

Orissa Forest Sector - Elements of a Vision

Principles

1. Forest planning and operations are sustainable and balance environmental services, local use, and commercial extraction.
2. Environmental services from forests are recognized and protected.
3. Local subsistence and forest based livelihood use has the first charge on forests, especially in scheduled areas based on strong incentives for local participation. Customary rights and usage are protected.
4. Operations and procedures are simple, transparent and effective.
5. Regulatory burdens and transaction costs are low.

Summary Vision

Orissa's forests are well stocked, diverse, multi-storied and dense. The forests are managed for sustained use providing a range of goods and services to a variety of stakeholders at local and broader levels. Forests are home to flora and fauna, build soil, regulate water flows, provide quality water as well as small wood, timber and NTFPs. They provide inputs to the agricultural economy, income to the impoverished and subsistence livelihood to all. An enabled and responsive Forest Department and empowered local community institutions collaborate to protect forest areas from encroachment, poaching, illicit felling and fire. Flexible forest tenure allows a diversity of institutions and forest categories at different spatial and temporal scales. Categories reflect function: Protected Areas protect representative habitats and species, Reserves are for environmental protection, subsistence use and commercial production. Forests are managed under a range of participatory options (Participatory Forest Management (PFM)), for local use, sale of surplus and commercial use. All categories, however, respect local rights and provide strong incentives for local participation in protection, management and use. Diversion of forest for development projects invite disincentives and increased cost and local compensation after due process. Transparent operations and procedures reduce transaction costs for harvesting timber and NTFPs and starting and operating enterprises, reduce externalities in terms of social and ecological impacts, and maintain confidence in the integrity of forest management and operations.

Note to reader: Foot Notes are numbered 1, 2, 3... and elaborate or provide examples on particular issues.

Elements of a Vision for the Orissa Forest Sector 2020

1.0 Improved Forest Extent and Condition

1.1 Increased forest cover on forest lands ¹

The rate of loss of existing forest cover has been arrested and the degraded open forest show enhanced biological and structural diversity.

1.2 More Trees Outside Forests²

Trees outside forests, on rural and urban private lands as well as non-forest public lands such as urban parks, along roads, canals, rail-tracks and other lands increase many fold and provide a range of goods and services.

1.3 Rationalized use of Forest land for non-forestry purposes

Eco-sensitive forest areas are not put to any non-forestry use. Subject to this, diversions of forest lands whenever justifiable on rigorous analysis of concerns of all stakeholders and following comprehensive consent processes to safeguard local customary and de jure use rights are permitted on case by case basis with exemplary compensation. All diversions are implemented and/ or monitored by independent third parties / institutions. Large scale diversions are rationalized and made difficult by high land use conversion charges. Smaller diversions for developmental purposes are made simple, easy to process and do not attract high conversion charges.

¹ Forest Cover is monitored by tenurial and administrative categories, so differential rates of forest cover loss/gain may be assessed (and discouraged or promoted). Natural Forests and Protected Area network are monitored as separate categories, for change in the crown density and with respect to biological and structural diversity. Horticulture trees are excluded from the definitions of forest/tree cover.

² Urban areas: A simple enforceable tree act restricts random felling, and facilitates legitimate felling with time bound permissions.

Rural Areas: Citizens have incentives to plant and nurture and sell trees. A simplified one-window clearance for sale of private timber reduces transaction costs. Rebates on land tax provide incentive for preserving or growing trees.

2.0 Sustainable Forest Management

2.1 Management Plans and Micro Plans³

All forests have valid management plans. Management / Working plans and microplans designed to benefit from local knowledge. Management systems complement each other, balance ecological and socio-economic, complementary and competing objectives and requirements of multiple users, and provide options for adaptive silvicultural management.

Forests on revenue lands are managed sustainably through management plans or microplans under appropriate/ different management models⁴

2.2 Land Records and Demarcation⁵

All land recorded as forests is demarcated and mapped. Records are computerized and georeferenced. This facilitates clearer delineation /management of public lands including recorded forest areas and resolution of claims of rights.

2.3 Monitoring and Evaluation⁶

³ Code (Manual) for preparing Working Plans (and management plans for Protected Areas) is reviewed to match local imperatives. Plan development process includes community representatives and external experts and incorporate internationally accepted SFM principles and criteria.

⁴ PFM models (that include Joint Forest Management (JFM), Community Forest Management (CFM), Village Forests, Gramya Jungles,) are prioritized.

⁵ Computerization of all revenue records is an ongoing national program. A pilot project currently covers six tehsils in the state viz Koraput, Rayagada, Kendrapara, Bolgarh, Satepur & Narsinghpur. Progress on this front is critical to addressing effectively, increasingly complicated issues relating to land tenure disputes and competing claims. In view of the complexity and political overtones of the process, less contentious areas with higher likelihood of success are taken up first. In parallel, a GIS database of all forests with management/working plans, is completed on priority. Appropriate mapping capacities are enhanced, and a state wide aerial photo provides a baseline.

Demarcation of forestlands can clarify ownership and rights on the ground. This is particularly applicable to undemarcated revenue forests. Many undemarcated forests face extensive pressures from a variety of forces. This is true for forests protected by community groups as well. Demarcation makes protection of public forests manageable by both forest department and local community groups.

In addition, demarcation of public lands indirectly promotes tenant timber production. By clarifying ownership of public forests on the ground, demarcation also clarifies ownership of adjacent private lands. This facilitates regulatory approvals for tenant timber harvesting on private lands that abut public forests

⁶ Long term monitoring of bio-physical parameters like forest cover, growing stock, regeneration, biodiversity, stream flows etc provides robust indicators of the ecological impact of policies and the health of the forest. Socio-economic monitoring helps assess the impact of forest policies on people. Regulatory assessment provides feedback on the regulatory burden on both the regulated citizens and, communities and the regulators. Civil society, through formal institutional

Monitoring using internationally accepted Criteria & Indicators for Sustainable Forest Management, encompasses biophysical parameters, socio-economic impacts of forest policies, and effectiveness of regulatory frameworks, and includes civil society and experts. Mechanisms consider and act upon the outputs of monitoring processes.

2.4 Reducing Shifting Cultivation (Podu)⁷

Alternate livelihood systems consistent with sustainable forest land use are promoted to reduce Podu.

2.5 Research⁸

Participatory action research program that includes silviculture, participatory management, biodiversity, NTFPs etc informs adaptive management practices. Genetically superior seeds & planting stocks are developed and used in the plantation programmes. Concurrently, genetic diversity in the wild and in use, is conserved.

mechanisms, is consulted and participates in assessing policy impacts and reviewing and designing new policies and regulations at different scales (e.g. via Forest working groups). Intradepartmental issues are handled via cross departmental monitoring
Plantations have Permanent Identification Numbers (PIN) for effective monitoring and accountability.

⁷ Give pattas before anything else. Then help to intensify cultivation in a small portion of the shifting range. In addition, offer to lease or buy-back the pattas thus facilitating a voluntary movement away from reduced fallow unsustainable shifting cultivation and also providing alternative sustenance.

⁸ Managing forests to provide competing products and services sought by a diverse set of local and other users is critical to establishing long-term incentives for the institutionalization of a sustainable forest management system. Adaptive and participatory silvicultural techniques can support community needs from the JFM forests as well as rejuvenate other forests. They require research, sustained interaction between communities and staff and freedom to innovate over time.

3.0 NTFPs and Wood

3.1 NTFPs⁹

A range of NTFPs are promoted and sustainably harvested which, support food and health security, local income,. Product development and certification facilitates higher returns (including exports) and sustainable management.

3.2 Timber Supply¹⁰

Improved scientific inputs and demonstrably sustainable systems for forest management and harvesting improve productivity..Plantations on private land, and processed wood products like panels and boards and wood alternatives reduce pressure on public forests. In the interim, wood imports continue to bridge the gap.

3.3 Wood Energy, Industrial wood and timber demand management

Consumption of fuelwood is reduced through promotion of LPG, and Non-Conventional Energy. Increased efficiency reduces consumption of wood. Promotion of use of wood and reconstituted wood products for structural purposes, reduces substitutes with adverse ecological impacts.. Wood, as industrial raw material, is increasingly substituted through low ecological impact alternatives like cotton stalks for pulp.

3.4 Forest Based Subsistence Use¹¹ & Livelihoods

Bonafide subsistence use of NTFPs and timber has first charge on forest produce. The right to such subsistence use is recognized. This is reflected equitably with gender sensitivity in management / working plans, microplans. Secure tenure and recognized

⁹ Case study based research points to high dependence on NTFP income among rural families. Unlike timber, NTFPs can provide early and regular income early in the regeneration cycle. Research on life cycles, harvesting levels and practices will help determine sustainable harvesting levels. A locally acceptable system of recording extraction will provide the long-term disaggregated data for sustainable management. Innovative NTFP management will sustain value addition. This applies to high volume NTFPs like fuelwood, fodder (cut and grazed), Kendu, Sal, siali leaf, as well as the wide range of other NTFPs.

Deregulation will increase the number of buyers and sellers and reduce transactions costs. Communities will form self-help groups to obtain better terms from the market and be empowered and incentivised to monitor and manage extraction sustainably. Forest department, Panchayats and local forestry groups will collaborate to support this management. Autonomous and membership based NTFP boards will engage in market development and intervention operations to reduce market fluctuations. This will reduce the some of negative impacts of unfair markets and price fluctuations and ensure quality. State monopolies, consistent with administrative and fiscal reforms, will be phased out and OFDC will predominantly play a market intervention role.

¹⁰ Investment, pricing, harvesting and trade policies ensure good supply

¹¹ Example - Timber distribution in Uttaranchal and Himachal which precedes, but is supported by the 1988 National Forest Policy.

NTFP collection for subsistence use provides an important social safety net, especially in the agricultural lean season, by providing food and other use items like fodder, fuelwood, smallwood and that sustain the rural agricultural economy .

access of forest fringe dwellers to forest produce provide incentives (sale of NTFPs etc) for protection and support sustainable livelihoods.¹²

3.5 Value Addition to forest produce¹³ & Forest Based Enterprises

From simple sorting and storing to high end processing, increasing value addition of Forest Produce (including NTFPs and medicinal plants) increase the turnover from the forest sector overall and the share of income accruing to primary collectors.. NTFP collectors move up the value chain, and obtain better prices at each level. Forest Based Enterprises flourish in an enabling environment and are strengthened through enhanced capacity of communities to manage, storage under ambient conditions, institutional credit, alternative market options (based on market information). Simplified transit rules facilitate trade.

¹² Collectors and processors transition from wage earners to price recipients. Returns exceed or at least meet minimum wage standards. Labour intensive products with low stumpage value like sal leaves, are protected, to sustain poorer collectors who have little other livelihood options.

¹³ Raw material supplies are increased and unshackled. The regulatory climate for starting and operating micro, small and medium enterprises is rationalized. A balance is achieved between environmental concerns and the risk of over harvesting with the need to expand investment, employment and turnover. There is consistency and stability in government policies for things like sal seed, sawmills, bamboo and pulp and paper. Government desists from subsidized supply of raw materials that depresses prices for private producers

4.0 Biodiversity Conservation Strategy

4.1 Biodiversity¹⁴

An ecosystem approach conserves keystone species/habitat integrity through community based long term ecological monitoring in collaboration with Wildlife/Research institutions. Known species thrive, new species are discovered, no additional species reach threatened lists, and those on the list bounce back. Biodiversity of Orissa has been largely inventories.

4.2 Protected Areas¹⁵

Wider Protected Area Network, including new categories like community reserves, secure critical and representative habitats, species and genetic diversity. Protected Area Management provides local incentives for protection and involvement in management, as well as enhance livelihoods through promising instruments like community-based eco-tourism.

4.3 Conservation outside Protected Areas¹⁶

Biodiversity is protected and managed at a landscape level in a mosaic of agricultural lands, forest lands, sacred groves, wetlands, coastal zones. Human- animal conflict is effectively managed. Sacred groves are identified in land records and managed as community reserves.

4.4 Zoological Parks/Botanical Gardens/Arboreta

The network of Zoological Parks/Botanical Gardens/Arboreta is enlarged to serve the important function of undertaking conservation breeding and ex-situ conservation of fauna and flora and undertake related research. They also provide conservation education and recreation to citizens. OFD makes space to develop inhouse and co-opt appropriate skills and expertise at different levels to manage such specialized facilities.

¹⁴ OFD specializes at appropriate levels and has an ongoing participatory action research program in collaboration with institutes like Wild Life Institute of India, Salim Ali Centre for Ornithology (SACON), etc.

¹⁵ National Parks and Sanctuaries are secured from development and illegal pressures. Core and fringe communities benefit directly from biodiversity conservation and have a strong vested interest in securing them. PA network is refined and rationalized through additional categories like community reserves etc. The roots of Man-animal conflict issues are researched to increase avoidance. Cases are compensated expeditiously as a matter of course. Non-consumptive uses like eco-tourism provides income and incentives for biodiversity for both park management and local communities, and reduces inroads of poachers. Physical and technical infrastructure for staff increases productivity. Long term collaborative research promotes viable populations and effective policies

¹⁶ Ban on hunting is in place. Where necessary, procedures to allow culling of schedule 1 species of the Wildlife Protection Act (like tigers and elephants) are vested with the state government. Damage and loss to livestock and crops and live by wild animals is expeditiously compensated as a matter of course.

5.0 Local Governance & Participatory Forestry

5.1 Participatory Forestry¹⁷

A statutory legal framework, combined with administrative support is in place and empowers the community to enhance its management decision making role to conserve and meet livelihood needs and expand areas under PFM..

5.2 Forest Tenure¹⁸

Assured and appropriate tenurial rights provides incentives for protection and sustainable use of forests by local stakeholders to restrict land use change.

5.2 Rules and procedures¹⁹

Rules and procedures are clear, simple, transparent, and enforceable. Impacts are reviewed periodically and rules refined. Discretion is minimized.

¹⁷ The presence of forests near habitations often means that there is some protection from local communities, usually with FD support. The local nuances of protection measures are recognized. Orissa has the huge strength and opportunity of local interest and involvement in forest protection, demonstrated by local protection groups and federations. Categories like village forests, Gramya Jungle, JFM and CFM forests are incorporated in a flexible framework that provides graded autonomy for local self-governance on different categories of lands. JFM provides a flexible step-wise approach of increasing autonomy to communities

¹⁸ Forest Settlement practices/ procedures and PFM rules provide tenurial security to local users for SFM. For example, each village of the 29000 odd that have recorded forest areas within village boundaries may have statutory village forests on revenue lands. Their tenurial conditions may:

1. restrict land use change away from forest or grassland to agriculture,
2. allow subsistence use of timber and NTFPs
3. allow sale of timber by government only
4. allow the community to decide whether to harvest timber and
5. entitle them to a share from timber and NTFP income
6. Entitle them to sell environmental services.

Allow podu (shifting cultivation) for a specified term.

¹⁹ They are available in multiple languages (English, Oriya) through the web and multiple print channels from the Forest Department and other locations. Rules are assessed for their regulatory burden on both the regulator and the regulated. They are developed through a participatory process and passed through a public comment phase, including public hearings.

Examples of rules that require clarification, or implementation that varies across the state include the following:

- Some divisions allow harvesting tenant timber, others restrict it.
- Multi village VSS are allowed in some circles but not encouraged in others.
- The Naib Sarpanch is the head of the VSS in many places, but in other places the President is a local leader.
- The extent of MOUs signed with VSSs varies.
- Sharing of bamboo harvest proceeds in VSS forests is unclear.
- Bamboo artisans require young green bamboo of 1 to 2 years but bamboo, where managed, is on a 4 year rotation

5.4 Role of Panchayats²⁰ / local institutions

Panchayats actively support, promote and are involved with PFM and help with conflict resolution and interface with government in public interest. The role of other local institutions in conflict resolution is promoted and recognized.

5.5 Linkage with Self Help Groups

Selfhelp groups strengthen grass root democratic processes and make village level PFM institutions vibrant, articulate and better able to serve interests of the poor as well as negotiate with Panchayats, line departments and the market. They ensure equitable sharing of benefits from PFM. Sound SHGs facilitated as good starting points for forest-based enterprises.

5.6 Integrated Rural Development

In forest fringe areas supported by PRIs, encompasses and promotes NRM based livelihoods through convergence of welfare and development schemes and programs.

5.7 Scheduled Areas²¹

Implementation of PESA enables better community-based management of local forests. OFD has taken special care to protect customary rights and privileges of forest dwellers through appropriate provisions in working and management plans.

²⁰ Panchayats have shifted from their 'contractor' stereotype, to being responsible third tier governance institutions.

²¹ Thus for example, if local tribals depend on forest fruit, then forest management objectives and working plans should reflect that right and provide adequate safeguards, including restrictions on logging of fruit trees.

Forests management objectives and working plans in Scheduled Areas explicitly protect local tribal customary rights and uses. Large-scale commercial extraction of resources is avoided or accompanied by similarly large scale payments to local governments and citizens.

There is a convergence of forests, tribals and minerals in the Eastern Ghat belt that passes through Orissa and neighbouring states. Many mineral resources are in tribal areas. The costs of extraction should be increased via high compensation requirements and taxes that dis-incentivise and divert mining pressure out of scheduled areas.

6.0 Forest Department and Administration / Governance

6.1 Forest Department and Administration²²

A responsive, well-equipped, more specialized & trained, gender balanced and motivated forest department uses bottom up participatory approaches to protect and manage forests sustainably, improve forest condition and cover, build local capacity, facilitate local institutions and maintain the value added from forests.

6.2 Wider Institutional Network²³

OFD is institutionally linked to NGOs, community based and other village level organizations as partners in mainstreaming participatory forest management.

6.3 Governance

Improved governance ensures institutionalization of a multi-stakeholder consultative policy making process, fully internalized and supporting a periodic institutional and administrative reform process.

²² Indicators include:

- Leaner department but having regular recruitment at different levels to infuse fresh blood.
- Regular in-service training for all levels emphasizing orientation to participatory processes and practice
- Increased computerization and e-connectivity
- Service conditions like travel allowance, medical reimbursement satisfied
- Career planning for specialization
- Appropriate incentives for staff and families for working in remote and difficult areas
- Shift from annual confidential reporting to a more objective performance appraisal system with shared and measurable criteria.
- Staff have legal protection and indemnity in discharge of duties, including use of fire-arms
- Status of forest guard as Forest Officer under the IFA rationalized.

²³ Good networking institutionally will obviate need to live with huge “vacancy” positions as is presently the case.

7.0 Allocations, investment, insurance and incentives

7.1 Green Forest Finance and Investment²⁴

Environmental services and subsistence consumption are realistically estimated and valued in terms of their economic contribution to the state economy. Annual forestry budgets reflect the value and significance of these assets and derived services.

Sources external to State Plan allocations tapped. A Forest development Fund created through appropriate mechanisms.

Discerning aid flows and allocations by Government of India are facilitated by demonstrated sustainable management and harvesting (e.g. via certification).

Simplified regulation of farm forestry and insurance cover for long-term tree crops facilitates access to institutional finance and attracts industrial investment.

Rural and Tribal Development & Panchayati Raj departments have explicit and enhanced allocations for forest based enterprise development.

Van Samarakshan Samitis and Forest Development Agencies are facilitated to access central government. FD networks and involves other agencies and departments for rural development, watershed development, tribal development, investment etc. especially in remote areas

7.2 Incentives for protecting and enhancing the supply of environmental services²⁵.

Incentive mechanisms are in place, and motivate stakeholders to protect and supply environmental services from forests, in combination with other regulatory, market and public investment approaches.

²⁴ The long term nature of forestry activities is reflected in multi-year budgets that guide release of funds.

²⁵ These include: Watershed services – the quantity and quality of water, flood control, soil erosion control, Landscape beauty, biodiversity and carbon sequestration

8.0 Transparency / Right to information/ E-Governance

Forestry rules, procedures, and operations are transparent and simple. Right to Information Act facilitates information sharing and communications with people. E-Governance facilitates transparency, accountability and decision-making. Institutional mechanisms for process evaluation and mid-course correction are in place. The Government of Orissa portal provides, as a matter of course, comprehensive financial and expenditure information by dis-aggregated administrative categories.

- 8.1** *Information on all aspects of forestry, - forest policy, projects, staff policies, budget etc. of FD and all such policies / projects applicable in specific forest areas are freely available without any conditions attached to the people. Right to information is enforced. E-governance facilitates 24 x 7 sharing of information, monitoring progress in clearances, as well as sharing results of ex ante, concurrent, and ex post evaluation and monitoring. Communities access information for all procedures, policies and programs from the web. Web enabled GIS provides a spatial representation of data, and rules and policies that vary across space.*