



FOREST POLICIES, REDD+ AND SFM; STATUS, OPPORTUNITIES AND CHALLENGES IN INDIA

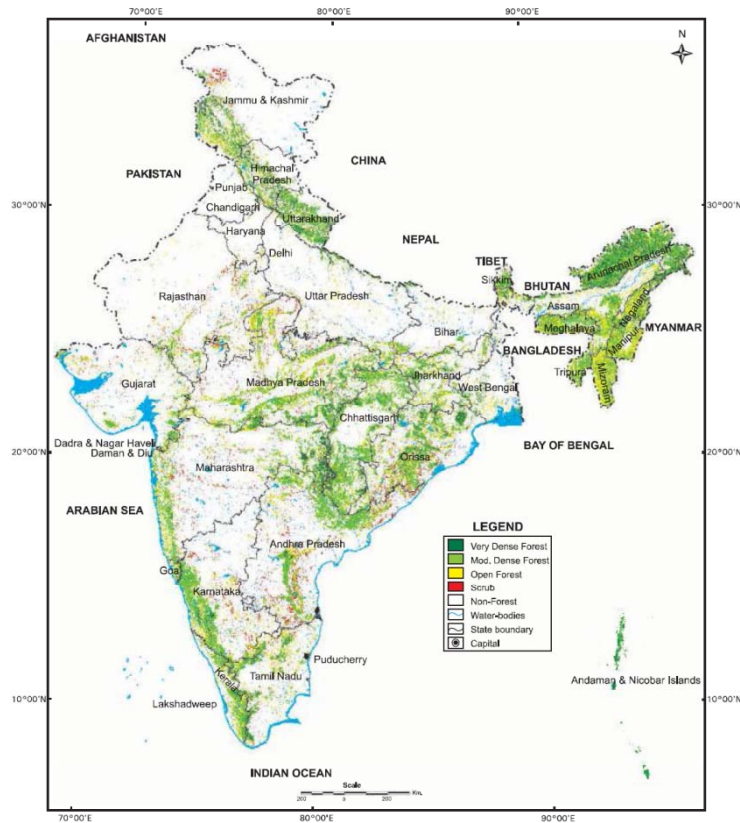
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Outline of the Presentation

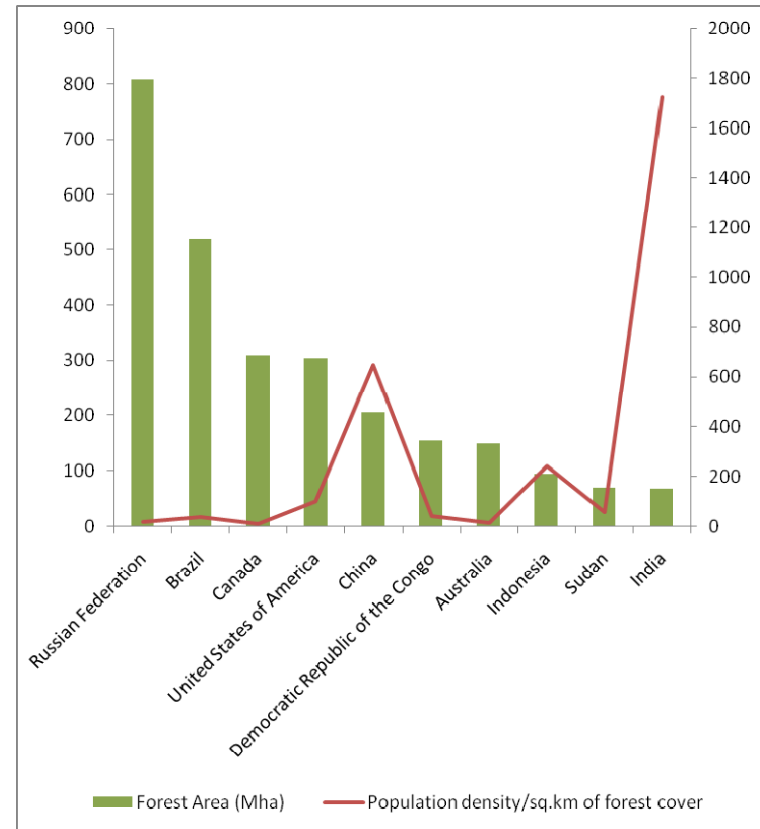
1. Area under forests and deforestation trends in India and pressure on forests in India
2. Potential for REDD and Plus components in India
3. Major forest policies relevant to REDD+ in India
 - **Afforestation, Reforestation and Community Forest programmes in India**
4. SFM process in India; SFM criteria and indicators adopted in India
5. Forest policies and implications for SFM and REDD
 - **Two case studies; 1)Forest Conservation 2)Community forestry**
6. Challenges in mainstreaming SFM in REDD+ and Forest Management
7. Lessons from forest policies and programs for SFM & REDD+ from India

Area Under Forests

Forest distribution in India



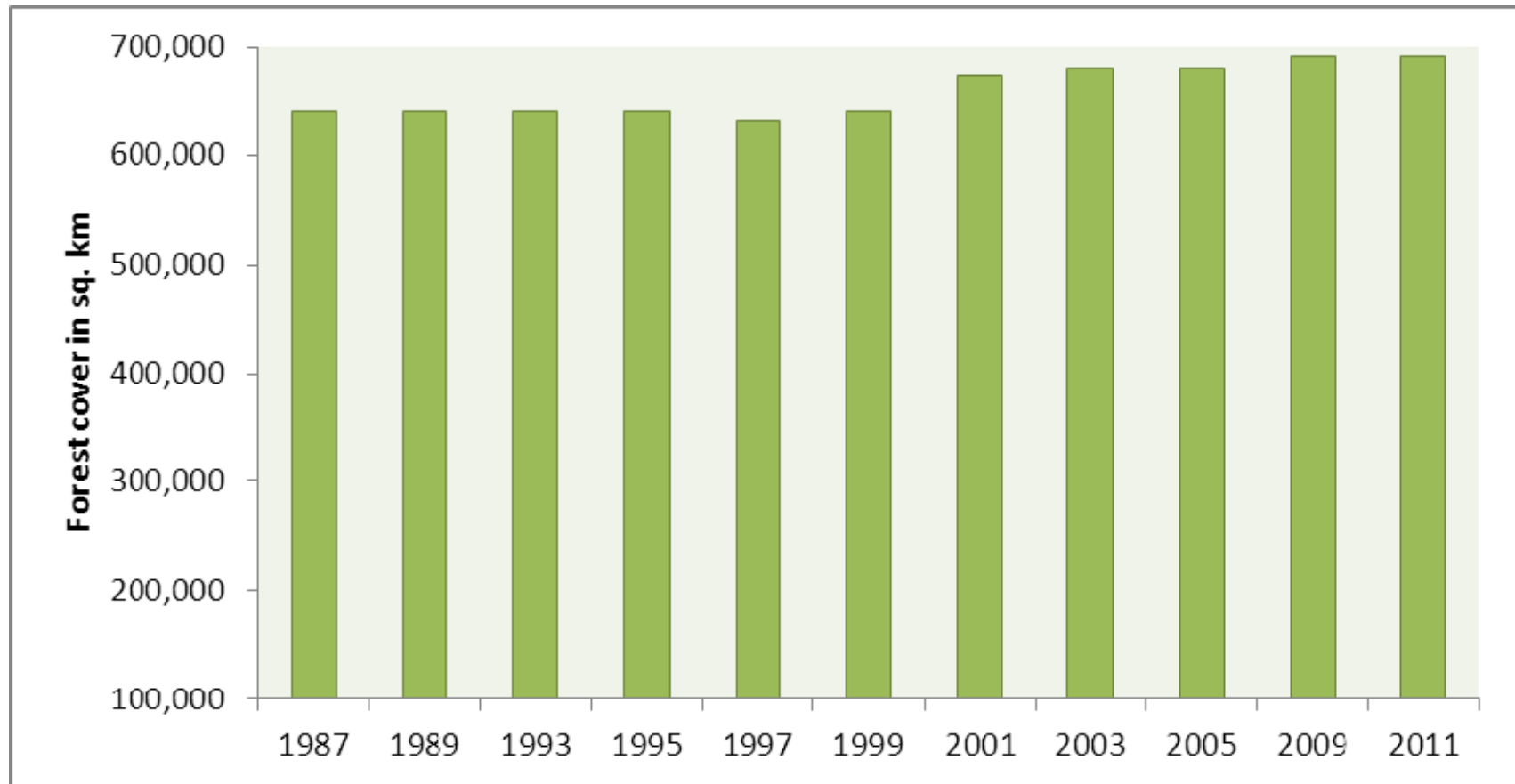
Comparison of forest extent with some other countries



Pressure on forests in India

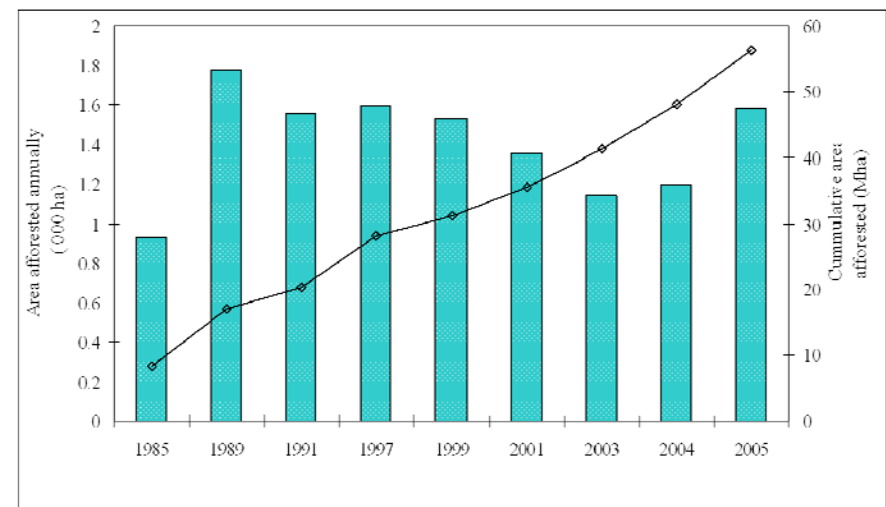
- 1. Low per capita forest area**
 - 0.06 ha per capita or 1800 persons / sq km
- 2. High rural population density** coupled with high dependence on forests for fuelwood, timber, grass, NWFP
- 3. High livestock population density and grazing pressure**
 - 7 livestock per hectare of forest (about 400 million livestock)
- 4. High dependence of human population on forests**
 - nearly 196,000 villages are in the forests or on the forest fringes
- 5. Forest fire prone**
 - 53% of 67 Mha forest area exposed to forest fire
- 6. Invasive species** covering all the open and degraded forests
- 7. Shifting cultivation** in North East India
- 8. Legal conversion of forest land to infrastructure projects**
 - 20,000 ha/annum during the period 2006-2012

Trends in Forest Area from State of Forest Reports



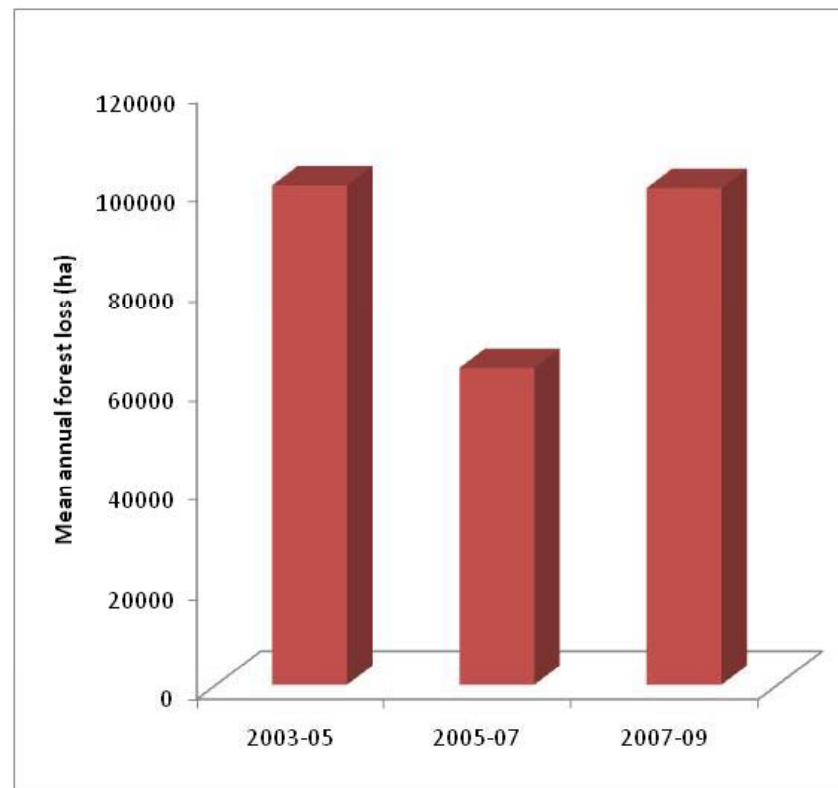
Afforestation trends in India

- India has been implementing a large afforestation programme since 1980 under the social forestry programme
- Currently a number of afforestation programmes are being implemented by the state governments with funding from central and state governments, as well as multilateral and bilateral funding
- **Annually >1 Mha afforested under different programmes since 1980.**

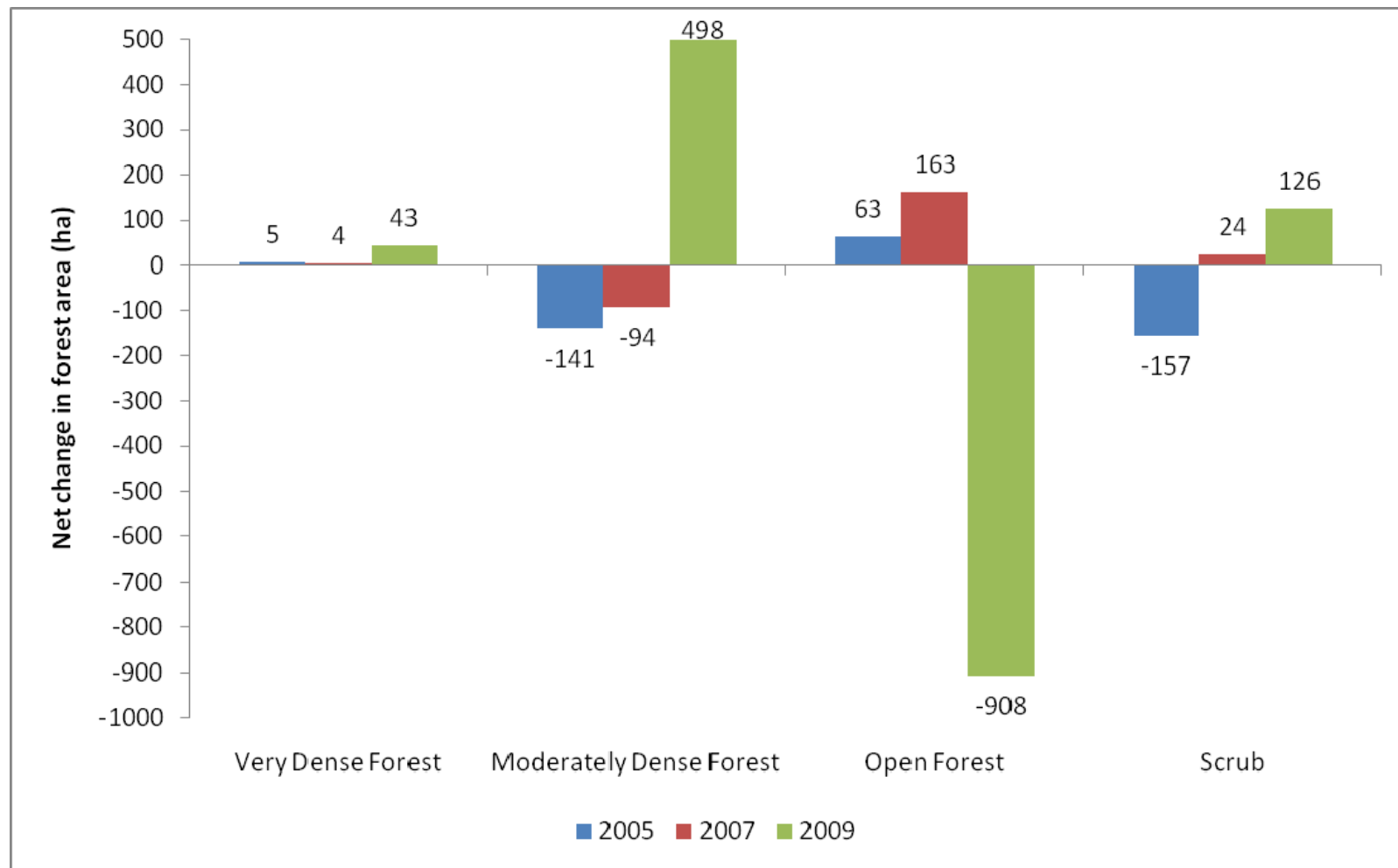


Deforestation trends in India

	2003-05	2005-07	2007-09
Number of districts where forest area declined	130**	174*	118*
Total forest area converted to non-forest, where the canopy cover declined (<10% canopy cover)	-200,800	-127,300	-199,700
Number of districts where forest area increased	112*	164*	162*
Increase in forest area (>10% canopy cover)	327,268	200,200	327,300



Forest Degradation in India; Net change in area under different tree crown classes



Potential for REDD?

- Significant scale forest loss based on decline in forest tree crown density below 10% is occurring
 - **It is not clear how much of forest loss is leading to land use change**
 - **No estimates of REDD that meets the UNFCCC definition**
- Forest degradation estimates are unclear – Only forest tree crown density data is available
 - **Forest degradation estimates are yet to be made**
- The potential of REDD is not yet assessed for India

SFM Process in India

- **Formally agreed at UNCED at Rio in 1992**
- **SFM Operationalized through an agreed set of criteria and indicators (C&I) at national and forest management unit levels**
 - **to monitor, assess and report the sustainability of forests and forest management.**
- **In India the process of identification of SFM C&I was initiated under FAO/ITTO/GOI project called ITTO initiative in 1999**
 - **Since then the C&I have been identified and field validated**
 - **There are 8 criteria and 49 indicators.**
- **The National Working Plan Code 2004 mentions incorporation of SFM C&I in Working Plans for monitoring and evaluation of SFM.**
- **A SFM cell has been created in MoEF in 2006**
- **National Forest Policy 1988 does not include an inbuilt mechanism for a feedback on forest management and forests**
 - **SFM C&I fill this gap in Indian scenario.**

FAO and India SFM Criteria

SFM - India Criteria	FAO SFM Key Themes
Increase in the extent of forest and tree cover	Extent of forest resources
Maintenance, conservation and enhancement of biodiversity	Biological diversity
Maintenance and enhancement of ecosystem function and vitality	Forest health and vitality
Maintenance and enhancement of forest resource and productivity	Productive functions of forest resources
Optimisation of forest resource utilisation	Protective functions of forest resources
Maintenance and enhancement of social, cultural and spiritual benefits	Socio-economic functions
Adequacy of policy, legal and institutional framework	Legal, policy and institutional framework
Conservation of soil and water resources	

SFM interventions – 2 levels

Incorporation of SFM Principles and Practices

- Forest Management
- PA Management
- Afforestation & Reforestation
- Community Forestry
- Commercial Forestry
- REDD+ Projects

SFM C&I – Monitoring, Assessment and Reporting

- Assessment and Monitoring of adoption of SFM Principles and Practices in Forest Management
- Certification of forests – based on SFM C&I
- **Meeting the UNFCCC REDD+ ‘safeguards’**
- **MRV of various components; ecological, social and economic**

Challenges / Readiness for REDD in India

- **Lack of clarity on Definition of Degradation and Plus Components**
 - Since plus components are more relevant to India
- **Absence of Criteria for identification of land for REDD+ activity and potential**
 - To assess the total potential of REDD+ activities
 - Criteria for identifying potential locations for REDD+ activities
- **Presence of Enabling Forest Policies**
 - India has progressive forest policies to meet the requirements of UNFCCC REDD+
- **Capacity for MRV**
 - India has the technical capability for MRV
 - Needs institutional arrangements for MRV process
- **Presence of Institutional capacity**
 - Technical institutions exist for forest area and carbon monitoring
 - Need for strengthening the institutions and to build capacity at decentralized level

REDD Initiatives in India -

- **Forest-PLUS**

- Attempting to integrate the REDD+ planning process with the Joint Forest Management setup
- Attempting to develop a community based MRV system for REDD+ in India
- Develop REDD+ projects compliant with the National Forest Policy and C&I of SFM
- Capacity building in modeling, MRV at national and sub-national levels
- Establishment of REDD+ Cell at the Ministry of Environment and Forests
- Consultative Committee on REDD+ at the MoEF
- **National REDD+ Policy Guidelines prepared**
 - **Under approval process**

Indian forest policies; Features and relevance to SFM

Forest Policies	Features	Relevance to SFM
Forest Conservation Act 1980	<ul style="list-style-type: none"> Regulates conversion of forest land to non-forest purposes Provides for compensatory afforestation in lieu of any forest land diversion for non-forest purposes 	<ul style="list-style-type: none"> Conservation of extent of natural forest resources
National Forest Policy 1988	<ul style="list-style-type: none"> Maintaining environmental stability and restoring ecological balance Preserving natural forests rich in biodiversity. Checking soil erosion and denudation of catchment areas Undertaking massive afforestation and social forestry programs Fulfilling biomass requirements of rural population Increasing productivity of forests Encouraging sustainable use of forest resources Community participation in forest management 	<ul style="list-style-type: none"> Meets all the 7 criteria of SFM
Joint Forest Management 1990	<ul style="list-style-type: none"> Management of forests by forest dept. in partnership with local people Timber and non-timber benefit sharing with communities 	<ul style="list-style-type: none"> Extent of forest resources Protective functions of forest resources Socio-economic functions Legal, policy and institutional framework
Wildlife Protection Act 1972 & National Wildlife Plan	<ul style="list-style-type: none"> Wildlife conservation Ecosystem conservation as a foundation for long-term ecological and economic stability Conservation of wild and endangered species and their habitats 	<ul style="list-style-type: none"> Conservation of biological diversity
National Biodiversity Act 2002	<ul style="list-style-type: none"> Conservation of biodiversity Sustainable use of biological resources Equity in sharing benefits from such use of resources 	<ul style="list-style-type: none"> Conservation of biological diversity Socio-economic functions

Major forest programmes: Features and their relevance to SFM

Forest Programmes	Features	Relevance to SFM
Greening India Mission <i>– Climate change Miti & Adaptation</i>	<ul style="list-style-type: none"> Enhancing carbon sinks in sustainably managed forests and other ecosystems Enhancing resilience of vulnerable species/ecosystems to changing climate, Enabling adaptation of forest-dependant communities to climatic variability 	<ul style="list-style-type: none"> Extent of forest resources Socio-economic functions Maintenance and enhancement of ecosystem functions
National Afforestation Programme (Social Forestry)	<ul style="list-style-type: none"> Develop forest resources with people's participation, with focus on improvement in livelihoods of forest-fringe communities Aims to accelerate ongoing process of devolving forest protection, management and development functions to decentralized institutions 	<ul style="list-style-type: none"> Extent of forest resources Socio-economic functions Legal and institutional functions
Compensatory Afforestation	<ul style="list-style-type: none"> In case of diversion of forest land to non-forest purposes – the user will identify land and develop forest and transfer it to forest dept. or pay the cost of afforestation (<i>2 ha of afforestation for every ha of forest converted</i>) 	<ul style="list-style-type: none"> Extent of forest resources

UNFCCC REDD+ provisions and linkage to SFM criteria and Indian forest policies

Provisions of REDD+ under UNFCCC	SFM criteria	Indian forest policy
That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements	Covers multiple criteria, e.g., conservation of biodiversity, maintenance of ecosystem, socio-economic functions, etc.	<ul style="list-style-type: none"> • National Forest Policy • Joint Forest Management
Transparent and effective national forest governance structures, taking into account national legislation and sovereignty	Legal, policy and institutional framework	<ul style="list-style-type: none"> • National Forest Policy • Joint Forest Management
Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous People	Socio-economic functions	<ul style="list-style-type: none"> • National Biodiversity Act 2002 • Forest Rights Act 2006
The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities, in REDD+ actions	Socio-economic functions Legal, policy and institutional framework	<ul style="list-style-type: none"> • National Forest Policy • Joint Forest Management
That actions are consistent with the conservation of natural forests and biological diversity, ensuring that REDD+ actions are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits; taking into account the need for sustainable livelihoods of indigenous peoples and local communities and their interdependence on forests	Conservation of biodiversity, ecosystem functions Maintenance of forest resource productivity Socio-economic functions	<ul style="list-style-type: none"> • Forest Conservation Act • Forest Rights Act 2006 • National Biodiversity Act 2002 • Wildlife Protection Act

UNFCCC provisions and Linkage with SFM criteria and Indian policies and programmes

Provisions of UNFCCC	SFM criteria	National policies & programmes
A national strategy or action plan	Increase the extent of forest cover Conversion of biodiversity, ecosystem and socio-economic functions, etc.	<ul style="list-style-type: none"> National Forest Policy Greening India Mission
A robust and transparent national forest monitoring system	Increase the extent of forest cover Conservation of forest area	<ul style="list-style-type: none"> Forest Conservation Act State of Forest Report Preparation
Address drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations and the safeguards	Socio-economic functions Legal, policy and institutional framework Forest resource utilization	<ul style="list-style-type: none"> Forest Conservation Act National Forest Policy Joint Forest Management Forest Rights Act Compensatory Afforestation
Ensure full and effective participation of relevant stakeholders, inter alia indigenous peoples and local communities	Legal, policy and institutional framework Socio-economic functions	<ul style="list-style-type: none"> Joint Forest Management Forest Rights Act
Consistent with the objective of environmental integrity and take into account the multiple functions of forests and other ecosystems	Maintenance and enhancement of ecosystem function and vitality, conservation of biodiversity	<ul style="list-style-type: none"> National Forest Policy Greening India Mission
Accordance with national development priorities, objectives and circumstances and capabilities	Increase the extent of forest cover Conversion of biodiversity, ecosystem and socio-economic functions, etc.	<ul style="list-style-type: none"> National Forest Policy
Be implemented in the context of sustainable development and reducing poverty, while responding to climate change	Maintenance and enhancement of ecosystem function and vitality, conservation of biodiversity, socio-economic functions	<ul style="list-style-type: none"> National Forest Policy Greening India Mission
Be consistent with the adaptation needs of the country		<ul style="list-style-type: none"> Greening India Mission
Promote sustainable management of forests	All SFM criteria	<ul style="list-style-type: none"> National Forest Policy

Institutional Case Study 1: Joint Forest Management (JFM)

- JFM is an approach to promote conservation and regeneration of degraded forests by building a willing and active partnership between the state Forest Department and local/indigenous communities.
 - **Village forest committees are formed to manage a given patch of forest and in return communities get access to NWFPs and a share of timber revenue**
- In 1990, the GoI issued an order facilitating participatory approach for managing forests.
- Currently, there are 274,134 JFM committees at the village level, involving 3,862,811 people in managing forests.

• Implications for REDD

- **Institutional mechanism that safeguards rights of forest dependent communities**
- **Framework for benefit sharing to ensure socio-economic benefit flow**
- **Promotes regeneration of degraded forests and conservation of biodiversity**
 - **which are the principles of SFM as well as REDD.**
- JFM could be a decentralized institutional basis for implementing REDD+ projects

Legislation Case Study 2: Forest Conservation Act

- **Forest Conservation Act, 1980 is one of the most effective legislations, contributing to reduction in deforestation.**
- The Act aims to reduce indiscriminate diversion of forest land for non forestry purposes and regulate and maintain the existing forest area.
 - **This Act stipulates prior Central Government approval based on stringent conditions before any forest land is sought to be diverted for non forestry purposes**
- With this Act, the deforestation and conversion of forest lands to non forest use were effectively checked
 - Rate of conversion of forests to non forestry uses has declined drastically to around 15,500 ha per annum since 1980 compared to 1,50,000 ha per annum prior to 1980
- **Implications for REDD**
 - **Highlights the need for an effective legislation for regulating forest conversions and reducing deforestation**

Lessons from Forest policies for REDD+ and SFM

1. **Strong Forest Conservation Act and Wildlife Act to promote REDD**
 - **Leading to effectively reduce deforestation**
2. **Long-term “National Forest Policy” incorporating forest conservation, community rights and ecosystem functions to promote ‘safeguards’ of REDD+ projects**
 - **Guiding all the forestry programmes and projects**
3. **Greening India Mission incorporating – Mitigation & Adaptation**
 - **C-stock enhancement + promoting resilience of communities and ecosystems**
 - **Provides an approach and basis for designing and implementing REDD+ projects**
4. **Large afforestation programmes to meet the community biomass needs and reduce pressure on forests**
 - **Social forestry, National afforestation programme**
 - **Ensures REDD+ ‘safeguards’ and criteria of socio-economic functions of SFM is met**
5. **Community participation and empowerment for decentralized forest management**
 - **Joint Forest Management / Community Forest Management institutions at the village level**
 - **Ensures rights of indigenous and local communities**
 - **To meet the ‘safeguards’ of REDD+ and for participatory monitoring**
6. **Institutional capacity availability for MRV and development of Forest Reference Level and Forest Reference Emission Level**
 - **Remote sensing based forest area and carbon stock monitoring on a biennial cycle**