Trees Outside Forests (TOF)



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Trees Outside Forests (TOF)



- In India, FSI has defined TOF as "All trees growing outside recorded forest areas irrespective of size of patch"
- FAO has defined TOF as "Trees on land not defined as forests and other wooded land"
- Trees growing under various models like -
 - TOF (Rural): agro forestry, farm forestry, along the farm bunds and homesteads, orchards, in common & government non-forest lands, in parks and gardens, along roads, canals and railway line in rural areas
 - TOF (Urban): forests, street trees, trees in parks and gardens, and trees in derelict corners.

TOF on the basis of their occurrence in the country:



Urban Landscape

- ✓ Grown in urban and semi-urban areas for its
 - Aesthetic values,
 - Fruits bearing qualities,
 - Shade and ecosystem services.



Rural Landscape

 Land use system which integrates trees and shrubs on farmlands and rural landscapes to enhance

- Productivity
- Profitability
- Diversity
- Ecosystem sustainability



Scattered Trees



- A single tree/ bunch of trees/ bamboo clumps etc.,
 - ✓ Grown in or in association with farm lands,
 - Not cultivated systematically for any economic, social or ecological benefit
- Trees in parks, homestead and home gardens

Avenue Plantations/Multipurpose lots

- It/includes
 - ✓ Shelterbelts
 - ✓ Windbreaks
 - Other linear plantations along streets, railway, highways, canals etc

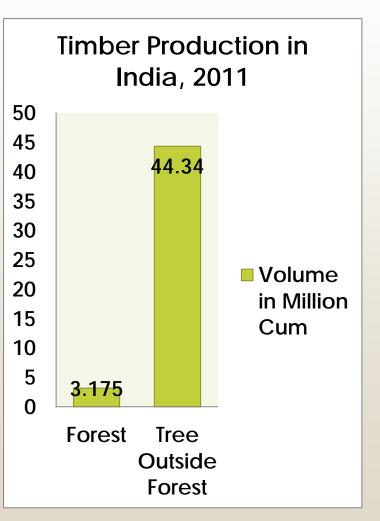




Timber Production in India



	Annual Timber Production(2011)			
State	Forest (000' cum)	Percenta ge	Tree outside Forest (000' cum)	Percenta ge
Uttar Pradesh	425	13.39	5190	11.71
Maharashtra	203	6.39	3530	7.96
West Bengal	122	3.84	1220	2.75
Madhya Pradesh	397	12.50	2680	6.04
Punjab	90	2.83	2120	4.78
Karnataka	49	1.54	2090	4.71
Uttarakhand	250	7.87	680	1.53
Chhattisgarh	397	12.50	2060	4.65
Haryana	108	3.40	1900	4.29
Andhra Pradesh	138	4.35	2360	5.32
Himachal Pradesh	231	7.28	670	1.51
Others	765	24.09	19840	44.75
Total	3175	6.68	44340	93.32



Source: FSI, Indian State forest Report-2011

Benefits of TOF Resource in India



- Beside constituting a major source for production of industrial wood in India, its benefits are multidimensional (Environmental & Socio-economic)
- Trees in Riparian Zones: regulate sediment/chemicals/pollutants transport, nutrient sinks
- Other benefits: Social, psychological, health, aesthetic, ecological and economic functions.
- TOF valuable majorly for timber & fuel wood.
- TOF (Rural): A source of food and feed, nutrients sinks, soil and water conservation, wind breaks, ethno forestry, biodiversity
- TOF (Urban): microclimate regulation, mitigation of urban heat island effects, mitigating effects of air & noise pollution, ground water recharge, prevention of soil erosion, carbon sequestration, urban green habitat and food, de facto sanctuaries for some species, community bonds, stress reliever

Certification: Benefits



- TOF certification is a market based non-regulatory tool designed for differentiating sustainably managed TOF products and promote responsible TOF management.
- Through Certification, TOF resource planning, its practices and harvesting are evaluated by an independent third party according to the standards.
- Benefits:
 - It strengthens trade-off between farmers, trade markets and wood based industries.
 - Strengthen Good Agricultural Practices (GAP) in the Agro forestry models.
 - Caters to various environmental & socio-economic benefits.

Thank You !!



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