sanctuary.
- M & E Frameworks
- Formats for:
  - ❖ Monthly Progress Report
  - ❖ Monthly Statement of Expenditure
  - ❖ MIS formats
  - ❖ Books of Account
  - ❖ Target Village Selection
  - ❖ SHG Assessment
  - ❖ Training result evaluation

In addition, project developed pictorial IEC material for better communication of project guidelines, processes among grassroot stakeholders.

The development and circulation of these manuals and guidelines were followed with orientation and training of project staff and VSS Office bearers and representatives.



## VSS Management Manual and localized VSS Management Guidelines

The major project components of OFSDP, such as Restoration of Forest, Entry Point Activity (EPA), Income Generating Activities (IGA), etc., were implemented through "Joint Forest Management (JFM) mode". Project consciously worked for community (VSS) empowerment, under which a VSS is the planner and implementer of project works, and role of forest officials was that of a facilitator. Therefore, it was critical to establish proper management system and practice within VSSs for the execution of works.

OFSDP developed "VSS Management Manual" as an important management tool for VSS. The manual contains comprehensive guidelines for the field staff and VSS to be able to manage VSS properly as a community-based organization.

### Main Areas Covered in the 'VSS Management Manual'

- Overview of OFSDP
- Basic structure and functions of VSS and their members
- Roles of NGO, VSS Animator and OFSDP
- Benefits and responsibilities of VSS
- VSS Accounting System
- Conflict resolution and convergence
- Overview and guideline for microplanning
- Self Help Group (SHG) and Income Generating Activity (IGA)

- Monitoring and evaluation by VSS

OFSDP organized a series of orientation meetings amongst project staff to familiarize them with the manual. The summary of the manual was prepared in local language (Oriya) for the benefit of VSSs. Later on, a major part of this manual was included in the latest JFM Resolution of the state that was brought out in 2008, which reinforced the "VSS Management Manual" further.

For the VSSs to internalize and customize the manual, the partner NGOs supported target VSSs to prepare a "localized VSS Management Manual".

#### Additional Areas Covered in Localized version

- Localized composition of Executive Committee members
- Additional duties of VSSs, Executive Committee members and General Body members
- Membership dues and other fees
- Detailed modality of forest protection (e.g., rotational voluntary patrolling of forests, collection of fees, etc.)
- Detailed modality of meetings
- Details of records to be kept and modality of record keeping



## 3.5 Improved communication strategy

### Project Imperative

Conventional communication style within the Department (linear and formal) was not suitable for the requirements of the project. Reciprocal, spontaneous and fast communication through conversations and emails for critical thinking, brainstorming, innovations and quick decisions making was very essential.

### Process Adopted

- Establishment of database of phone numbers (both mobile phone and landline) and email addresses of project staff and other stakeholders.
- Establishing operational internet accessibility at DMUs and FMUs.
- Setting the norms of effective communications by senior project officers
- Organizing a number of meetings, workshops for exchange of information and ideas.

### Lessons Learnt

- System can be changed quickly, and norms need to be changed with time. The changes in the minds of officers to think critically and work creatively take a long time.
- Communication through email is more effective than the conventional letters and facsimile. It is further better if it is accompanied with verbal pre-notice and follow-up.

A project like OFSDP requires creativity, critical thinking and proactive initiatives among the project staff.

### Major Means of Communications under OFSDP

- Verbal communication among project staff through orientation and telephone conversations (project staff members talked to each other almost on a daily-basis)
- Brainstorming, exchange of ideas and discussion through meetings and workshops (large number of such programmes were organized)
- Faster communication through email (most office instructions and reports are sent through email)
- Visual photos / videos and pictorial manuals and handbooks in addition to circulars and office memos

OFSDP also realized the importance of public relations. The project disseminated the information to the public through:

### Major Means of Information Dissemination

- Official website of OFSDP
- Quarterly newsletters (English and Oriya)
- Leaflets, booklets and brochures
- Other periodical publications
- Posters and other IEC materials
- Regular meetings with VSS representatives (such as "Annual Sameekshya") at PMU & DMU level.



## 4. Community empowerment for forest management

### 4.1. Systematic target JFM area selection

#### Project Imperative

Target VSSs needed to be selected based on the levels of needs of the area. A systematic village selection needed to be in place.

#### Process adopted

- Finalization of JFM area village selection guideline with selection criteria, procedure, etc.
- Orientation for the field staff on the village selection process
- Data collection by the field staff
- Scoring and screening
- Finalization of VSSs and notification by PMU

#### Lessons Learnt

- Local conflict is the major obstacle in selection of candidate/eligible villages. Problematic villages can be taken up in subsequent years rather than in the first year, after conflict resolution through painstaking interventions by the project, and increase in awareness about the project interventions.
- Involvement of front-line officers was effective for data and information collection because of their field knowledge.
- The selection process became more effective with the availability of satellite based landuse/forest maps.
- Some selected villages had to be dropped due to intra-village conflicts. On the other hand left out villages expressed their willingness to participate because they saw the benefits to neighboring villages under OFSDP. The project flexibly adjusted to the field situations.

OFSDP stressed the importance of "need-based approach". The project understood that the project interventions would have a maximum impact when target locations were selected based on the needs for such interventions. For this, OFSDP prepared a "Guidelines for Target Village Selection".

The selection criteria indicated in the guidelines were:

**Minimum Requirements**

- a) Majority of village households are dependent on forest resources and tribal, but no shifting cultivation areas within the forestland
- b) There are no problems regarding law and order in the village
- c) The village is not covered by other projects similar to OFSDP

**Prioritization Parameters**

- a) Size of forest land (higher score for larger forestland) and degree of forest degradation (higher score for greater forest degradation)
- b) Slope category (higher score for steeper sloped areas)
- c) Existence of headwater (higher score for more headwaters) and shortage of water (higher score for longer water scarce period)
- d) Variety of forest products (higher score for more variety of forest products)
- e) Existence of VSS (higher score for existing VSS)

- f) Conflict (higher score for no / lower village conflict)

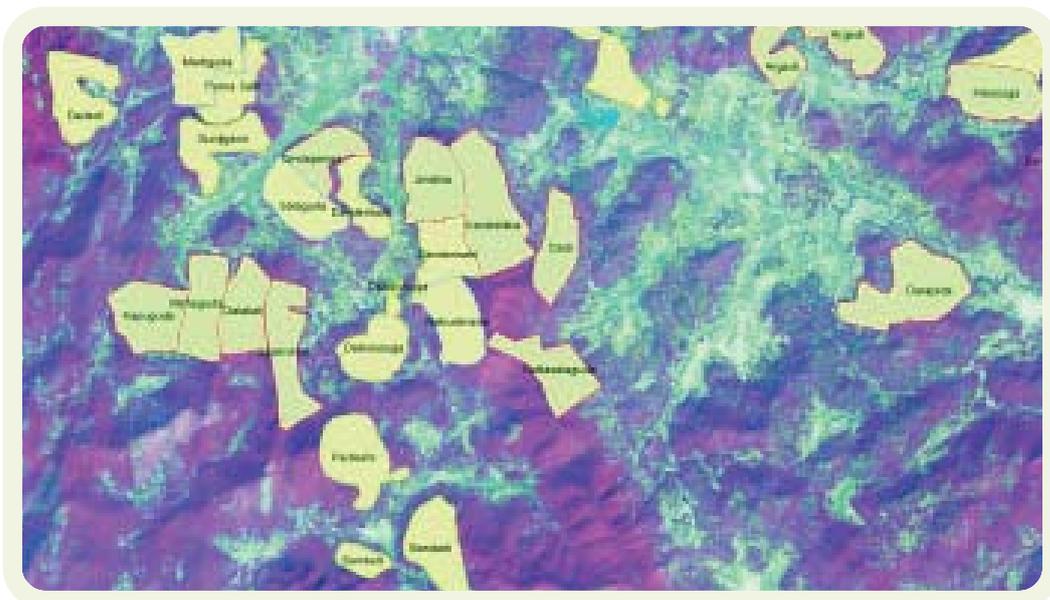
As a result of selection process, approximately 2,500 villages were long listed for a target of 2,275 villages. The project selected more number of villages than the target because it anticipated that some villages would have to be dropped due to various reasons, and more over additional villages were selected after 1<sup>st</sup> year interventions.

Out of 2,500 villages selected, the project selected 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> batch villages in 2007, 2008 and 2009 respectively:

- a) 1<sup>st</sup> batch: 610
- b) 2<sup>nd</sup> batch: 652
- c) 3<sup>rd</sup> batch: 758

At the Range level, necessary data and maps were collected and compiled. Subsequently at the Division level, a workshop was organized to review all the data and maps for selection. During the selection, the cluster approach was considered important for treatment of micro-watersheds and also for optimizing IGA outcomes.

Systematic and scientific process of target village selection was new to many project staff at the beginning and not free from difficulties.



## 4.2. VSS Formation / Revitalization

### Project Imperative

Because VSSs were envisaged as project implementer under OFSDP (not a mere labor provider), the willingness and initiatives of villagers were prerequisite for project works. For this, proper community entry, sensitization, community organizing and VSS formation/revitalization were essential before taking up actual interventions. The barrier between the Department and community had to be removed.

### Process Adopted

- Orientation to field staff and NGO team members
- Initial community meetings
- Community entry and active observation of the community by Development Officers of NGO
- House-to-house visit and situation analysis
- Rapport building and leadership identification
- Formation of originators group
- More community meetings and awareness raising
- Gram Sabha meeting, resolution on the establishment of VSS, election of Executive Committee members
- Registration with the forest department, signing of MoU, and other formalities and approvals

### Lessons Learnt

- Trained field workers with experience in community mobilization are required for community entry, community organizing, sensitization and formation of VSS. For this, NGOs can be useful and VFWs are an asset.
- This process is time-consuming, painstaking, and there is no short-cut. Sufficient time should be given to this activity through several visits spread over time.
- Logistics support (such as mobility, travel allowance, proper travel planning etc.) should not be overlooked for effective execution of this process.

After the selection of villages, number of community meetings were organized by the project facilitators (field persons - VFWs and NGO Team members). During such meetings, existing and potential community leaders were identified. Those leaders became the originators of VSS who carried out the VSS formation process.

A VSS was formed through a democratic process. Executive Committee members, including President and Treasurer, were elected by voting of VSS General Body (2 members, a male and female, from each member household). One VSS Animator (a local educated youth from the VSS) per VSS was appointed by the VSS.

Proper community organizing, sensitization and formation of VSS were the foundations for strong community-based organization.

## 4.3. VSS Empowerment

### Project Imperative

Community Empowerment is critical for achieving the aim of sustainable forest management. VSS being the community level institution needs strengthening for taking up development activities.

### Process Adopted

Transferring 'decision making' to the community through adequate sensitization, capacity building and financial support for activities relating to forest & village development. Main Processes adopted were-

- Discussions and brainstorming on the roles and responsibilities to be transferred / retained, a new set of administrative procedures that are acceptable within the existing policy framework
- Drafting of manuals and guidelines on the VSS procedures.
- Organizing orientations and training programs for the field staff.
- Regular monitoring on whether the procedures were followed or not.
- Necessary mid-course corrections

### Lessons Learnt

- Opening a VSS bank account and transferring the project fund to the account gave a sense of ownership of the project to the VSS and is a necessary step for community empowerment.
- Details of released fund (detail budget heads, unit rates and total cost, quantities of work, etc.) need to be informed properly to VSS for proper use.
- All fund withdrawal and expenditure must be approved by all VSS Executive Committee members and reported to General Body of VSS regularly. Such approval must be recorded in a VSS resolution book.



OFSDP made it clear from the beginning that the implementers are VSSs for all works at the village level. This shift was a major 'paradigm shift' and changes in the procedures and in practices. These changes are given in the table below:

Conventional Procedure	Newly Adopted Procedure
Fund is with the Section Officer (Forester), and villagers work more or less like daily wage laborers.	All VSS opened their own bank accounts, and President and Member Secretary jointly operate the account. The project fund is released to the VSS account directly. Before withdrawing fund, the detail of expected expenditures was explained to all VSS EC members, who approve the withdrawal.
Funds are released with a summarized release order, and aggregated Utilization Certificate is signed by the VSS President after spending.	Project fund is released to VSS with a detailed release order indicating budget head-wise released amounts. VSS to submit detailed, standardized Statement of Expenditure (SoE) to FMU every month. This allows the project to adequately monitor VSSs' financial status.
All the records of VSS were kept at Section Office or Range Office.	All the records of VSS are to be kept with VSS and at the VSS Office Building.
All the VSS records were prepared by Member Secretary of VSS, who is the officer of Department.	VSS records (except certain documents as Books of Account and Plantation Journals) were prepared by either by VSS EC members or VSS Animators.
In case of mismanagement at the VSS level, member secretary will be punished as per the government rules.	In case of mismanagement, VSS EC members, including but not limited to member secretary, can be prosecuted for the breach of agreement (MoU).

These changes in procedures made a significant impact on the empowerment of local communities. A great degree of transparency was ensured, and communities started owning the project. The process of community empowerment was institutionalized due to the change of procedures, and transfer of real financial and managerial powers to the communities. On the government side, there is also a change; the officers started to recognize the potential of communities and to trust villagers more.

## 4.4. VSS evolving as Village Resource Center

### Project Imperatives

Development of VSS as a village level institution, self-sufficient & capable of taking community development initiatives. VSS to be developed in democratic, transparent community organization to ensure equitable development.

### Process Adopted

Free and easy access to key information, such as financial transactions, physical progress, proof of payments, participatory decision making based on consensus among EC members, social and external auditing, etc.

- Engagement of VSS Animator for record keeping and better facilitation of meetings / discussions / decision making among VSS members
- A series of training programs for VSS Animators and VSS members on record keeping and VSS management
- Construction of VSS Office Building, provision of necessary furniture (such as file cabinet etc.) to keep the Records, establishment / maintenance of "Transparency Board" for information dissemination
- Auditing of VSS accounts at the VSS by CAs.
- Monitoring by partner NGOs on proper VSS management and community participation

### Lessons Learnt

- While many VSS members are illiterate, the inputs from VSS Animator for record keeping are essential. Also, VSS Animators need be trained properly so that they can execute their works accordingly.
- The dynamic information on financial status of VSS is the most crucial for ensuring transparency, and updating "Transparency Board" on this aspect requires extra effort and attention. This must be monitored closely by the facilitators.
- The construction of VSS office building is effective in initiating the process of institutionalizing JFM and giving visibility to VSS, and also for ensuring transparency because it will function as venue for meetings, record keeping & "Transparency Board".

OFSDP supported the construction of a VSS office building in each project village. The building had an enclosed room for keeping records and equipments, with an attached covered meeting hall. In several VSSs, community has contributed labour/materials in construction of VSS office buildings.

The VSS office building enabled VSS for exercising their administrative power and responsibilities as discussed in the earlier. Because of the existence of a place for keeping records safely, the responsibilities



of record maintenance could be transferred to VSS. The existence of records at the VSS level reinforced the transparency in the project operations.

### Records Kept by VSS

- VSS registration and Memorandum of Understanding
- List of VSS members and Executive Committee members
- VSS Management Manual
- Micro plan, JFM area map and treatment area map
- VSS resolution register
- VSS bank passbook, cashbook, supporting vouchers, measurement book, Statement of Expenditure (SoE)
- VSS audit report
- A plan, cost estimate, land status and alienation for VSS office-cum-meeting hall and EPA list
- Documents relating to Pilot IGA (record of SHG activity and status, VSS policies on terms and conditions of loan, amount loaned, etc.)
- VFDF status report
- Transparency board

Because of the establishment of office building for VSS members to regularly meet, the communication among VSS members, project staff and NGOs was strengthened.

For instance, the fund transactions were examined, discussed and approved by the members of Executive Committee of VSS and the members were apprised about this during the VSS General Body meetings. The discussion and decision were recorded in the VSS Resolution Book by a VSS member. When any members have questions regarding funds released by the project, they asked clarifications. Withdrawal of fund from a VSS bank account by VSS President and Member Secretary was possible only when it was approved by the EC.



This practice of regular meetings and record keeping further enhanced transparency in the project operations.

On one of the walls of meeting hall in the VSS office, a "transparency board" was created to reinforce the transparency within the project implementation.

### Items Included in Transparency Board

- Overview of VSS (name, history, members, etc.)
- Overview of forest area under the joint management of VSS and the government
- OFSDP's project components, physical targets availability of funds and work progress
- Fund released by the project to VSS
- Expenditures by VSS



## 4.5. VSS Animator - a crucial link between the VSS & the Project

### Project Imperative

Capacity of VSS needed to be enhanced. Need of a literate young person from the village as VSS Animator will be crucial for VSS management and communication with other stakeholders.

### Process Adopted

A local educated youth from the village was selected as VSS Animator. Capacity building in managing affairs of the VSS, record keeping. Training and exposure in forestry and community development programmes.

### Lessons Learnt

- Support by VSS Animator was essential for proper management of project works by VSS.
- VSS Animators must be adequately oriented regarding their roles and responsibilities and should be trained properly regarding the technical and administrative aspects of project works.
- For sustainability and better incentives for VSS Animator, additional income shall be explored.

While VSSs have great stakes and responsibilities for project implementation, OFSDP realized the limitations of VSS. In most forest-fringe villages in Orissa, literate villagers were limited. In many cases, all EC members were illiterate. Most of them were farmers who were busy in their livelihood activities. In such a reality, the project expected VSSs to execute project works, monitor them and maintain records.

To augment the capability of VSS, OFSDP created a system of "VSS Animator". A VSS animator is usually a young, literate unemployed person who resides in the VSS village. He was engaged by the VSS. They were given a small honorarium to compensate their contributions to the project (Rs. 750 / month) for which funds were provided by the project.

### Roles and Responsibilities of VSS Animator

- To mobilize and motivate villagers to participate in OFSDP activities

- To facilitate meetings and coordinate with FMUs / NGO Team.
- To act as a link between the project and VSS.
- To assist VSS in record keeping

In addition to the honorarium and training programs, additional incentives (income) for VSS Animators were explored/facilitated viz. through fee from SHGs for writing SHG records, selling of various forms to apply for government subsidies, additional honorarium from the IGA cluster for assistance, etc.

VSS Animators participated in a number of training programs organized by OFSDP. The services of VSS Animator however need careful handling so as not to create "dependency" of VSS on the animator. Training programs were part of VSS Animators' incentives, and VSS Animator shall be an additional human resource of the target village beyond the project.



## 5. Capacity building

### 5.1. Entry point activity (EPA) - as a tool for management training for VSS and creating community assets

#### Project Imperatives

Community organization would be effective only with tangible benefits to the community. EPA will boost community confidence and raise their interest in project interventions.

#### Process Adopted

Small-scale community infrastructure development was implemented as Entry Point Activity (EPA) as immediate tangible benefit / incentives of the community and opportunity to experience project management.

#### Lessons Learnt

- Timely fund release to concerned offices and VSS is critical for the timely work execution at the beginning of field activities
- EPA items and their locations need to be selected and prioritized through consensus building among VSS members, not just by a few VSS leaders. NGO and VSS Animator shall play key roles in facilitation of consensus building.
- Implementation of EPA shall be done in such a way that in the process, it build up management capability of VSS.

OFSDP supported the creation of small village community assets by VSS. Quantum of fund was linked to the forests area that the VSS treated under the project (Rs. 1919 per hectare at wage rate of Rs. 90/manday). Some of the EPA items taken up by VSSs were:

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>a) Excavation of new wells, renovation of existing wells (cement platform, concrete walling) and shallow well</li> <li>b) Renovation of irrigation channels and ponds</li> <li>c) Construction of bathing enclosure with bricks and cement structure for women</li> <li>d) Repair of community schools, religious facilities and meeting / drying platforms</li> <li>e) Installation of solar light system and purchase of petromax light.</li> </ul> | <ul style="list-style-type: none"> <li>f) Purchase of -               <ul style="list-style-type: none"> <li>● community kitchen utensils,</li> <li>● tent houses, sound system</li> <li>● transistor radios,</li> <li>● weighing measures,</li> <li>● water pumps, sprayers,</li> <li>● agricultural tools and implements,</li> <li>● portable Spot lights to drive elephants away, etc.</li> </ul> </li> </ul> |
|--|--|

EPA works provided an opportunity and experience to the VSS leaders and members in managing project works. This boosted their confidence in managing affairs of VSS as per project needs.

Where ever feasible, collection of user fees was encouraged by the project for use of VSS facilities and equipment. The management of user fees was a new experience to many VSSs, and worked as a training opportunity to develop their management skills.

As a result of creation of new community assets, the capacity of community was enhanced as a whole. The time for fetching water, which was widely the responsibility of women, became shorter and bathing enclosure for ladies enhanced their self esteem. The dependence on traders / outsiders decreased because of availability of tools and equipments in the village.

## 5.2. Training modules, course materials and IEC

Project conducted “Training Needs Assessment” and developed a 'Trainers' Manual' through Xavier Institute of Management, Bhubaneswar.

### Project Imperatives

The complex and comprehensive nature of the project interventions and JFM mode of project intervention called for multi-stakeholder capacity building with cascading effect upto grassroot level.

### Process Adopted

Planning, designing training guidelines, modules and calendars and coordinating with local, national and international service providers to facilitate training/ exposure programs for OFSDP. Conceiving & designing IEC materials.

### Lessons Learnt

- **VSS Leaders / Members:** Skill of Information seeking, assertiveness, moderating VSS meetings, safe keeping of the books and records, monitoring the financial transactions etc. are key to VSS empowerment
- **Animator:** Given the background of the Animators and the critical deliveries expected of them, the Animators need to be trained in the following: Community Organization including approaches to community work, community mobilization, developing ownership of the project among villagers, accounts keeping, and coordination at the grassroots level. Special emphasis on record keeping.
- **FMU Team:** FMU Chiefs - Training in Project Management, including NGO Partnership Management is must.
- **DMU Team:** Need to monitor Training/ exposure initiatives and application of the knowledge and skills gained to augment project activities.
- **Documentation:** Need of the hour is to systematically document the trainings at all level for institutional learnings.
- **Application:** More than the training, application of knowledge, skills gained is essential and strict adherence/compliance to the Project circulars and guidelines related to Capacity Building.



## 6. Participatory and scientific micro planning for community-based forest management

### Project Imperative

Considering the Forestry and livelihood related interventions and implementation through comprehensive village level Micro-planning, there is need of scientific data support & analysis for planning accuracies.

### Process Adopted

- Adopting advanced technologies as GPS, GIS and satellite data based maps.
- Participatory process for situation analysis and planning for fostering sense of ownership.
- Demarcation of JFM area through participatory transect walk and perimeter survey, using differential GPS treatment area mapping based on satellite data with ground truthing and production of GIS compatible map.
- Orientation of the NGOs and Forest officials about the micro-planning strategy under the project.
- Development of Micro plan Preparation Handbook (state level), distribution of handbooks with formats and training of project staff, partner NGOs, VSS Animators and VSS members.
- Partner NGOs to mobilize Community and raise awareness/ provide orientation and get requisite data through Participatory Rural Appraisal (PRA).
- Preparation of first draft of micro plan (this includes Treatment Plan Mapping using GPS), review and approval by VSS EC and VSS GB and revision of micro plan, if necessary.
- Review and approval by FMU, suggestions by DMU and CF and revision of micro plan and re-approvals, if necessary.
- Compilation of strategic micro plan data for Annual Planning and Budgeting of the project.
- Revisit of micro plan and regular update of micro plans as need arises.

### Lessons Learnt

- Involvement of VSS from the stage of area selection / demarcation/ development of micro plans helps in a big way to create a sense of ownership.
- With close relationship that villagers have with the forests they know it more intimately / have better appreciation of resources: this, coupled with remote sensing data assessment of resources, which is factual is quite useful.
- With technical support of the VSS Member Secretary/ FMU Chief , treatment that will be prescribed will be in tune with forestry science and address the aspirations of the community.
- Being an innovative approach it takes time for the VSS to comprehend its role and responsibility; only with due hand holding can it deliver optimal results.

## 6.1. VSS micro plan as a village perspective plan

The purpose of OFSDP was dual: Rehabilitation of degraded forests and livelihood improvement of forest-fringe villages. For this, VSS micro plans prepared under OFSDP were more than a plan for forest rehabilitation and management. A micro plan prepared under OFSDP was to be a comprehensive village perspective plan, covering wide range of development aspects.

It was realized that more intensive support was required for micro plan preparation when the scope of micro plan became broader. To supplement the inputs from the project staff, partner NGOs played key roles in the micro planning. NGO members visited the village intensively during the micro planning period and organized a series of

village-level or hamlet-wise workshops for micro planning. Recording of outputs during the micro planning exercise was also undertaken by the NGO members.

Before the micro planning process, project organized series of orientation programmes on micro-planning for NGO Teams and Forest officials at various levels. During the training, the methods of PRA, how to prepare the plan, etc. were discussed thoroughly.

After the completion of micro planning exercise at the village level, partner NGOs wrote the plan in Oriya. The draft micro plan was then presented to VSS General Body for review and approval. Once it is OKed by GB, it was sent to FMU Chief for approval. The process of micro planning for each VSS took 4-5 months.

With a view to assess the efficacy of the micro-planning process, OFSDP undertook case study on micro planning process through GC. One VSS was selected from each DMU for the sample study. The key finding and lessons learnt from the case study are summarized below:



### Areas Covered in Micro plan

- Socio-economic profile of village, including a set of maps as:
  - ❖ Transect map
  - ❖ Village social map
  - ❖ Village resource map
  - ❖ Seasonality diagram
  - ❖ Venn diagram
  - ❖ Participatory wealth ranking
- Livelihood opportunity analysis
- Forest development plan, including a set of maps as:
  - ❖ Present forest map (GIS map based on RS technology)
  - ❖ Proposed forest treatment map (using GPS)
- Village perspective development plan
- Annual action plan
- Record of activities undertaken

### Micro plan need be revisited & updated as under-

- Prepare performance map by detailed transect indicating all the intervention conducted for areas/ sites by overlaying the information on the duplicated forest map.
- Interventions required are to be identified and micro plan of forest treatment and SMC works be updated.
- Cost required for such intervention to be estimated and reported to PMU; decision there on to be fed back to the VSSs concerned through DMU/FMU.
- Then based on the PMU review, annual action plans of the Micro plan will also be updated.
- At the end of the implementation,

- performance map should be updated and finalized; it should be as detailed as possible because it will be the basic reference for the JFM management and will be the basis for benefit sharing from possible harvesting of planted / tended standing stocks after the project is over\
- Treatment plan map to be prepared based on the detailed transect with GPS and to be overwritten on the forest map as digital data.
  - Silviculture cleaning should carefully take into account topographic conditions, soil characteristic and vegetative conditions
  - Additional SMC work required should be identified and precisely indicated on the performance map.
  - At the time of the detailed transect, SMC work is identified in the field / type of the SMC work dimensions of the SMC work decided - measurement taken and sketch be prepared with dimensions.
  - Through the preparation of the detailed performance map, necessary SMC work has to be identified and propose fund for implementation to DMU accordingly.
  - CCT is effective for dryer area such as dry regions in Maharashtra .
  - For the area where average annual rainfall is 200 cm like Orissa, necessity of CCT and dimension of the same should be carefully decided and exact contours to be laid, not to cause gully development by overflowing of surface runoff stored in the CCT
  - Considering the average annual rainfall in Orissa, more attention should be paid for soil conservation rather than the moisture conservation, generally speaking.



## 6.2. Participatory Rural Appraisal (PRA) and forest PRA tools

Appropriate sets of activities and work quantities shall be planned during the micro planning based on all required data, and information regarding the village.

OFSDP also believed that the micro planning process is more than data collection and drafting a document. It is a process, through which community members become more aware of their surroundings, status of their livelihood, problems and opportunities. It is also a process for the villagers to deepen their understanding about OFSDP and confidence in project activities. Micro planning helps establishing rapport between community members and project staff, develops community leaders and strengthens their cohesiveness. This could be achieved only after



series of visits spread over almost 3 months by the NGO team members and Member secretary and other Forest staff.

Proper outcomes from micro planning derive from adequate participation and cooperation of villagers during the data / information collection and micro plan preparation. To facilitate the participation and cooperation of villagers, tools and techniques of Participatory Rural Appraisal (PRA)

were adopted by OFSDP.

During data / information collection through the PRA exercise, a series of community meetings, small-group workshop, Focus Group Discussion (FGDs) and key informant interviews (KIIs) were undertaken, along with review of existing secondary data and information.

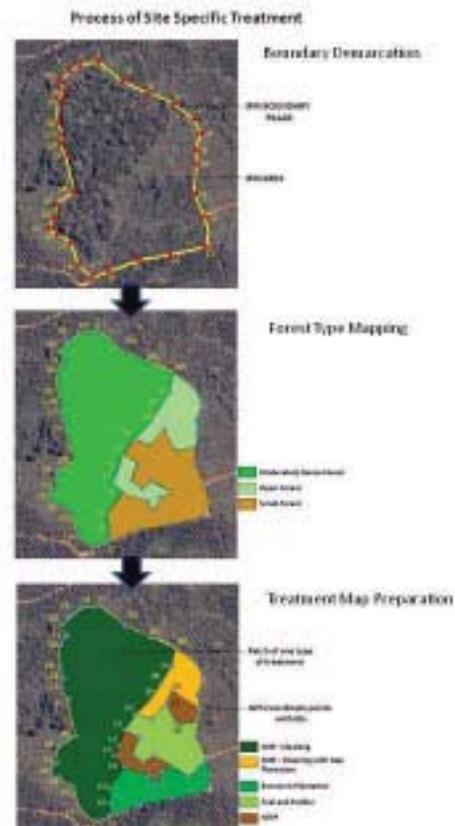
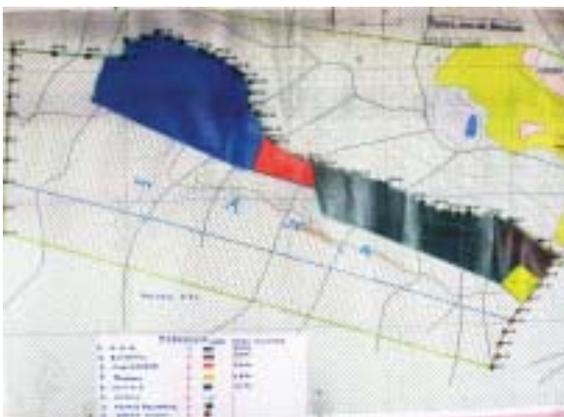
### 6.3. Planning of forest treatments vis-à-vis site conditions: Remote sensing and GIS technology for VSS micro planning

Obviously, villagers are not formally-trained foresters. Therefore, one of the biggest challenges of community-based forest management is adoption of scientific forest planning and management. In order for OFSDP to realize scientific, need-based planning, advanced technologies were adopted, such as remote sensing and GIS.

The project identified the present vegetation within the demarcated JFM areas through the interpretation of satellite images and ground truthing. For this, a set of mapping firms were engaged through competitive bidding process. The forest maps were put in the platform of Geographical Information System (GIS) for analysis and effective utilization at PMU level.

The GIS compatible maps based on the remote sensing and ground truthing was used for

the selection of proper forest treatment models for such vegetation. The visual image of application of advanced technologies in the micro planning is shown in the figures below:



It was not without difficulties to introduce such a scientific and logical approach to village-based micro planning.

## 6.4. Regular updating and revisiting of micro plan

OFSDP considered a micro plan as a dynamic, rather than static document. Situations in the village change over time, and new findings come up during project activities. A micro plan has sections that require regular update, such as Annual Plan and Activities completed.

### Major Lessons Learnt from Treatment Planning Using Advanced Technologies

- The GIS map was to be verified by VSS through reconnaissance and transect walk of entire JFM area. After the verification, the GIS map was to be modified when necessary. This process requires time, effort and resources, and adequate technical and labor inputs shall be provided by the project.
- The logical relation between the forest map and treatment map, though appears to be simple, was difficult to understand for VSS members and some frontline project staff members. Also, the treatment models were not understood properly at the initial stage, especially the variety of silvi-cultural operations under Assisted Natural Regeneration (ANR). As a result, certain areas remained untreated or treated by inappropriate treatment model. The introduction of such approach requires intensive orientation and field demonstration. The establishment of demonstration sites by specialized agencies would be helpful too.
- Apart from vegetation, other factors influence the forest treatment and management, which cannot be shown on a map. Because of those factors, there are cases of discrepancy between forest map and treatment. Those factors were:
  - Traditional forest rights and customary ownership over forest patches
  - Village conflict
  - Lack of laborers in the village
  - Lack of manpower at the field project offices

Micro planning using the advanced technologies faced certain difficulties at the beginning stage and required midcourse corrections. For this, the micro plans were revisited and rectified where necessary one year after the formulation. for the following aspects:

Items revisited	Timing
Re-verification of GIS maps	1 year after preparation
Treatment map preparation using GPS (re-survey)	Right after plantation
Revising of targets for treatments	As needs arise

**In addition, a micro plan was regularly updated in the following points / items:**

Items updated	Timing
Annual Plans	Annually
Activities completed (including the survey on growth and survival rate of plantation)	As needs arise
Activities modified (e.g. EPA)	As needs arise
Changes in membership	As needs arise
Changes in EC members	Annually

A revised and updated micro plan had to be approved by General Body of VSS and subsequently by the FMU Chief.

## 7. Rigorous M&E

### 7.1. Establishment of baselines / benchmarks

#### Project Imperative

Considering the objective of the project, OFSDP needed to measure the impact. Baseline and benchmarks were required for measuring the actual development.

#### Process Adopted

Various baseline surveys and benchmark establishment to collect the basis of measuring various impacts of OFSDP

- Preparation of "M&E Guideline"
- Selection and contracting of specialized agencies for remote sensing mapping, socio-economic baseline survey and Training Needs Analysis (TNA).
- Execution of work -data collection.
- Review / verification of data collected, further processing and analysis of data by the project
- Utilization of data for M&E by the project.

#### Lessons Learnt

- Identification of types and qualities of data to be collected and their purposes / uses need to be clear from the beginning. For this, "M&E Guideline" needs to be prepared before starting data collection.
- Remote sensing mapping, socio-economic baseline survey and TNA are highly technical subjects. Specialized consultants are useful for tender and monitoring of works.
- Project staff must check and verify data collected by specialized contracts, such as forest maps and socio-economic profiles of beneficiaries. This requires time, effort and skills. Project staff shall be trained and guided by experts.

Because the project activities were taking place in many locations that were geographically spread over 10 districts, the project had to put extra-effort for proper monitoring. To face the challenge, OFSDP adopted various strategies described in the following sections.

For the project to be able to measure the impact / outcomes of project interventions and investment, the data and information on "pre-project" status were collected. Also, in order to assess the changes with and without the project, the project established "controls" where the situations are similar to our targets villages or sites.

**For baseline and benchmark establishment, the following project works were completed under OFSDP:**

- VSS area mapping using Remote Sensing and GIS technology:
  - Baseline data regarding vegetation / forest type and landuse of intervention areas before the project.
  - This work was outsourced to specialized mapping firms through competitive bidding.
- Socio-economic baseline survey:
  - Benchmark data on socio-economic conditions of target villages / households and control villages.
  - This work was outsourced to a specialized agency through competitive bidding.

- Data collection during microplanning:
  - As discussed in the earlier section, primary and secondary data regarding the target villages were collected during microplanning through document review, key informant interviews and focus group discussions
  - Qualitative information and community maps were also generated through PRA
- Training needs analysis (TNA):
  - Baseline data regarding the existing expertise and capabilities of project staff
  - This work was contracted out to a specialized agency through local competitive bidding.

Using the baseline data and benchmarks, the project plans to undertake:

- Mid-Term Evaluation (at the 4<sup>th</sup> year of project period),
- Terminal Evaluation (at the end of the project)
- Ex-Post Evaluation (a few years after the completion of project)

## 7.2. M&E Frame work assessing suitable indicators

During these evaluations, the project outcomes will be assessed using following evaluation criteria and logical framework that is under preparation for Project.

- ☛ **Relevance:** Consistency of project objectives with development priorities and policies.
- ☛ **Efficiency:** Efficiency of converting inputs to outputs.
- ☛ **Effectiveness:** Achievement of project purpose by use of outputs.
- ☛ **Impact:** Direct and indirect project effects including achievement of overall goals.
- ☛ **Sustainability:** Continuity of project benefits in medium- and long-term.

Criteria	Points of Evaluation	Necessary Data
Relevance	<ul style="list-style-type: none"> <li>Overall Goal and Project Objectives indicated in Log frame are still consistent with the overall policy environment and government priorities.</li> <li>The project needs and rationale indicated in the Project Document are still applicable to the current situation.</li> </ul>	<ol style="list-style-type: none"> <li>Information regarding government policies and priorities</li> <li>Information on the sector in general</li> <li>Overall information on the needs and situation of project area</li> </ol>
Efficiency	<ol style="list-style-type: none"> <li>Objectively Verifiable Indicators [OVIs] of "Outputs" indicated in the Log frame were achieved with:                             <ol style="list-style-type: none"> <li>Project cost</li> <li>Manpower / organizations</li> <li>Consultants &amp; contractors</li> </ol> </li> <li>OVIs of "Outputs" were achieved in accordance with project schedule / time inputs.</li> </ol>	<ol style="list-style-type: none"> <li>Data relating to achievement of "Outputs"</li> <li>Data related to expenditure</li> <li>Data related to manpower of project staff</li> <li>Data related to consultants &amp; contractors</li> <li>Information on component-wise project schedule</li> </ol>
Effectiveness	<ol style="list-style-type: none"> <li>OVIs of "Outputs" and "Project Purpose" indicated in the Log frame or were achieved.</li> <li>"Activities" planned in Log frame were executed through appropriate process and contributed to "Outputs"</li> <li>Projected IRRs are still valid.</li> </ol>	<ol style="list-style-type: none"> <li>Data relating to achievement of "Outputs" and "Project Purpose"</li> <li>Information on the modality, process and challenges of activities undertaken</li> <li>Re-calculated IRRs</li> </ol>
Impact	<ol style="list-style-type: none"> <li>OVIs of "Overall Goal" indicated in the Logframe or were achieved.</li> <li>Both expected and unexpected negative social and environmental impacts were not observed.</li> </ol>	<ol style="list-style-type: none"> <li>Data relating to achievement of "Overall Goal"</li> <li>Data on EIA (when applicable)</li> </ol>



Criteria	Points of Evaluation	Necessary Data
Sustainability	<ol style="list-style-type: none"> <li>1) A proper institutional setup is in place for sustainability of project benefit.</li> <li>2) Capacity of Executing Agency and its staff are enhanced properly.</li> <li>3) Financial commitment is ensured by the Government for operation and maintenance after the project.</li> </ol>	<ul style="list-style-type: none"> <li>● Information on government decisions on the operation and maintenance</li> <li>● Information on the result of capacity building activities of the project</li> <li>● Information on financial provisions and budget allocation on Five Year Plan and Annual Plan of the Government</li> </ul>

Because of longer gestation period, say at least a decade, impact assessment of short term project activity immediately after 3<sup>rd</sup> year of plantation activity has severe limitations.

## 7.3 Treatment area re-survey using GPS handsets

### Project Imperatives

Discrepancies were inevitable between planned forest treatment and actual treatment during the executing of work in some cases. For this, re-survey of treatment areas / plantations was required. In the Department, re-survey is done using "chain and compass". In order to improve the accuracy, OFSDP decided to introduce GPS for re-survey.

### Process Adopted

Re-survey using GPS as a more effective, efficient and accurate method for an adequate monitoring purpose

- Preparation of guideline and orientation
- Data collection (GPS survey on the ground)
- Plotting on the map
- Data calculation, quality checking and layer finalization
- Cross-checking with existing JFM area maps and non-spatial data
- Rectification and other necessary actions (such as re-allotment of project fund, etc.)

### Lessons Learnt

- Though the purpose and process are quite simple, extra-effort is required for this exercise to be useful for better monitoring. The final step (rectification) requires close guidance when the initial data on plantations and re-survey results are not matching.

Because OFSDP provided public fund to VSS, it was important for the project to make sure that the works of VSS were completed as per the plan. For this, the re-survey of treatment areas within the VSS forests were undertaken to check the work of VSS.

Conventionally, this work is done by the Department by using chain and compass, which is not so accurate and cannot be overlaid on the vegetation / forest maps developed by the project using GIS technology. OFSDP decided to introduce a re-survey using GPS handsets to increase the accuracy and to integrate the information into the GIS database. This was to ensure more accurate and effective monitoring of project works by the VSSs.

### Guideline for Treatment Area Re-survey Using GPS

#### Do's

- Before recording coordinates in the field for treatment area boundary, refer the available treatment maps/ sketches.
- Collect coordinates in Clock-Wise direction only. The coordinates need to be recorded so as to maintain natural curves of the boundary.
- Before storing the coordinate, make sure GPS is tracking and receiving signals from at least 5 satellites for better accuracy.
- Along with treatment areas (boundary of various interventions) also do record GPS coordinates of Boundary pillar locations along with their IDs and Reference Number.

#### Don'ts

- Do record the coordinates in a Hard Copy Data Record Sheet for GPS Mapping of Treatment Areas during the field survey itself.
- Immediately after completing the survey work do download the GPS file and store the file. Send a digital copy of the file along with hard copy filled in Data Record Sheet to respective Circle Office.
- Never delete the GPS file before successful downloading from the GPS
- Never forget to record the details of every recorded GPS location point in the Hard Copy Format



## 7.4. Sample plots and control plots

### Project Imperative

Unlike block plantation, the impact of ANR operation is difficult to assess. For this, process of comparative assessment is to be adopted.

### Process Adopted

Sample and control plots as units for comparative assessment of areas with and without ANR operations

- Identification of plots within and outside ANR treatment areas that are similar in geography, ecology and physiognomy
- Layout the plots (20m x 20m) on the ground and put marking on the 4 corners of plots
- Monitor the changes in vegetation regularly in both sample and control plots

### Lessons Learnt

- Establishment of such plots can be done without much effort, but using such plots for M&E purpose requires analytical and critical mind and practices.
- Sample plots shall be established not only at the gap plating areas but also ANR areas without gap planting (areas with tending operations only).

As discussed later, OFSDP stressed the importance of Assisted Natural Regeneration (ANR) with or without gap planting. Unlike block plantation where planting materials were planted in compact patches, the outcomes of ANR may not have been obviously visible because ANR areas already had certain root stocks, and major works for ANR is cleaning, thinning and disperse gap filling with seedlings.

In order to compare and measure the result of ANR operations, sample plots and control plots were established in the treatment areas.

### Main Features of Plots for ANR Monitoring

#### Sample Plot (with treatment)

- Sample plots were selected from the treated areas.
- 20m x 20m plots were laid out. At the 4 corners of the plots, markings were made on the ground.

#### Control Plot (without treatment)

- Control plots were selected within or near JFM area and in the sites where similar forests exist.
- At the selected sites, a series of 20m x 20m plots were laid out. At the 4 corners of the plots, markings were made on the ground.
- Within the control plots, no treatments were applied

### Comparison between Sample and Control Plots

- In both sample and control plots, following items were measured and compared so that the effect of treatment can be compared:
  - Crown density
  - Number of poles, their girths and heights
  - Variation of species / biodiversity
  - Livelihood potentials / economic values
  - Signs of soil erosions

ANR interventions are rather complex as compared to raising plantations and considerable efforts have been made to provide orientation and hand holding support to the field personnel. To assess impact of the same, two short-term studies have been launched to analyze impact of ANR on forest composition.

## 7.5. Regular reporting and field verifications

### Project Imperatives

A reporting system had always been with the Department, and OFSDP tried to strengthen the reporting and documentation in detail for M&E.

### Process Adopted

Prescribed reporting formats and guidelines for report preparation as means to reinforce effective reporting and compliance to reporting

- Preparation of various reporting formats and guidelines
- Circulation of formats and guidelines as well as orientation on reporting
- Provision of additional manpower at the field levels (such as Data Entry Operators, FLEs, etc.) and infrastructure (such as computer units, etc.)
- Monitoring of report submitted and compilation of data
- Analysis of data and decision making / actions

### Lessons Learnt

- Detail reporting must be supported by adequate strengthening of human resources and infrastructure.
- A report format must be simple and short. Collecting too much data will confuse the decisions maker and rather impede achieving better M&E. while developing formats, one must be clear on the use of data.
- Data analysis is not easy in many cases. People as GC experts or FLEs are useful for data collection, reporting and analysis.



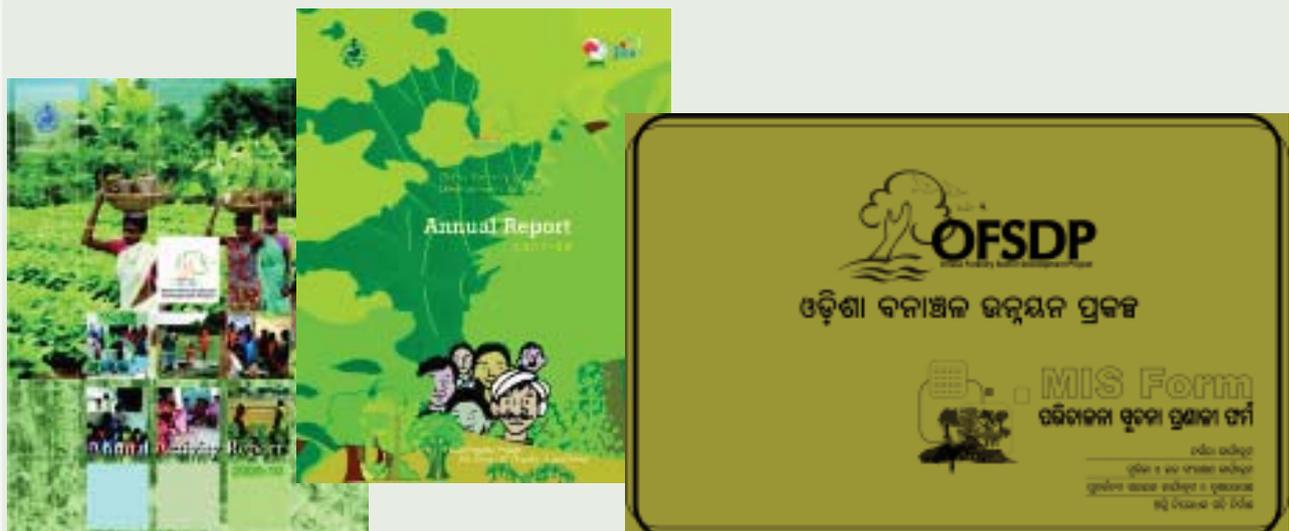
Good M&E required adequate documentation, management of information and verification of information. OFSDP established detail reporting system for the M&E excellence. Various reporting formats were developed by the project for effective and standardized reporting.

### Major Reports Maintained at Various Levels for Monitoring

- Statement of Expenditure (SoE) - At VSS, FMU, DMU and PMU levels
- Monthly Progress Report (MPR) - At NGO and GC levels
- Quarterly Progress Report (QPR) - At VSS, FMU, DMU and PMU levels and NGO and GC levels
- MIS Formats - At VSS, FMU, DMU and PMU levels
- Annual Report - At PMU and GC levels
- Ad-hoc status reports as needs arise as:
  - IGA Status Report
  - Training Status Report
  - Status Report on SMC and EPA, etc.

These reports were prepared and verified at various levels before being sent to higher levels and authorities. Verifications involved field inspections and review of records. Senior officers of PMU and GC experts also visited the field for field verification, inspection, orientation, clarifications, technical guidance and technology transfer. As discussed earlier, regular visits and meetings created venues and norms of dialogues and brainstorming, rather than linier instructions and orders.

At PMU, each JPD was assigned a circle for monitoring. At DMU level, each FEO was given certain FMU for monitoring.



## 7.6. Third-party verification

### Project Imperatives

As a part of project M&E, third party verification is intended for independent systematic stock taking and verification of physical outputs/ performance/ achievements (in terms of quantity, quality and appropriateness) to enable improvement of processes and adherence to the laid guidelines.

### Process Adopted

- Review of documents and guidelines such as Operational Manual, VSS Management Manual, Plans including detailed estimates, and/or MOU with contractors.
- Validation of procurement/installations/ assets to find out the rationale with respect to laid down principles and project objectives and suggestions, if any.
- Verification of necessary supporting documents, records, and accounts including selection criterion for outsourcing/ awarding contracts for procurement/ installations/ construction etc and adherence with the guidelines.
- Physical verification of procurement/ installations/ construction and their quality assessment based on the norms and material used, such as rates of plantation applied, quality of materials like manure applied, quality of seedlings used, wages paid etc.
- Inspection of assets created such as Buildings and furniture, Electronic Items, Vehicles, Road construction etc at appropriate PMU/DMU/FMU level and VSS building, usability of Assets under EPA, maintenance of SMC structures, survival rate of plantation, quality of ANR cleaning, Fire Line maintenance, record keeping etc. at VSS level.
- Submission of detailed report with facts and figures and recommendations to PMU
- Findings / Recommendations sent to respective DMUs for taking necessary remedial measures.

### Lessons Learnt

- As part of re-verification, additionally 10% of 'Repeat VSS' (out of sample VSS covered during previous year 3<sup>rd</sup> party verification) and 20% of 'Problem VSS' (where plantation survival rate was below expectation) shall be covered.

The independent 3<sup>rd</sup> party verification under OFSDP was carried out to get unbiased verification of project assets on annual basis. Apart from stock taking, one of the important aspects of 3<sup>rd</sup> party verification was to provide feedback to the system for process development and improvement in implementation work.

As a sound mechanism of effective M&E, GPS coordinates and field photograph of all assets created in sample VSS were also collected during site inspection and a digital database was created for future usage. It has also ensured that the verification work is being carried out at the site and also would become a baseline data with respect to assets created under the project.



On receipt of the reports from the independent agencies, PMU studied and sent the findings / recommendations to respective DMU for taking necessary remedial measures.

### Main features of 3<sup>rd</sup> Party Verification

- At FMU/DMU/PMU level
    - Assets created and or procured at FMU/ DMU/ PMU level that include construction work, procurement of store articles, equipments and their maintenance.
  - At VSS level
    - Meeting records, Training Programmes / Capacity Building and a summary sheet of events.
    - Assets created and quality of work done under EPA, IGA etc. including nurseries and SMC.
    - Collection of GPS coordinates and photograph of assets created were collected/ captured during site inspection.
- Pillar posting of JFM areas (10%), Plantations and Survival rate, and internal demarcation of Treatment areas, etc.
  - Usage of assets created under EPA, VSS building, nurseries,
  - Maintenance of plantations, fire line and SMC measures and their existing status.
  - Compilation of detailed inventory of procurement / installations / construction at each level of project implementation.



## 8. Paradigm shift from conventional forestry to sustainable forest management

### 8.1. Refined Assisted Natural Regeneration (ANR)

#### Project Imperatives

The concept of ANR was not new to the Department, but somehow it was not practiced extensively on the ground, and was timber centric. When OFSDP introduced ANR in a large scale, a lot of confusion was observed at the field level. OFSDP intended to promote ANR for the livelihood improvement of forest-fringe villagers.

#### Process Adopted

- A clear ANR guideline, orientation / training and demonstration sites on it as tools for promoting proper ANR and livelihood improvement of villagers.
- In-depth study on ANR practices under OFSDP and identification of problems
- Preparation of ANR guideline and orientation of field staff (demonstration by experts)
- Establishment of demonstration sites
- Extension work for the application of proper ANR

#### Lessons Learnt

- Field offices may strongly resist systematic ANR and its monitoring because they may consider it as an exercise to find faults on the ground. Application of proper ANR method requires experts and persistence persuasion at the field level.
- ANR focusing on livelihood of local people may be difficult to understand for the field staff because of their conventional timber-centric frame of mind. Again, persistent persuasion is required.
- This kind of meticulous assessment of field conditions and planning require adequate time, manpower and fund. A project must provide these.

Traditional forestry was oriented to timber species. This is partially possible today due to international trend and discussion on the livelihood of forest dependent villagers, biodiversity and



importance of holistic, sustainable forest management. The basic approach of OFSDP reflected such an international trend and practices.

For instance, OFSDP had a strong emphasis on Assisted Natural Regeneration (ANR) with and without gap filling by multiple species, largely indigenous. ANR also included silvi-cultural operations as cleaning, selective thinning and other tending operations.

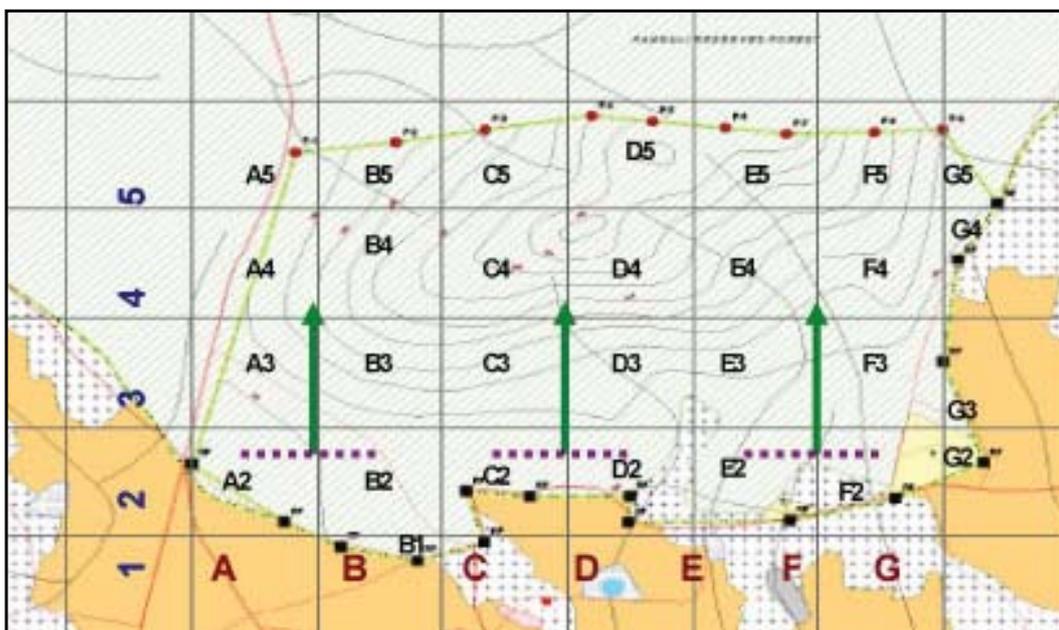
It was realized that ANR concept with respect to sustainable forest management was not understood properly by field forest officers. It was found that ANR works were not executed properly in the beginning of the project.

Project took immediate action. First, the PMU prepared "Guidelines for Refined ANR". Based on the guidelines, proper ANR process was demonstrated at various project locations. Right now, the project is in the process of establishing demonstration sites at each DMU.

## Main Features of ANR under OFSDP

- Participatory eco-livelihood assessment was undertaken at the beginning of ANR works. This was to assess the environmental and economic value of forest resources grid-wise.
- Based on the participatory eco-livelihood assessment, "what to be cut / retained", "how much to be cut / retained", "where and how to tend", "what to be planted as gap filling", "where to apply SMC measures", etc. were decided and planned.
- ANR works were carried out VSSs with the guidance of forest officers.
- All above works were undertaken through a team of VSS members, VSS Animator, Member Secretary of VSS and NGO team members.

"Participatory eco-livelihood assessment" was one of the innovations that OFSDP promoted for sustainable forest management. Using the GIS maps for JFM areas, a set of grids were assigned in a JFM area as shown in the figure below:





For each grid, the following works were undertaken by the team:

**Major Works in Each Grid for Assessment**

1. To take transect walks along a grid-line and study the area on both the sides.
2. Using the format, to describe each grid as per the characters of canopy density, eye estimation of forest type, livelihoods potentials, present level of dependence on the patch, important species, potential

tending operations, status of soil erosion and needs of SMC measures

3. To write down desirable character/uses for forest species as per the preference of the community
4. To assist the VSS working group members to put their scores in the scale of (0-10) against each use for each species.
5. To rank the species under each sub-group (tree, shrub etc.) based on the scores

As a result of refined ANR, certain species were preferred by local communities and augmented, such as shrubs, climbers, herbs, tubers, etc., which were traditionally considered to be the "impediments" of timber species.



## 8.2. Decentralized VSS nurseries and block plantation

### Project Imperatives

Orissa had a good history of promoting decentralized VSS nurseries. OFSDP intended to bring about stronger initiatives of VSS members in species selection and nursery operations for effective forest rehabilitation works.

### Process Adopted

- Training by forest officers for VSS members on the establishment of VSS nursery
- Area assessment during the micro planning and estimation of quantities and species of planting materials required
- Selection of suitable sites for VSS nursery within the village, planning and release of fund
- Seed collection and procurement of poly bags and fertilizers, etc.
- Establishment of VSS nursery and raising seedlings

### Lessons Learnt

- When species selection is to be actually done by the VSS members, the micro planning must start well before the seasons of seed collection and establishment of VSS nursery.
- All nursery operations, including procurement of materials as fertilizers and poly bags, can be done by VSS once they are trained adequately by the field forest officers and guided by them properly.
- It is always challenging to overcome the difference in preferences of species to be planted by the forest officers (who prefer non-browseable, fast growing species) and VSS members (NTFP which are directly related to their livelihood). Facilitation by NGO is helpful if done properly.

When the sites are too degraded and rootstocks were not sufficient for ANR, OFSDP encouraged VSS to take up Block Plantation. For Block Plantation also, OFSDP promoted a set of plantation models based on the needs of forest-dependent villagers vis-à-vis timber species.

It is important to note that the species were selected by VSS members themselves during the intensive micro planning exercise with the technical assistance from the field forest officers, instead of the Department imposing the species to VSS.

It is also important to note that most planting materials were produced from the decentralized VSS nurseries, instead of departmental nurseries.

Almost all VSSs targeted by OFSDP established their nurseries within their villages under the technical guidance of field forest officers. The fund for nursery operations was released directly to the VSS bank account so that VSS would be accountable for the production of planting materials.

It is important to note that Orissa Forest Department had previous experience of large-scale social forestry project during the 1980s and 90s funded by Swedish SIDA, and the experience during the project was useful for the establishment and operations of VSS nursery under OFSDP.

## 8.3. Soil and Moisture Conservation (SMC)

### Project Imperatives

The Department had been executing the SMC works within the forestlands for many years, and OFSDP felt that quality of outcomes needed to be improved, and new techniques needed to be introduced for SMC works within the forestlands.

### Process Adopted

Improved SMC as one of the important means to rehabilitate degraded forest and improve water regime of micro-watersheds

- Assessment and evaluation of present expertise of the field staff of the Department on SMC works and identifications of areas for improvements
- Organizing a series of training programs by the project
- Within the JFM areas, identification of sites to be treated by SMC, planning and cost estimate (sometimes, external engineers from other department and open market were engaged for this)
- Technical sanction by DMU Chief on the proposed SMC works and release of fund to VSS by the project
- Execution of work by VSS and regular monitoring by the project staff on the SMC works

### Lessons Learnt

- There is scope for innovation for making SMC measures economical & effective; water conservation and its utilization down stream for protective irrigation / drinking water for villagers and their livestock has been recognized.

Soil and moisture conservation measures will accelerate the natural regeneration of vegetation in the degraded forest areas and check the loss of top soil. OFSDP considered SMC works as an important and integral part of forest rehabilitation.





Brush wood check dams for gully plugs



Continuous Contour Trenches (CCT) demonstration in Jeypore DMU



Palisade of lantana branches woven around stakes

## Main Features of Soil and Moisture Conservation under OFSDP

- Scientific selection of sites to be treated by SMC works:
  - ❑ Instead of partially treating many gullies, major gullies were selected for complete treatment from upstream to the down.
- Proper designing and cost estimate
  - ❑ OFSDP engaged engineers from Soil Conservation Department for designing and cost estimate to ensure the quality of SMC structures constructed
- Introduction of unconventional SMC structures
  - ❑ Brushwood check dams, Continuous Contour Trenches (CCTs) and Continuous contour banding were proposed.
- Emphasis on capacity building and training
  - ❑ To ensure the work quality and innovations, OFSDP organized a series of training and exposure visits on SMC works.

## 8.4. New planting techniques

(root trainer seedlings, micro-propagation of bamboo, improved seeds)

### Project Imperatives

New concept of root trainers though introduced was not being practiced; orientation to staff / senior managers & paradigm shift in nursery practices necessary.

### Process Adopted

Provided whole process is adopted, Root trainer nursery seedlings are economical & effective.

- Exposure visits to area where the concept is being practiced effectively
- Training/ orientation in development of potting mixture / bio fertilizers/ humus building
- Monitoring & Evaluation of root trainer seedlings vis-à-vis conventional seedlings

### Lessons Learnt

- Concept of utilizing quality seeds is taking roots
- Field staff is now familiar with modern nursery practices



# 9. Income Generation Activities

## 9.1. SHG Promotion - for IGA adoption

### Project Imperatives

Livelihood improvement and simultaneous streaming income alternatives for the local community was a major objective with the consideration of reducing sustenance dependence on forests and commitment towards proper and sustainable management of forest resources. With this aim project prescribed selection/prioritization of on average 2 SHGs per VSS for IGA adoption.

### Process Adopted

- Development of SHG selection/prioritization tool based on eligibility (target community - Tribal, Poor and Forest Dependency), capability (in terms of practicing SHG activities), willingness, and previous loan experience.
- Communicating this tool through workshops, guidelines and review meetings
- Identification of areas of deficiencies in SHGs and delineating areas of strengthening. Communicating it through a Hand print sign - 5 fingers showing 5 areas of strengthening
- Prescription of processes, development of IEC materials
- Prescription of roles and responsibilities of field stakeholders (NGO team and VSS animator) and supervisors

### Lessons Learnt

- NGO teams' support found to be wanting in several cases due to inadequate monitoring by DMU & FMU.
- Strengthening of animators' knowledge in IGA specific activities and use of his/her services can enhance SHG strengthening to a great extent.

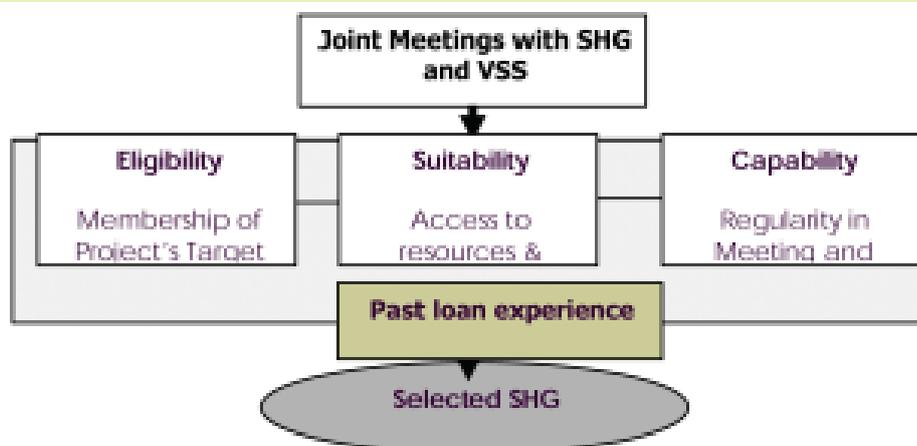


Fig : SHG selection Tool

With considerable attention on selection of SHGs, forest resource dependent groups got a preference. With prior efforts to screen for minimum financial discipline and improvement of entrepreneurial skills, SHGs are empowered to develop simple business plan. Continuous hand

holding support, improvement of skills and fostering of market linkages are additional feature. As a result this venture can not be target driven, but needs to be demand driven/result oriented.

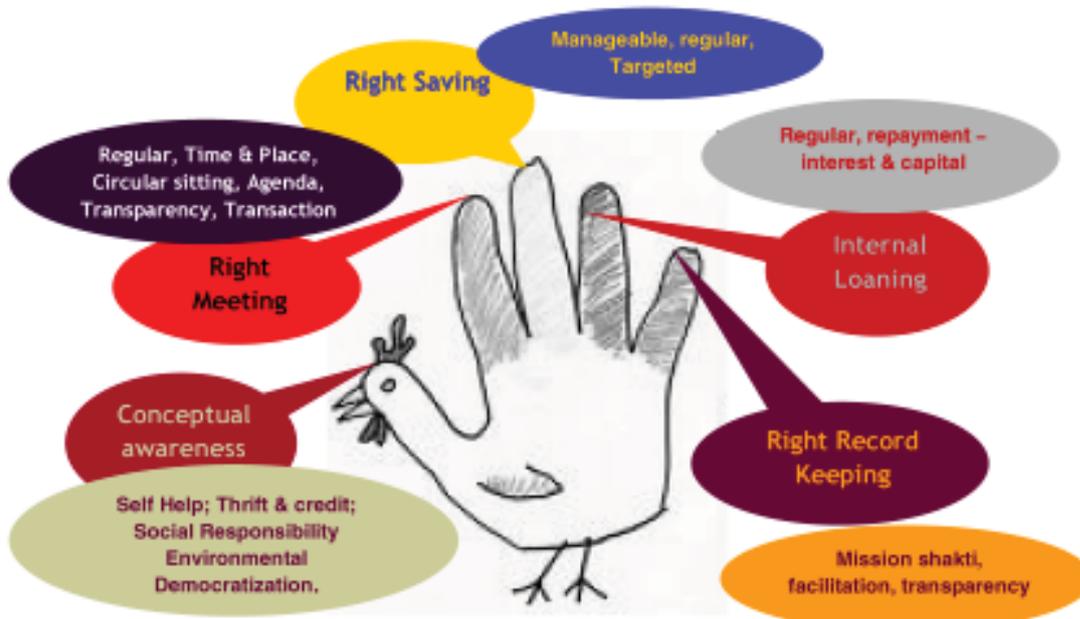


Fig : 5 areas of SHG strengthening

**Role of NGO in SHG Promotion-**

1. Assisting SHG in IGA analysis and selection
2. Assisting SHG in preparation of Business Plan
3. Assisting VSS in screening business plan & monitoring IGA
4. Assisting SHG in procurement & setting business
5. Assisting SHG in forging linkage/BDS support
6. Assisting SHG in marketing the product.



## 9.2. Pilot IGA experiment

### Project Imperatives

Learning from experiences of other livelihoods schemes and projects, OFSDP realized the need of demand driven approach in IGA adoption. For defining various IGA parameters project decided to provide small loan support to SHGs to avoid distress sale of NTFPs and assessing the community capability and preferences for major IGA interventions.

### Process Adopted

- Selection of SHG by VSS with focus on eligibility, capability, willingness.
- Analysis of IGA options by SHG with facilitation by NGO team.
- Preparation of business plan and submission of loan application by SHG
- Screening of business plan by VSS and sanction of loan; follow up monitoring and facilitation
- Collective procurement of inputs and availing of subsidy etc, by SHG as per availability
- Technical back up support through Govt Departments/other NGO or local BDS (Business Development Services) Providers
- Collective marketing in local market
- Facilitation and handholding at all these steps by Partner NGO and the VSS animator

### Lessons Learnt

- Small IGA provides much needed match practice for the SHG
- Choice of IGA by SHG gets influenced by many factors such as local resources/skill etc.
- Handholding by partner NGO remained far from desired due to factors like limitation of their knowledge/ experience.
- Facilitators at DMU/FMU had also very limited exposure and understanding to this new aspect
- Lack of timely facilitation of capacity building support also affect critically the success of IGA
- Facilitation of timely release and repayment of loan and development of an user-friendly MIS are very important considerations

Small IGA is an important IGA practice/exercise for SHG who lacks IGA experience. It helps them in conducting a small activity for a small gestation period with less risk and hence boost their confidence and enable them to go for more cycles of loan or higher loan.

## 9.3. Livelihoods Opportunity Analysis

### - Market Research for defining IGA criticals

#### Project Imperatives

Income generation through alternative resources was main focus of the project interventions towards livelihood promotion. There was need of ascertaining various resources available with respect of IGA promotion in the project area such as raw material, processing, skill development and market linkage scenario.

#### Process Adopted

- For conducting 'Livelihood Opportunity Analysis' an external market research agency was selected.
- Inception meeting on study approach & field reconnaissance was held with PMU.
- DMU-wise potential IGAs and Livelihood profiling of Project Divisions was done by the agency through review of literature, project documents and micro plans.
- Validation of Division-wise IGA options and study approach in a Multi-Stakeholder Consultation
- Comprehensive Value Chain Study of 20 selected commodities and identification of points of intervention by the contractor
- Validation and refining of findings in a Multi-Stakeholder Consultation
- Development of business plan, institutional arrangement including plan for capacity building and convergence by the contractor
- Development of final FMU-wise list of commodities and cluster in a DMU-wise Grounding Workshop on Cluster-IGA

#### Lessons Learnt

- Focus on market (demand-based products) and scale could affect selection of supply-based products, particularly under-utilized, high-potential products like medicinal plants, NTFP etc.
- NR-based Livelihoods are governed by seasonality; therefore market research requires to be carried out over an year to capture the seasonal patterns and dynamics
- Carrying out local market research and screening of products by project stakeholder can compliment and supplement such research by external agencies



## 9.4. Evolving IGA Strategies - Small IGA to cluster approach

### Project Imperatives

Project started IGA process through small loan support on pilot basis. Then extended this facility to other SHGs. Ultimate objective was to prepare the community for taking up more intensive cluster based IGAs to be initiated after Livelihood Opportunity Analysis revolving around 20 identified products in the project area.

### Process Adopted

- Practicing of small IGA by SHG, facilitation by NGO and animator
- Detailed analysis of IGA status and monitoring of progress by PMU
- Realization of the need and importance of small IGA vis-à-vis the status and performance of SHG
- Conduct of market research (LOA)
- Sharing of LOA report through a series of DMU level Grounding Workshops by PMU and GC
- Organization of mF and mE workshops at project and district levels

### Lessons Learnt

- Organisation of active SHGs in interior areas in forest fringes need concerted efforts on the part of facilitators.
- SHGs, particularly in tribal interior areas are not conversant with micro-enterprise or IGA process, they also don't have capability and willingness to take up IGAs due to lack of confidence. In this context there is a need of designing IGA packages to suit different section of the community as per their capabilities and gradual upgradation to higher segments.
- Apart from capacity building, handholding support during full IGA cycle is critical for confidence building and successful IGAs initially.
- The level of capacity and skill with partner-NGO are not adequate to meet total handholding requirement and therefore support of specialized agencies and/or supporting institutional arrangements are required.



## 9.5. Convergence - for holistic development

### Project Imperatives

Besides forestry interventions projects' interventions revolved around livelihood promotion of the resident community. This required development support from various agencies and departments having expertise in specific area of development.

### Process Adopted

- Project laid institutional provisions through High Power Committee (with Chief Secretary as Head) at state level, District Level Advisory Committee (with Collector as chairperson) at district level for augmenting convergence support.
- Use of platform of DLAC and HPC to share information about project components helped in planning synergy at various levels.
- Issue of letters by Chief Secretary to Collectors for convergence around health, animal husbandry, agriculture, horticulture etc.
- Organization of cross-learning workshops on livelihoods at Division and PMU level
- Major Convergence support from different line departments / agencies such as-
  - National Rural Health Mission - Various health facilities in association with VSSs,
  - National Horticulture Mission - Economic support, seedlings of economic importance, training, monitoring the progress,
  - Water & Sanitation Mission - Drinking and Sanitation facilities, maintenance support and training,
  - Fisheries Dept. - Technical support in Pisciculture activity,
  - Veterinary Dept. - Cattle health care and Vaccination of livestock,
  - Agriculture Dept. - Subsidy on agricultural implements, quality seeds, technical support and training,
  - and many others as per local requirements,
 was established for ameliorating various livelihood problems of the community.
- Project level regular interaction with state level authorities to launch and monitor specific actions like mosquito net distribution, functioning of Gaon Kalyan Samiti etc.

### Lessons Learnt

- Convergence is a critical tool for building synergy and optimization of resource use among different development stakeholders towards holistic development of a Village.
- Building in trust and faith with other departments is very important. Constant facilitation, coordination and monitoring remain the key areas of concern.

In OFSDP, it has helped in meeting community development, basic human needs fulfillment and livelihoods improvement (IGA) more effectively through knowledge and resource support/convergence.



## 9.6. IGA Facilitation

### Project Imperatives

Project's analysis of small IGA experience as well as preliminary exposure to cluster IGA grounding pointed to the need of a concerted efforts for undertaking full-fledged cluster IGAs. From the prevalent scenario need of professional support services (IGASA) arised for focussed IGA facilitation.

### Process Adopted

- Development of common understanding and consensus around the need, areas and process of support required at PMU
- Development, refinement and open invitation of bids from professional agencies.
- Screening of the bid, presentation by screened bidders and short listing
- Short listing of agencies and development of Terms of Reference for working with the project.
- Negotiation with short listed bidders based on the common ToR and finalization of financial implications

### Lessons Learnt

- IGA facilitation by the selected agencies under process.
- Professional agencies are expected to provide IGA cycle support services -institutional (SHG and cluster) mobilization and strengthening, capacity building, IGA-handholding and market linkage services around different streams of IGA - small IGA and cluster IGA.



## 10. Promotion of community-based eco-tourism

### Project Imperatives

Livelihood promotion being a major objective of the project, project interventions around protected areas are being undertaken by community organisations-EDCs for eco-development with biodiversity conservation of the area. These areas have good eco-tourism potential, which project utilized for the benefit of EDCs.

### Process Adopted

- Implementation of biodiversity management component was started in Satkosia Gorge Sanctuary.
- Project adopted the cluster development approach for community based eco-tourism.
- In total 17 villages were identified in the core area in which 19 EDCs were formed/revitalized in 4 clusters.
- EDCs were facilitated to prepare micro-plans for Eco-development including protection of wildlife habitats in the area and livelihood promotion of the community.
- Considering the eco-tourism potential, EDC clusters are being developed for undertaking eco-tourism activities.
- Cluster development plans are being evolved for all the four clusters involving 19 EDCs

### Lessons Learnt

- Community formations need extensive capacity building with concerted support of the forest staff considering various parameters to follow regarding tourism in the area.
- Policy issues are restrictive for robust eco-tourism development, which needs amelioration, in keeping with the overall goal of conserving natural habitats.



Day visit Nature Camp, Goindi managed by the EDC.

# 11. Coastal Interventions

## 11.1. Technical excellence on mangrove restoration

### Project Imperatives

Rehabilitation of mangrove requires more skills and efforts as compared to those for Afforestation mainly because of varying species specific needs, limitations imposed by tide fluctuations difficult working conditions etc. Expertise available within the system therefore had to be mobilized and innovations introduced.

### Process Adopted

- Pre-scheduling of mangrove restoration was done to start the activities on pilot basis to understand various parameters for fullfledged interventions ahead.
- Technical manual for planting techniques was developed and circulated.
- Project evolved 4 treatment models based on the tidal pattern and soil conditions as -
  - Type-1: Plantation of mangrove associates in uplands close to saline embankment, where tidal water flow is very infrequent.
  - Type-2: Mud flats (planting mangroves in fishbone channels).
  - Type-3: Assisted Natural Regeneration in mud flats towards the sea front which support low density degraded mangroves and have frequent tidal inundation.
  - Type-4: Planting hypocotyls in tidal flats on sea front with daily tidal inundation.
- Guidelines for the micro planning with specific emphasis on new models introduced.
- Composite maps were prepared showing areas with type of interventions.
- It was suggested to take up most appropriate treatment model as per the site conditions and requirements to cover the entire area.
- Exposure to areas where in different approaches are in practice

### Lessons Learnt

- An advance planning for taking up activity in a phased manner
- More emphasis on site specific choice of species and appropriate planting practices there for are essential
- Social mobilization and harnessing common interest for the development and maintenance of mangroves requires special skills
- EPA as also IGA in the coastal area have to be site specific and different from other forest fringe areas.



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