



Program for Recognition and Accreditation of Sustainable Management Practices for
Agroforestry and Natural Forestry Resources

Trees Outside Forests (Management) Standard

IFWCS-TOFMS-2023

Indian Forest and Wood Certification Scheme “PRAMAAN”
Indian Institute of Forest Management, Bhopal
(Scheme Operating Agency)



Indian Forest and Wood Certification Scheme

PRAMAAN

Ministry of Environment, Forest & Climate Change (MoEF&CC), Government of India



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Acronyms, Units and Symbols

| | |
|---------|---|
| FSI | Forest Survey of India |
| GCP | Green Credits Program |
| IAF | International Accreditation Forum |
| IEC | International Electrotechnical Commission |
| IFMS | Indian Forest Management Standard |
| IFWCC | Indian Forest and Wood Certification Council |
| IFWCS | Indian Forest and Wood Certification Scheme |
| IIFM | Indian Institute of Forest Management |
| ISO | International Organization for Standardization |
| MoEFCC | Ministry of Environment, Forest and Climate Change |
| NABCB | National Accreditation Board for Certification Bodies |
| NCM | National Carbon Market |
| NGO | Non-Governmental Organization |
| NWFP | Non-Wood Forest Products |
| NWP | Numerical Weather Predictions |
| PBR | People's Biodiversity Register |
| PRAMAAN | Program for Recognition and Accreditation of Sustainable Management Practices for Agroforestry and Natural Forestry Resources |
| QPM | Quality Planting Material |
| SFM | Sustainable Forest Management |
| SOA | Scheme Operating Agency |
| TOF | Trees Outside Forests |



In order to make a clear distinction between requirements, recommendations, permissions, possibilities, capabilities, and external constraints when using the verbal forms (shall, should, may, can, and must), Table 1 shall be used to express each type of provision. [Adapted from ISO/IEC Directives Part 2: Principles and rules for the structure and drafting of ISO and IEC documents].

Table 1: Recommendations for the use of verbal forms to express each type of provision

| Provision | Verbal form | Equivalent phrases or expressions for use in certain cases |
|----------------------------|-------------|---|
| Requirement | shall | is to is required to it is required that has to only ... is permitted it is necessary needs to |
| | shall not | is not allowed [permitted] [acceptable] [permissible] is required to be not is required that ... be not is not to be need not do not |
| Recommendation | should | it is recommended that ought to |
| | should not | it is not recommended that ought not to |
| Permission | may | is permitted is allowed is permissible |
| | need not | it is not required that no... is required |
| Possibility and capability | can | be able to there is a possibility of it is possible to |
| | cannot | be unable to there is no possibility of it is not possible to |
| External constraint | must* | a legal requirement |

*Do not use “must” as an alternative for “shall”. (This will avoid any confusion between the requirements of a document and external constraints)

A. Background

The TOF management standard has evolved from the Indian Forest Management Standard (IFMS), which derived its Criteria and Indicators (C&I) from the Bhopal-India Process. The Bhopal-India Process is one of the 9 internationally recognized process frameworks¹ for the C&I approach to sustainable forest management which subsequently led to the formation of the IFWCS, which was launched by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India on 12 December 2023. Over time, the standard evolved to include the Trees Outside Forests (TOF) Management Standard, which consists of 5 criteria, 22 indicators and 76 verifiers ensuring that the certification scheme remains both comprehensive and simple for ordinary tree growers. The TOF Management Standard increases the applicability to a wider range of tree management scenarios in India.

The C&I provides an internationally recognized standard for responsible TOF management. However, to apply to diverse types of plantations/agroforestry systems they need to be adapted at regional and national levels to reflect the diverse, social and geographical conditions of trees outside forests in India. The criteria will be applicable at both the national and local levels, while the indicators can be site-specific. The periodicity of the verification could range from annual to once in 10 years depending on the nature of the indicators and local conditions.

B. Introduction

The Indian Forest and Wood Certification Scheme (IFWCS), branded as “**PRAMAAN**” (Program for Recognition and Accreditation of Sustainable Management Practices for Agroforestry and Natural Forestry Resources), is a voluntary, market-based, third-party certification to promote sustainable forest management and agroforestry practices and incentivize responsible wood production and consumption in India.

Trees Outside Forests (TOF) are found in diverse formations in the rural and urban landscapes of India, such as small woodlots, block plantations, trees along linear features such as roads, canals, bunds, etc. and scattered trees on farmlands, agricultural lands, homesteads, community lands and urban areas. TOF plays a significant role in the livelihood of rural and urban people of the country both economically and ecologically. They also act as important sources of timber and fuel wood and contribute to carbon sequestration and biodiversity conservation, provide wildlife habitat and help in microclimate stabilization, etc. Timber and panel products of TOF origin have emerged as the major alternative to timber from forests and thus TOF has significantly obviated pressure from forests (FSI Technical Information Series, Volume 2, No. 1, 2020, Trees Outside Forest Resources in India).

TOF are crucial for meeting the wood demands of various sectors, thereby alleviating the extraction pressure on natural forests and contributing to the conservation of forest resources. TOF performs various productive, ecological, economic, and socio-cultural functions. Ecological and recreational benefits from TOF are prioritized in urban areas, whereas in rural landscapes their economic and livelihood potential in addition to socio-cultural values are better recognized.

Trees Outside Forests (TOF) management certification is the certification of trees outside the forest

¹ Castañeda, F. (2000). Criteria and indicators for sustainable forest management: international processes, current status and the way ahead. In Unasylva (Vol. 51, pp. 3434–3434).

areas to the effect that such areas have an appropriate management plan, and that their management practices comply with the requirements of the IFWCS standard as contained in this document. TOF has significance in all three components of sustainability viz. economic, environmental and social, including the supply chain. This standard is developed to monitor the performance of TOF including plantations/agroforestry on private, government or community owned lands, other than the territorial and protected areas designated as forest lands, for their sustainable management through the framework of criteria, indicators, and verifiers.

The institutional framework of the IFWCS is delineated below:

a. Indian Forest and Wood Certification Council

The Indian Forest and Wood Certification Council (IFWCC) was established by the Government of India to guide and monitor the implementation of the Indian Forest & Wood Certification Scheme (IFWCS) as notified in the Gazette of India Notification No. 3-19/2022-SU dated 12 December 2023. It acts as a multi-stakeholder advisory body with representatives from various stakeholder groups. The IFWCC acts as a multi-stakeholder consultative body to approve the standards, processes, and procedures under IFWCS.

b. Scheme Operating Agency

The Indian Institute of Forest Management (IIFM), designated as the Scheme Operating Agency (SOA), is responsible for the implementation of the IFWCS under the guidance of the IFWCC. The Centre for Sustainable Forest Management & Forest Certification at IIFM acts as the Secretariat of the IFWCS.

c. Accreditation

The National Accreditation Board for Certification Bodies (NABCB), a constituent body of the Quality Council of India (QCI), Ministry of Commerce and Industry (MoCI), and a member of the International Accreditation Forum (IAF), acts as the accreditation body for certification bodies for IFWCS certification.

The IFWCS is committed to upholding the rules of sustainable management practices and to maintaining impartiality, independence, and transparency in the development and implementation of this standard. This is achieved through the multi-stakeholder consultations and inputs from interested stakeholders throughout the standard review process.

C. Scope

This standard is applicable to owners of trees or plantations raised on lands outside forests such as plantations/agroforestry on private or government, or community-owned lands, individual farmers, Farmer Producer Organizations (FPOs), farmer groups, institutions, industries, and other entities engaged in agroforestry, farm forestry, and other wood-based and Non-Wood Forest Products (NWFP) value chains.

According to India State of Forest Report 2023 (Volume 1), TOF refers to all trees growing outside recorded forest areas irrespective of patch size. TOF types may include farm forestry, woodlot, block plantation, pond side plantation, roadside windbreaks, railway windbreaks, canal side plantations, and homestead.

Marginal and small farmers are exempted from the requirement of preparing a TOF management plan. The area covered under the scope of this certification standard covers different categories based on the operational holdings and the classes as given below:

| SNo. | Category | Size-Class (ha) |
|------|--------------|-----------------|
| 1. | Marginal | < 1.00 |
| 2. | Small | > 1.00 - 2.00 |
| 3. | Semi- Medium | > 2.00 - 4.00 |
| 4. | Medium | > 4.00 - 10.00 |
| 5. | Large | 10.00 and above |

Source: Press Information Bureau, Government of India Ministry of Agriculture & Farmers Welfare, Categorisation of Farmers (<https://pib.gov.in/Pressreleaseshare.aspx?PRID=1562687>)

D. Normative References

The IFWCS Trees Outside Forests Management Standard, along with its set of criteria, indicators and verifiers approved by the Indian Forest and Wood Certification Council (IFWCC), constitutes the IFWCS TOF Management Standard. The development of this standard follows the requirements set out in the following IFWCS normative documents:

- Indian Forest and Wood Certification Scheme Guidelines (2023)
- National Working Plan Code (2023)
- IFWCS-IFMS-2023

E. Universal Requirements

1. Management Systems

To establish, implement, maintain, and continually improve a management system comprising of necessary processes and their interactions, in accordance with the requirements of this standard, the client shall:

- i. have a documented management plan specific to the area under the scope of certification, ownership status, description of the resources to be managed, land use and socio-economic conditions, and a profile of the adjacent area;

NOTE: The Procedures may include information on rotation length, annual harvest rate or allowable cut, and species selection, as well as strategies for identifying and protecting rare, threatened and endangered species.

- ii. nominate a management representative with sufficient expertise and qualification who is accountable, responsible for and committed to maintaining the requirements and effectiveness of this standard and for the continual improvement of the management system, which includes but is not limited to internal audits, management review, health and safety and other social and environmental issues;

NOTE: An individual may address one or more requirements, or an individual representative may be appointed to manage specific tasks.

- iii. have adequate resources needed for the establishment, implementation, maintenance of procedures and processes as per the requirements of this standard;
- iv. have policies for conducting periodic management reviews to assess compliance with the requirements of this standard; and
- v. implement a robust system of internal monitoring and continuous improvement including periodic internal audits (on an annual basis at a minimum) in a planned and systematic manner to ensure compliance with the requirements of this standard.

NOTE: The internal audit is conducted based on the defined audit criteria and scope of the audit, with objectivity and impartiality. Based on the results of the internal audit and with the approval of management, appropriate corrections and corrective actions are taken; and relevant information is documented and retained.

2. Organisation Structure

In order to maintain the integrity of its management and organizational structure in compliance with the requirements of this standard, throughout its operations, the client shall:

- i. be a legally defined entity authorized by the competent authority for the activities under the scope of the IFWCS TOF certification;
- ii. have procedures in place to maintain the applicable requirements of this standard; and
- iii. have well-defined roles and responsibilities of concerned personnel handling/implementing processes and procedures as per the requirements of this standard.



3. Competence

To ensure the management of competencies of personnel in accordance with the requirements of this standard, the client shall:

- i. establish, implement and maintain procedures and internal processes that ensure all of its personnel (permanent, temporary and contractual) involved in the certification process have comprehensive understanding of and are able to fulfil the requirements set out in this standard;
- ii. demonstrate the competence and qualification of personnel with respect to the duties and responsibilities they undertake, in terms of the appropriate education, training, or experience; and
- iii. ensure that all its personnel (permanent, temporary, and contractual workers) receive adequate training and supervision to facilitate the proper implementation of the management plan in accordance with the requirements of this standard.

4. Subcontracting

To maintain compliance with the requirements of this standard with respect to outsourced or subcontracted activities, the client shall:

- i. establish clear policies for the management of subcontracted activities including monitoring the role and functions of the subcontracted party; and
NOTE: In case of a company applying for certification on behalf of farmers or a group of farmers, there must be land ownership documents and land lease rules/legal agreements with farmers.
- ii. take full responsibility for subcontracted work and ensure that the subcontractor complies with all the requirements set out in this standard.

5. Due Diligence System (information collection, risk assessment, and risk mitigation)

To establish a policy for the implementation of an effective due diligence system and framework to ensure compliance with the requirements of this standard, the client shall:

- i. include criteria for categorizing risks as high or medium or low risk in the risk assessment;
- ii. document the risk assessment and make available for review to the certification body upon request;
NOTE: The client is responsible for establishing a due diligence system on behalf of its subcontractors. The risk assessment carried out for its subcontractors shall be documented and made available for review by the certification body, upon request.
- iii. implement mitigation measures for high and medium-risk areas of activity based on the risk assessment; and
- iv. maintain a documented procedure for information gathering and risk assessment for all areas of activity to comply with national and international regulatory requirements.

6. Document Control and Record Keeping

To establish and maintain a system of records to ensure compliance with the requirements in this standard and to facilitate transparent monitoring, the client shall:

- i. retain all the relevant documents related to this standard for a minimum period of Five (5) years;



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and

NOTE: Indicative documents to be retained may include, but are not limited to, forest management plan, personnel competence, and training records, internal audit reports, management review records, records of first party/self-declaration, corrective action plan, details of complaints, appeals and disputes, precedents, disciplinary actions, records of the due diligence system, risk assessments, wood harvesting and collection of wood and non-wood forest products, list of obsolete documents removed from use and any other information deemed relevant.

- ii. maintain a record-keeping system that is transparent and allows easy retrieval of information.

F. Criteria, Indicators and Verifiers

This standard is developed to monitor the performance of TOF including plantations/agroforestry on private, government or community-owned lands, other than the territorial and protected areas designated as forest lands, for their sustainable management through the framework of criteria, indicators, and verifiers.

The Standard is structured around five Criteria as follows:

| S. No. | Criteria | Indicators | Verifiers |
|--------|---|------------|-----------|
| 1. | Maintenance and increase in the extent of area under TOF | 2 | 5 |
| 2. | Maintenance, conservation and enhancement of biodiversity and ecosystem services through TOF | 5 | 20 |
| 3. | Conservation, maintenance and enhancement of productivity and vitality of trees outside forests | 9 | 29 |
| 4. | Socio-economic and cultural benefits of trees outside forests | 2 | 8 |
| 5. | Policy, legal provisions and guiding documents for the establishment of trees outside forests | 5 | 20 |

Criteria 1: Maintenance and increase in the extent of area under TOF

Criteria 2: Maintenance, conservation and enhancement of biodiversity and ecosystem services through TOF

Criteria 3: Conservation, maintenance and enhancement of productivity and vitality of TOF

Criteria 4: Socio-economic and cultural benefits of TOF

Criteria 5: Policy, legal provisions and guiding documents for the establishment of trees outside forest

Unless otherwise stated, the requirements of the standard apply to both natural TOF and TOF plantation conditions. These requirements shall be met throughout the process as indicated in the relevant criterion, indicator or verifier. The nature of this standard document is normative, and interpretations or guidance on specific requirements of this standard document may be issued from time to time to provide additional clarification on implementation.

NOTE 1: A TOF management plan refers to a management plan for natural TOF or TOF plantation or equivalent management plans including all elements covered under the requirements in this document.

NOTE 2: The order of presentation of the criteria does not indicate priority or relative importance.

The following set of criteria, indicators and verifiers may be used to assess the corresponding indicators within the five criteria of this standard:

Criteria 1: Maintenance and increase in the extent of area under TOF

This criterion records the extent of area under tree plantations/agroforestry and its sustainable management using criteria and indicators approach to sustainable management of trees outside forest areas. Promoting tree plantations through diverse agroforestry/farm forestry models is significantly important for India to meet the fast-growing demand for wood in the country, reduce dependence on wood imports, enhancing incomes of the farmers and mitigating risks with crop diversification. The co-benefits of growing trees include enhancing ecosystem values, carbon capture and thus receiving additional benefits of carbon credits and green credits. These are indicated by the following:

Indicator 1.1: Extent of tree plantation/agroforestry

Indicator 1.2: Extent of utility of TOF

Indicator 1.1: Extent of tree plantation/agroforestry

The indicator documents the enhancement of land area under tree plantations/agroforestry practices.

Intended situation: Maintenance and increase in tree plantation/agroforestry

Verifiers

1.1.1 Documentation of land use/land cover

1.1.2 Plantation journal

Periodicity: 5 years

Indicator 1.2: Extent of utility of TOF

Trees raised in farmlands yield a variety of commercial or non-commercial products at different time periods. Intermediate thinning may yield poles while pruning would yield fuel wood. Intercrops such as ginger, turmeric etc. may also be harvested. Appropriate value addition to these products at local level would enhance the benefits to stakeholders.

Intended situation: Maximize the economic and social benefits derived from TOF

Verifiers

1.2.1 Percentage of output from TOF used for commercial and non-commercial purposes

1.2.2 Monetary value of the products used for commercial purposes

1.2.3 Percentage of raw material met for the wood-based industries (x% of the local volume)

Periodicity: 5 years

Criteria 2: Maintenance, conservation and enhancement of biodiversity and ecosystem services through TOF

Plantations under different schemes should avoid monoculture and enhance biodiversity and various ecosystem services through raising multiple tree and crop species. These are indicated by the following:

Indicator 2.1: Species diversity in TOF

Indicator 2.2: Protected area network and TOF

Indicator 2.3: Effectiveness of TOF in soil and water conservation

Indicator 2.4: Ecological restoration and rejuvenation of degraded and denuded land using TOF

Indicator 2.5: Potential carbon stock mapping

Indicator 2.1: Species diversity in TOF

This indicator records floral and faunal diversity in terms of planted and naturally growing plant species.

Intended situation: Maintenance and enhancement of biodiversity (to be prepared by institutions or accredited consultants)

Verifiers

a. Flora

- 2.1.1 Composition of the tree and agriculture crops, in terms of species (species diversity) and varieties (genetic diversity) and type of the planting material (seeds, clonal propagation, etc.)
- 2.1.2 Species grown in the farmlands are found in the adjoining natural stands
- 2.1.3 List of indigenous and exotic species grown in the farmland

b. Fauna

- 2.1.4 Composition and diversity of faunal community including mammals, birds, reptiles, insects, earthworms, etc.
- 2.1.5 Presence of natural predators or biological control agents

Periodicity: 5 years

Indicator 2.2: Protected area network and TOF

Agroforests and plantations raised as corridors to connect fragmented forest ecosystems in wildlife sanctuaries, national parks etc.

Intended situation: Encourage tree cover and diversity near protected areas for better connectivity.

Mature plantations and agroforests mimic natural forests and provide habitat continuity to facilitate the movement of animals.

Verifiers

- 2.2.1. Establishment of wildlife corridors and development of wildlife habitats through plantations
- 2.2.2. List of species conserved by developing corridors for protected area network

Periodicity: 5 years

Indicator 2.3: Effectiveness of TOF in soil and water conservation

Sustainable management of tree plantations would result in better soil and water conservation regimes that is reflected in enhanced flow of water in streams for longer duration throughout the year. Soil and water conservation measures in tree plantations can result in multiple benefits such as reduction in soil erosion, increase in water recharge, improvement in soil health and conducive environment for plant

growth.

Intended situation: Plantation has stabilized the soil and helped in regulating surface run-off. Conservation measures undertaken in the plantation facilitates soil and water improvements in adjoining areas.

Verifiers

- 2.3.1. Total area identified and demarcated for the protection of soil and water conservation
- 2.3.2. Number of physical and biological measures/structures for soil and moisture conservation in tree plantations
- 2.3.3. Documentation of the impacts of plantations on surface and groundwater in the watershed
- 2.3.4. Enhancement in natural regeneration and growth of the saplings in plantations
- 2.3.5. Improvement in land capability
- 2.3.6. Riparian zones (area adjacent to rivers/wetlands) identified, defined and protected before harvesting
- 2.3.7. Reduced impact logging mechanisms are devised

Periodicity: 5 years

Indicator 2.4: Ecological restoration and rejuvenation of degraded and denuded land using TOF

TOF is a sustainable strategy for restoring degraded lands and achieving national restoration commitments. This will also fetch additional revenue through green credits.

Intended situation: Encourage land restoration activities for the management of degraded lands

Verifiers

- 2.4.1. Wasteland map with the extent and intensity of degradation or denudation
- 2.4.2. Land capability classification
- 2.4.3. Soil health status
- 2.4.4. Methods for managing culturable and non-culturable wastelands

Periodicity: 5 years

Indicator 2.5: Potential carbon stock mapping

This indicator will cover the estimation of carbon stock in tree biomass and soil if it has the potential for carbon credits.

Intended situation: Maintenance and enhancement of carbon stock from the base year data.

Verifier

- 2.5.1. Documents on growing stock (volume, biomass, etc.)
- 2.5.2. Document on tree and soil carbon stock assessment

Periodicity: 5 years

Criteria 3: Conservation, maintenance and enhancement of productivity and vitality of TOF

Maintaining and improving the productivity of plantations is very important, particularly from the point of view of financial returns. Boosting productivity will increase the commercially valuable yield in addition to improving co-benefits such as carbon sequestration that can help in bringing additional capital/funds for plantations and thus increase areas under tree cover. These are indicated by the following:

Indicator 3.1: Quality planting material

Indicator 3.2: Survival and growth of planted species

Indicator 3.3: Rotation period of the tree species

Indicator 3.4: Regeneration status of planted species

Indicator 3.5: Harvesting of trees

Indicator 3.6: Extent and nature of damage to TOF

Indicator 3.7: Existence and application of site-specific technologies for enhancing productivity

Indicator 3.8: Greater reliance on eco-friendly methods for raising and management of TOF

Indicator 3.9: Optimization of use, value addition and enhancing marketing opportunities of produce from TOF

Indicator 3.1: Quality Planting Material

High-quality planting material is essential for the successful establishment of Trees Outside Forests (TOF). Ensuring the use of superior planting material contributes to enhanced growth, resilience, and productivity of TOF systems, thereby supporting long-term environmental and economic benefits.

Intended situation: There should be successful establishment, growth, and sustainability of TOF, maximizing environmental and economic benefits.

Verifiers:

- 3.1.1. Documentation of the source of planting material
- 3.1.2. Due diligence for assessing quality
- 3.1.3. Provenance and genotype verification

NOTE 1: QPM can be sourced from nurseries that hold a certificate issued by the National Nursery Assessment and Accreditation Committee (NNAC) or equivalent authority.

Periodicity: 5 years

Indicator 3.2: Survival and growth of planted species

This indicator records the survival percentage of the planted species in the farmland. Survival is assessed during the initial years of plantation. Maximum survival is necessary to achieve the objectives of the plantation and in case of sapling casualty, replacement must be done to fill the gaps. Optimum spacing and density should also be prescribed in the management plan. The survival percentage would indicate the suitability of the planted species and the effectiveness of management practices. For long rotation crops tending operations are also done to increase productivity.

Intended situation: The survival and growth of tree species should be according to the documented

growth parameters for the given locality.

Verifiers

- 3.2.1. Plantation register with records of survival and growth statistics of different planted species at periodic intervals
- 3.2.2. Re-planting of saplings in the successive years
- 3.2.3. Annual growth parameter monitoring report including data on Current Annual Increment and Mean Annual Increment, growing stock and other growth parameters

Periodicity: 5 years

Indicator 3.3: Rotation period of the tree species

Timely harvesting of mature plantations is important for maximizing returns. It is desirable that harvesting should be done as per the prescribed rotation period in the management plan.

Intended situation: Rotation period may be fixed and documented in the management plan based on the silvicultural characteristics of the tree to obtain optimum income

Verifiers

- 3.3.1. Long-term projections, strategies and plans for enhancing production
- 3.3.2. Harvesting plan as per the rotation period fixed at the time of planting tree or deviation, if any

Periodicity: 5 years

Indicator 3.4: Regeneration status of planted species

This indicator assesses the success of natural regeneration and the implementation of practices to promote regeneration of planted species. It aims to ensure the long-term sustainability of TOF plantations.

Intended situation: Records/observations on regeneration through seeds or coppice/root suckers will facilitate raising future crops.

Verifiers

- 3.4.1. Natural regeneration assessment reports
- 3.4.2. Practices for promoting assisted/natural regeneration

Periodicity: 1 year

Indicator 3.5: Harvesting of trees

Harvesting of trees in a phased manner and as per plan may facilitate the management of plantations in perpetuity.

Intended situation: Records of harvested trees will be used for yield projections which may help in planning new plantations.

Verifiers

- 3.5.1. Percentage area harvested for which pre-harvesting surveys have been conducted and

harvesting proposal prepared with estimation of level of sustainable harvest for each species

3.5.2. Documentation of age v/s volume of harvested trees

3.5.3. Cost estimation of the harvest plan is as per the guidelines

Periodicity: 5 years

Indicator 3.6: Extent and nature of damage to TOF

This indicator will record the damage to plantations due to various reasons such as pests and diseases, weeds, wildlife, drought, storms and others. Weeding activities should be undertaken to reduce competition of weeds with the planted species.

Intended situation: Maintaining records of species prone to various disturbances will help in successful establishment of TOF

Verifiers

3.6.1. Type and extent of diseases and pest infestations

3.6.2. Records on the frequency of natural calamities and area damaged

3.6.3. Integrated pest and disease management to minimize tree damage and mortality

3.6.4. Weed management practices to reduce weed competition promoting early canopy closure

Periodicity: 5 years

Indicator 3.7: Existence and application of site-specific technologies for enhancing productivity

This indicator assesses the extent to which site-specific technologies and indigenous knowledge are applied to enhance the productivity and sustainability of TOF

Intended situation: Enhanced use of technology blended with indigenous knowledge for raising TOF

Verifiers

3.7.1. Report of potential productivity of the site from reputed R&D and management institutions, NGOs, accredited consultants

3.7.2. Document showing the chronological list of activities for use of appropriate technologies in site selection, species selection, seed collection, nursery techniques, plantation and its maintenance

3.7.3. Records of use of local resources and use of indigenous knowledge in raising plantations

Periodicity: 2 years

Indicator 3.8: Greater reliance on eco-friendly methods for raising and management of TOF

This indicator reflects the use of eco-friendly technology and inputs such as use of renewable energy sources (solar pumps, solar dryers for NWP etc.) for the day-to-day management activities, use of bio fertilizers etc.

Intended situation: Encouraging use of renewable energy and alternative natural products for sustainable management of TOF.

Verifiers

- 3.8.1. Installed renewable energy equipment
- 3.8.2. Extent of energy saved
- 3.8.3. Extent of use of organic manures/biocontrol agents (compared to total quantity of chemical fertilizers used, if any)
- 3.8.4. Available facility for on-site production of vermicompost
- 3.8.5. Integrated pest management

Periodicity: 2 years

Indicator 3.9: Optimization of use, value addition and enhancing marketing opportunities of produce from TOF

Facilities and knowledge for value addition and institutionalization of marketing are needed to enhance the optimum utilization of products from tree plantations. The documentation of ecosystem benefits such as increased carbon stocks, restoration of degraded lands, and watershed services can also be monetized through the National Carbon Market (NCM) and Green Credits Program (GCP).

Intended situation: Incorporating value-addition options and ensuring market linkages at the time of plantation planning will enhance financial viability

Verifiers

- 3.9.1. Existence and application of local processing and utilization of tree produce
- 3.9.2. Effective purchase and supply mechanism with the availability of online platforms
- 3.9.3. Market intelligence to provide assistance in the timely disposal of products
- 3.9.4. Diversifying the mix of commercial products derived from the forest plantation

Periodicity: 5 years

Criteria 4: Socio-economic and cultural benefits of TOF

Many communities have been traditionally dependent on tree products for their cultural and socio-economic needs. Documenting traditional tree management practices will help in managing the plantations sustainably. Indigenous knowledge and local traditions are useful in bringing degraded lands under tree cover. These are indicated by the following:

Indicator 4.1: Indicator 4.1: Economic and sociocultural benefits generated for local communities

Indicator 4.2: Indicator 4.2: Social Impact Assessment

Indicator 4.1: Economic and sociocultural benefits generated for local communities

TOF supports local livelihoods and adds to the income of the communities through the supply of fuel wood, fruits, fodder, etc. Local employment generation from plantation activities is also an important socio-economic benefit. A mechanism for distribution of specified share of harvested material, revenue and usufruct benefits should be assured in the management plans. Respect for indigenous traditional knowledge and cultural practices of communities should be ensured.

Intended situation: Contribution towards direct and indirect benefits for local community

Verifiers

- 4.1.1. Records on fruits, fuelwood, fodder etc. used by local community
- 4.1.2. Records on employment of local workers in plantations
- 4.1.3. Labour rules are implemented, and labour rights are protected
- 4.1.4. No child labour is involved in plantation activities
- 4.1.5. Health and safety measures for employees in plantations including health insurance, suitable gears (helmet, hand gloves etc.), availability of first-aid kit, maintenance of up-to-date safety records in compliance with all applicable laws and/or regulations etc.
- 4.1.6. Cultural values such as recreation, religious worship and tourism are maintained

NOTE 1: Documented policies and procedures may be used to ensure accountability, and the employees (permanent, temporary and contract) should be competent with adequate training provided and be aware of the health and safety policies and work practices that apply to their specific activities and roles.

NOTE 2: Organizations are encouraged to actively support workers' rights, respect workers' fundamental rights, and promote freedom of association to enable meaningful collective bargaining opportunities.

NOTE 3: Clients who can demonstrate compliance with other standards (e.g. ISO 45001, ISO 9001 and ISO 14001) may use the same requirements to meet the health and safety requirements of this standard.

Periodicity: 1 year

Indicator 4.2: Social Impact Assessment

The indicator assesses the impacts of tree outside forest/plantations/agroforests on the rural livelihoods

Intended situation: Help in identifying potential social impacts, both positive and negative.

Verifiers

- 4.2.1. Social Impact Assessment report
- 4.2.2. Focus Group Discussion report

Periodicity: 5 years

Criteria 5: Policy, legal provisions and guiding documents for the establishment of trees outside forest

The criterion is concerned with the existence of a conducive environment in terms of available rules, regulations, policy guidelines and management plans for the sustainable development and management of TOF. Well-defined rules and regulations shall be in place based on a National/State Policy/Act to support and motivate tree-based farming in the country to meet the production, conservation and socio-cultural needs. These are indicated by the following:

Indicator 5.1: Adherence to the legal framework for establishment of trees outside forest for production, conservation, and socio-cultural needs

Indicator 5.2: Availability of comprehensive management plan with clear objectives and guidelines

Indicator 5.3: Institutional framework for research, development and best practices, if any

Indicator 5.4: Guidelines to identify, incorporate, retain, and encourage the adoption of native multipurpose species in TOF



Indicator 5.5: Comprehensive Monitoring and Evaluation (M&E) mechanism

Indicator 5.1: Adherence to the legal framework for establishment of trees outside forest for production, conservation, and socio-cultural needs

The indicator will record all the issues related to the adherence to rules, regulations and legal frameworks to support trees raised in government or private lands by government institutions or by private organizations/individuals. Sound knowledge of the legal provisions will be beneficial for planting, harvest, transport and management of depot/storage place.

Intended situation: Establishment of TOF/plantations/agroforest as per the law of the land.

Verifiers

- 5.1.1. Land ownership documents land lease rules/legal agreement with farmers in case of a company seeking certification on behalf of farmers or a group of farmers
- 5.1.2. Registration of plantation with concerned authority as required by the relevant State Acts and Policies
- 5.1.3. Documents on policy/legal requirements regarding tree plantation, harvest and transport consistent with the national objectives and the direction of apex court, if any are available
- 5.1.4. List of tree species that require license/permission for cultivation, harvest and sales
- 5.1.5. Felling and transit rules
- 5.1.6. Applicable rules/legal provisions for disposal/selling of trees in open market or through timber depots

Periodicity: 1 year

Indicator 5.2: Availability of comprehensive management plan with clear objectives and guidelines

A comprehensive management plan would ensure the ecological, economic and socio-cultural aspects of sustainability. Principles of sustainability given in the National Working Plan Code 2023 may be used as a guiding document for the preparation of management plan for TOF. Management plan should also encourage the application of traditional/indigenous knowledge.

Intended situation: Management operations as per the plan and the maintenance of plantation register.

Verifiers

- 5.2.1. Copy of duly approved management plan/micro-plan with guidelines for silvicultural operations (including sustainable harvesting/collection practices) for wood and non-wood produce
- 5.2.2. Plantation journal with details and timeline of silvicultural operations, with deviation, if any

Periodicity: 5 years

Indicator 5.3: Institutional framework for research, development and best practices, if any

Research & development and transfer of technology mechanisms for the plantation are important in raising quality plantations. Development of Quality Planting Material (QPM) of different tree species, maintenance of clonal seed orchards, and application of the results of provenance trials are important.

Knowledge of suitable species and their survival and growth rates according to specific site conditions are important for successful plantations. This indicator will document these aspects and capture the shortcomings in technology transfer and further requirements of technology to meet the objectives of plantations.

Intended situation: Extension activities conducted by various institutions (Forestry and Horticulture departments, universities, NGOs etc.) for tree growers.

Verifiers

- 5.3.1. Availability of best package of practices for raising and management of plantation
- 5.3.2. Research & Development Plan of institutions
- 5.3.3. Availability of adequately trained manpower with the growers or concerned institutes
- 5.3.4. Transfer of technology (lab to land) mechanism

Periodicity: 5 years

Indicator 5.4: Guidelines to identify, incorporate, retain, and encourage the adoption of native multipurpose species in TOF

This indicator will set the guidelines to maintain the diversity of indigenous species of trees, shrubs, herbs, shrubs and agricultural crops in TOF in accordance with the ecological conditions of the area and objectives of the plantations.

Intended situation: Endemic species identified, recorded and protected as per the People's Biodiversity Register (PBR) (Biological Diversity Act, 2002)

Verifiers

- 5.4.1. People's Biodiversity Register from the concerned local body
- 5.4.2. Register of number of native and endemic plants retained/adopted
- 5.4.3. Guidelines for retention and management of native species

Periodicity: 2 years

Indicator 5.5: Monitoring and Evaluation (M&E) mechanism

Monitoring and Evaluation(M&E) is an important aspect of any development work. M&E of plantations should be regular to assure the desired outputs. The indicator will assess the arrangements made by the certification agency and follow-up action taken for monitoring and evaluation of plantations.

Intended situation: Monitoring and evaluation mechanism in place

Verifiers

- 5.5.1. Written M&E Mechanism
- 5.5.2. Periodic M&E reports
- 5.5.3. Compliance of the feedback received
- 5.5.4. Complaint/suggestion register

Periodicity: 1 year