NOTE

Trees Outside Forests (TOF)

This document put forward possible pathways to TOF Certification in India

Background

In India, 95% of the forest cover is under the ownership of central and state government, majority of industrial demand is fulfilled from the Trees present outside the forests. Therefore, the concept of Trees outside Forests (TOF) is not new in the country and targeted efforts to promote expand and increase production from this resource may hold great possibilities.

This paper provides a synopsis on the possible approaches that can be used to implement the certification TOFs in the country.

Definition

TOF definition can vary by country just like the definition of Forests and technically TOF are identified as an element contrasting to 'forests'. In one of its working paper FAO has defined TOF as "Trees on land not defined as forests and other wooded land" including area less than 0.5 ha, trees able to reach atleast a height of 5 m at maturity in situ where the stocking level is below 5 percent or trees not able to reach a height of 5m at maturity in situ where the stocking level is below 20 percent; scattered trees in permanent tree crop such as fruit-trees and coconut; trees in parks and gardens, around buildings and in lines along streets, roads, railways, rivers, streams and canals; trees in shelterbelts of less than 20m width and 0.5 ha area."

In India, "All trees growing outside recorded forest areas" are defined as trees outside forests. The recorded forest area means "reserve", "protected' or 'unclassified forest'. The trees growing in private lands in agroforestry, farm forestry, along the farm bunds and homesteads, and in orchards and in common and government non forest lands in parks and gardens, along roads, canals and railway line in rural or urban areas constitute TOF. Trees Outside Forests can have their occurrence in the form of block, linear and scattered stratum.

On the basis of existing definition of Forests and TOF in India, we classify four certification models to include every possible category of Forests and TOF under the preview of forest certification system (refer next section).

Potential Pathways

The possible models illustrated in this paper are broadly based on the following attributes:-

I. Landscape/standalone approach (defined on the basis of Forest type, area, size, occurrence and arrangement)
II. Buyer-led and Forest Management Entity (FME) approach

Concept at Glance:

	Type	Approach	Driver	Type of Forests/Trees Outside Forests	Applicable Standard
Forest management certification	Model I	Landscape	Forest Management Entity	Natural Forest/Reserve forests/Protected area/conservation zones Example - Uttar Pradesh Forest Corporation	Country Specific Sustainable Forest Management (SFM) Standard
	Model II	Landscape	Forest Management Entity	Commercial Plantations Example – Plantations by Pulp & Paper, Plywood etc.	SFM Standard (+) additional indicators and safeguards
Trees Outside Forest (TOF) certification *There may be an overlap of FM – SLIMF and TOF certification in Model III.	Model III	Landscape	Forest Management Entity or Service-provider	Block plantations less than 25 acres Example –PACL, SARA	SFM Standard (-) less some indicators to give a relaxation against SFM standards
	Model IV	Standalone	Supplier, Buyer or Service-provider	Scattered and Linear stratum of trees with economic utility (commercial trees)/Agroforestry practices/Urban trees/ stand-alone trees at homestead/home gardens/multipurpose tree lots like shelter belts/ windbreaks etc.	Standalone standard containing non-negotiable attributes of SFM standard (+) environmental & social safeguards which are reduced from model III but intense and robust than required in DDS (Due Diligence System) of PEFC and/or Controlled wood of FSC.

MODEL I –

A landscape approach model that will be applied to Natural Forests/Reserve Forests/Protected areas/Conservation zones where the Forest Management Entity (FME) is either state or central government. In such forest type, country specific SFM standard will be appropriate to implement that recognizes the interaction between the different components of ecosystem and sustainability requirements of whole system and its management.

Illustration I- In India, Uttar Pradesh Forest Corporation (UPFC), a state government entity has certified approx. 350,000 hac against SFM standard with approx. 40 species under the scope of certification. The area under the scope of certification mainly consists of Reserve forests, Protected and Natural Forests of the State Forest department.

MODEL II-

Another Landscape approach model where the Forest type will be commercial plantations comprising of Monoculture Plantations for industrial application, raw material bank, Energy Plantations, Pulpwood plantations and other commercial woodlots. This classification can be managed by both Private and Government entities. Plantations are done as per the demand of the certain species and their threats depend on plantation scale, objective, species and the socio-economic environment where it is done. Hence, to minimise the negative impacts and maximise the benefits additional environmental and socio-economic safeguards will be required here. This can be achieved by implementing SFM standards and additional safeguard to ensure sustainable management of forests/TOF is well aligned with the concept of sustainable forest practices.

Illustration II – Industries raise plantations species of their interest like *Eucalyptus spp.*- Pulp & Paper; *Dalbergia spp. & Tectona spp.* – Plywood and manage them as a management entity. SFM standard is being used to certify such plantations however, considering the severity of plantations on ecology and society it is necessary to put extra safeguards to assess and mitigate the impacts of Plantations.

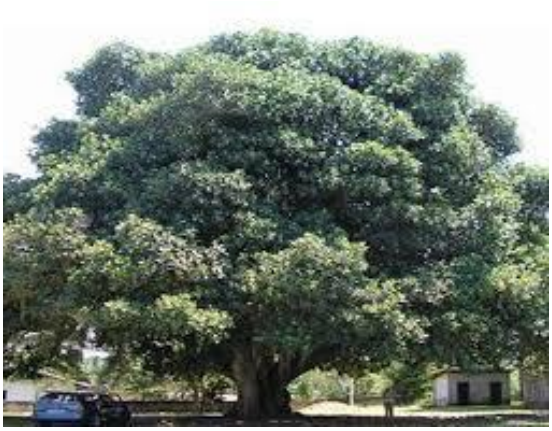
MODEL III-

Another Landscape approach, where small farmers, landholders raise block plantations on either degraded lands or agricultural land (where a 3-4 Years crop gives more benefits to them when compared to traditional agricultural practices), less than 20/25 acres where each piece of land will be called as units. Such model can be aggregated and managed by a federation, cooperatives, NGO or any other third party. Due to small size and large number of units it will be difficult to implement the entire SFM standard which brings the need to filter and streamline the Meta SFM standard for small land holding farmers.

Illustration III- Here, Cooperative/Federation is the FME, aggregating and managing these units in congruence with certification requirements. These cooperatives purchase timber from these farmers and sell it to pulp & paper/plywood industry as certified raw material. Patneswari Agri. Cooperative Limited (PACL) is one such certified organization that operates under this model.

MODEL IV-

This approach comprises of all the possible categories of Forests (except those covered in Model III) namely – urban forestry/ urban trees, agroforestry, scattered trees and other multipurpose tree lots. To define parameters and criteria for TOF certification under these categories we have adopted the following definitions as per their occurrence-



- Urban forestry - an integrated, city wide approach to the planting, care and management of trees in the city to secure multiple environmental and social benefits for urban dwellers[1]. These are basically grown in urban and semi-urban areas for its aesthetic values, fruits bearing qualities, shade and ecosystem services.
- Agroforestry – is defined as a land use system which integrates trees and shrubs on farmlands and rural landscapes to enhance productivity, profitability, diversity and ecosystem sustainability. It is a dynamic, ecologically based, natural resource management system that, through integration of woody perennials on farms and in the agricultural landscape, diversifies and sustains production and builds social institutions.[2]FAO defines agroforestry as a collective name for land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land-management units as agricultural crops and/or animals, in some form of spatial arrangement or temporal sequence[3].
  National agroforestry
- Scattered Trees – A single tree/ bunch of trees/ bamboo clumps etc., grown in or in association with farm lands, which are not cultivated systematically for any economic, social or ecological benefit. This category may also include trees in parks, homestead and home gardens.
- Multipurpose tree lots/Avenue Plantations – This will include shelterbelts, windbreaks, defined as barriers of trees or shrubs that are planted to reduce wind velocities and, as a result, reduce evapotranspiration and prevent wind erosion; they frequently provide direct benefits to agricultural crops, resulting in higher yields, and provide shelter to livestock, grazing lands, and farms[4]; or any other linear plantations along streets, railway, highways, canals etc.,

[1] The potential of urban forestry in developing countries: A concept paper
[2] National Agroforestry Policy 2014, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India
[3] Food and Agriculture Organization of United Nations, http://www.fao.org/forestry/agroforestry/80338/en/
[4] Food and Agriculture Organization of United Nations, http://www.fao.org/docrep/t0122e/t0122e0a.htm#2. windbreaks and shelterbelts

This model will have a separate standalone standard, designed to be broad based in application and focusing on ensuring compliance at buyer/supplier or service provider end rather than at farmer end. The standalone standard will consists of non-negotiable attributes of Sustainable Forest Management practices with environmental and social safeguards at low intensity that can be considered as an advanced version of Controlled Sources but more robust and rigorous. In addition to the standard, this approach will require a monitoring system at management level which will bring it at par with SFM standard. The monitoring system can based on technology interventions and support tools like-

- Volumetric data collection for standing trees which can help to follow through along the chain of custody
- Photographs in locations, geotagged and volumetric estimation prior to harvest for inclusion into certification program
- Initial second party verification, prior to certification audit.

Plan of Action in India

NCCF is a not for profit organization established under Societies registration Act 1860 by key forest based stakeholder with the key idea to develop country specific Sustainable Forest Management scheme. NCCF is already in a process to develop country specific Sustainable Forest Management (SFM) standard which shall become a tool for monitoring, assessment and improvement of forests and plantation management operations. This standard has gone through stakeholder consultation and will be adopted after pilot testing. Suggested, Trees outside Forest (TOF) standard will be developed in alignment with the ongoing SFM standard development process. NCCF is planning to finalise both the standard together through following stages to develop the standard:–