

## **Introduction to REDD+ and National REDD+ Strategy**

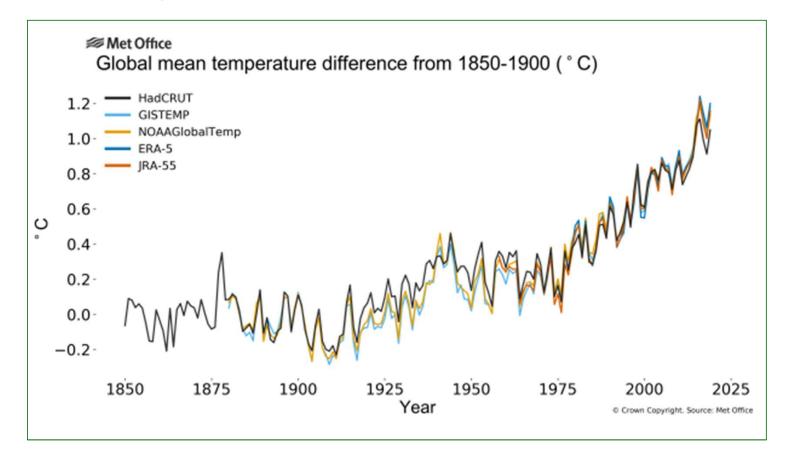


## **Indian Council of Forestry Research and Education**

(An Autonomous Body of the Ministry of Environment, Forest and Climate Change, Govt. of India)

## P.O. New Fores, Dehradun – 248 006

The year 2019 was the second warmest year on record after 2016, according to the World Meteorological Organization's consolidated analysis of leading international datasets



2020 was one of three warmest years on record			
Tags:	El Niño / La Niña Climate change		
15	Published 15 January 2021		

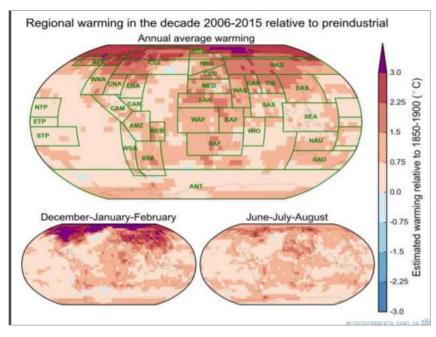
WMO concur that 2011-2020 was the warmest decade on record, in a persistent long-term climate change trend The warmest six years have all been since 2015, with 2016, 2019 and 2020 being the top three

## Where are we now?

### Temperature changes relative to pre-industrial (1850-1900) climatology

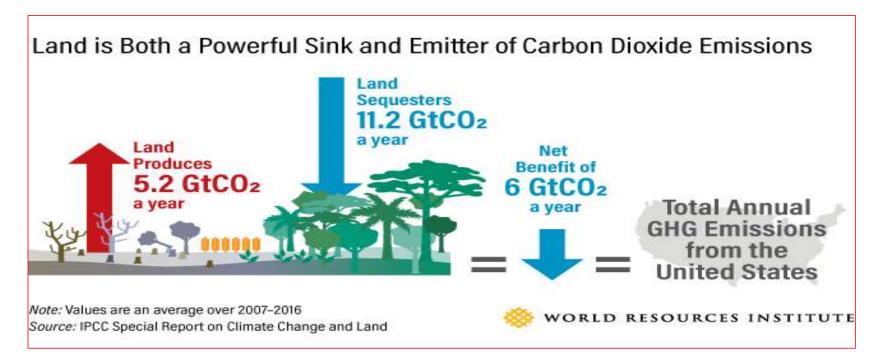
**Key Points:** 

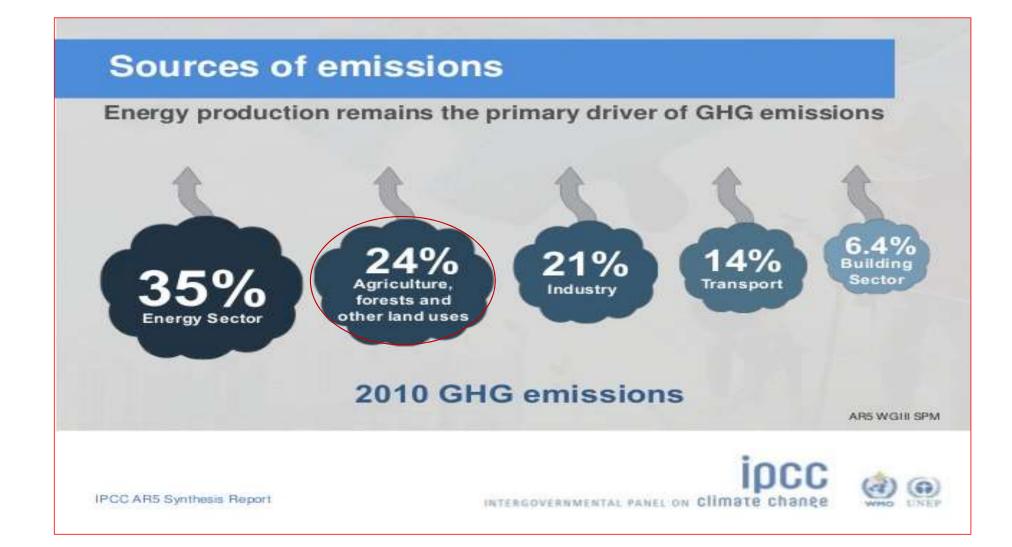
- We have warmed by 1°C and are now warming at a rate of 0.2°C/decade.
- Warming > 1.5°C has already occurred in some regions and 20-40% of the global population lives in regions that have already warmed by more than 1.5°C in at least one season.
- Climate change is already happening and there will be substantive impacts regardless of the future temperature trajectory



## **IPCC Special Report on Climate Change and Land**

- Land acts as a tremendous carbon sink.
- Despite increased deforestation and other land use changes, the world's lands are removing more emissions than they emit. Land removed a net 6 gigatonnes of CO<sub>2</sub> per year from 2007 to 2016.





# Several land-based climate solutions can reduce emissions and/or remove carbon from the atmosphere

- The largest potential for reducing emissions from the land sector is from curbing deforestation and forest degradation, upto 5.8 GtCO<sub>2</sub>eq per year.
- Afforestation and reforestation have the greatest carbon removal potential, followed by enhancing soil carbon and using bioenergy combined with carbon capture and storage, a process that uses biomass for energy and then captures and stores its carbon before it is released back into the atmosphere.

# **Role of Forestry Sector in Climate Change**

- Forests both sources and sinks of carbon
- Forests contribute about 17.4% of global CO<sub>2</sub> emissions
- Forests provide large and relatively low cost mitigation opportunities
- Provide other ecosystem goods and services to the communities to adapt to climate change

# **Key Elements of two Recent Reports of IPCC**

Impacts of global warming of 1.5<sup>o</sup> C above preindustrial level and related Greenhouse Gas pathways (October 2018)

## INTERGOVERNMENTAL PAREL ON CLIMATE CHARGE

#### Global Warming of 1.5°C

An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of dimate change sustainable development, and efforts to eradicate poverty



Special Report on Climate Change and Land (January 2019)

Both these reports brings very strong messages on importance of land restoration in climate change mitigation

# The Agenda of REDD under UNFCCC

- Avoided Deforestation was discussed in the side events of UNFCCC in COP 9 (2003)
- Agenda Item on "Reducing emissions from deforestation in developing countries: Approaches to stimulate action" first presented in COP 11 Montreal (2005) in response to request of Papua New Guinea and Costa Rica
- COP 11 invited parties and accredited observers to submit views on related issues and also to organize a workshop

# **REDD since 2005**

**Avoided Deforestation** 

**Compensated Reduction** 

Reducing Emissions from Deforestation in Developing Countries (REDD)

**Compensated Conservation?** 

**Indian Viewpoint on REDD** 

**Comprehensive REDD** 

**Carbon Saved and Carbon Added** 

Reducing Deforestation & Degradation

•Conservation, Sustainable Management of Forests, Increase in Forest Cover (A&R)

Indian submission incorporates above and seeks incentives on incremental and Baseline stocks

UNFCCC - COP 13 (December 2007) Bali

Bali Action Plan: "…Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries…" [Para 1b (iii) of BAP] (Decision 1/CP.13)

# **Copenhagen Accord and REDD+**

There was clear intent in the Copenhagen Accord to get REDD going without delay. The accord called for the "immediate establishment of a mechanism including REDD+".

In the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries

A significant portion of such funding should flow through the Green Climate Fund (GCF)

Establishment of a Green Climate Fund to support mitigation activities in developing countries, including REDD+

# Methodological guidance for REDD+:....

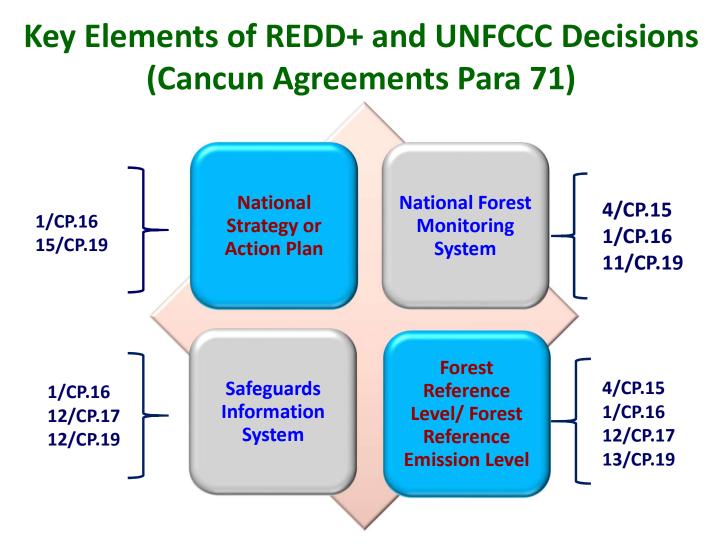
# Decision 4/CP.15 requests developing country Parties, to take the following guidance into account

- **1.** *Requests developing country Parties, .....* in particular those relating to measurement and reporting:
  - (a) To identify drivers of deforestation and forest degradation resulting in emissions and also the means to address these;
  - (b) To identify activities within the country that result in reduced emissions and increased removals, and stabilization of forest carbon stocks;
  - (c) To use the most recent IPCC guidance and guidelines, as a basis for estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes
  - (d) To establish, robust and transparent national forest monitoring systems and, if appropriate, sub-national systems as part of national monitoring systems that:
  - (e) Use a combination of remote sensing and ground-based forest carbon inventory approaches for estimating, as appropriate, anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes;

# **Cancun Forestry Decisions**

Decision 1/CP.16 Scope of REDD+ finally agreed by parties (Cancun Agreements)

- (a) Reducing emissions from deforestation;
- (b) Reducing emissions from forest degradation;
- (c) Conservation of forest carbon stocks;
- (d) Sustainable management of forest;
- (e) Enhancement of forest carbon stocks;

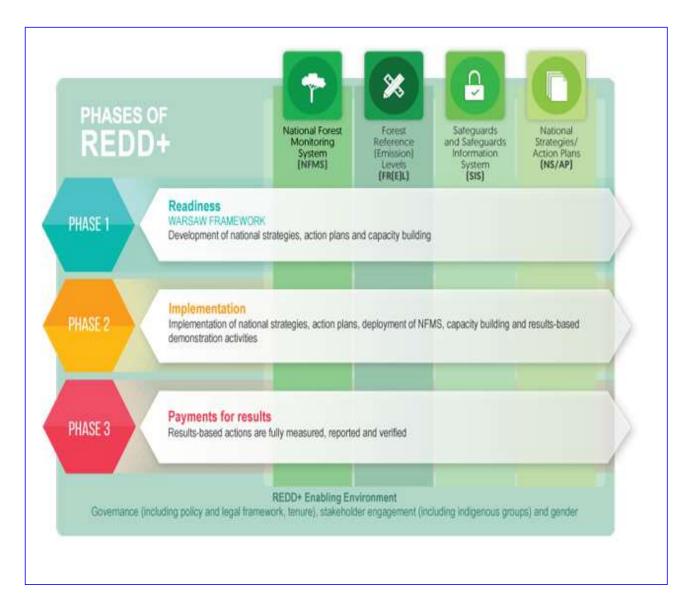


CP 15: Copenhagen - 2009; CP 16: Cancun - 2010; CP 17: Durban - 2011; CP 19: Warsaw- 2013

# **Cancun Forestry Decisions....**

**REDD+ activities to be implemented in three phases:** 

- 1. Beginning with the development of national strategies or action plans, policies and measures, and capacity-building,
- 2. Followed by the implementation of national policies and measures and national strategies or action plans, technology development and transfer and results-based demonstration activities, and
- 3. Evolving into results-based actions that should be fully measured, reported and verified (MRVable).



# **REDD+ countries have to respect....**

# The Seven REDD+ Safeguards (Cancun Safeguards)

- (a) Objectives of national forest programs and other relevant agreements and conventions.
- (b) Transparent and effective structures of national forest governance.
- (c) Respect for knowledge and rights of Indigenous Peoples and local community members.
- (d) Full and effective participation of relevant stakeholders.
- (e) Conservation of natural forests and biological diversity
  - Not used for the conversion of natural forests,
  - Protect and conserve natural forests and ecosystem services,
  - Improve social & environmental benefits.
- (f) Actions dealing with risks of reversal
- (g) Actions to reduce displacement of emissions.

# Modalities for Forest Reference Emission Level/ Forest Reference Level (FREL/FRL)

Forest reference emission levels and/or forest reference levels expressed in tonnes of  $CO_2$  eq per year, are benchmarks for assessing each country's performance in implementing the REDD+ activities

Parties to submit information and rationale on the development of their forest RL including details of national circumstances

# **National Forest Monitoring System**

Item	Actions	
National forest monitoring systems	Parties' national forest monitoring systems for the monitoring and reporting of the activities, should take	
(Decision 11/CP.19)	into account the guidance provided in decision 4/CP.15 and be guided by the most recent IPCC	
	guidance and guidelines, as adopted or encouraged by the COP	

# **MRV of REDD+ Actions**

Item	Actions needed
Measuring Reporting and Verification (MRV)	Activities is to be consistent with guidance provided in decision 4/CP.15.
of REDD+ (Decision 14/CP.19)	The data and information should be transparent, and consistent and with the established forest REL/RL Data and information should be provided through the biennial update reports (BUR).

# **Technical Assessment of Reference Level**

ltem	Actions
Guidance and	UNFCCC Secretariat to prepare a synthesis report on
procedure for technical	the technical assessment process
assessment of Forest	Parties and relevant international organizations were
<b>Reference Emission</b>	invited to support capacity-building in relation to the
levels/ Reference Levels	development and assessment of forest reference
submitted by Parties	emission levels and/or forest reference levels.
(Decision 13/CP.19)	

# Submission of Summary of Information on Safeguards

ltem	Actions		
Timing and frequency of	(i) Parties should provide a summary of information on how all		
submission of summary of	of the safeguards are being addressed and respected		
information on how	throughout the implementation of the REDD+ activities.		
Safeguards are addressed	(ii) The information to be provided periodically and be included		
and respected	in NATCOM, or communication channels agreed by the COP.		
(Decision 12/CP.19)	(iii) Parties should start providing the summary of information		
	in their NATCOM or other communication channel after the		

start of the of REDD+

## **REDD+ under Paris Agreement**

**Article 5 of the Paris Climate Agreement on REDD+** 

- Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1(d), of the Convention, including forests.
- 2. Parties are encouraged to take action to implement and support:

Policy approaches and positive incentives for activities relating to reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries; and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, while reaffirming the importance of incentivizing, non-carbon benefits associated with such approaches.

# **Financing REDD+**

While multilateral funds continue to play a critical role in delivering REDD+ readiness, bilateral arrangements dominate the provision of financial support for capacity building, demonstration and early implementation activities

- Capacity building
- Governance reform
- National strategy development
- Implementation of policies
- Measures to get countries ready for REDD+

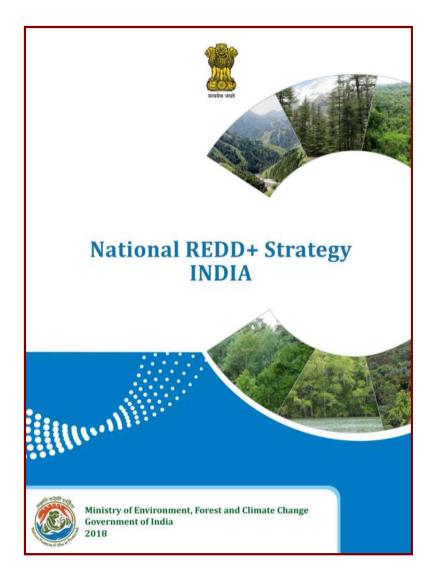
# India made its stand clear in subsequent UNFCCC Workshop on REDD and COP-12 in Nairobi (2006)

- Nations not managing forests in a sustainable manner stand to benefit from the proposal
- Thereby favoring only avoidance of deforestation goes against very preamble of UNFCCC and Kyoto Protocol (sustainable development)
- Reducing deforestation only defers emissions
- Capable of shifting attention of Annex I countries from crucial domestic action for GHG reduction
- Nations who have implemented strong conservation regulations put at disadvantage

## **National REDD+ Strategy India 2018**



ICFRE on behalf of MoEFCC prepared National REDD+ Strategy and released on 30 August 2018 and submitted to UNFCCC



## **National REDD+ Strategy**

**Objective:** To facilitate implementation of REDD+ programme in the country in conformity with relevant decisions of UNFCCC, and the national legislative and policy framework for conservation and improvement of forests and the environment

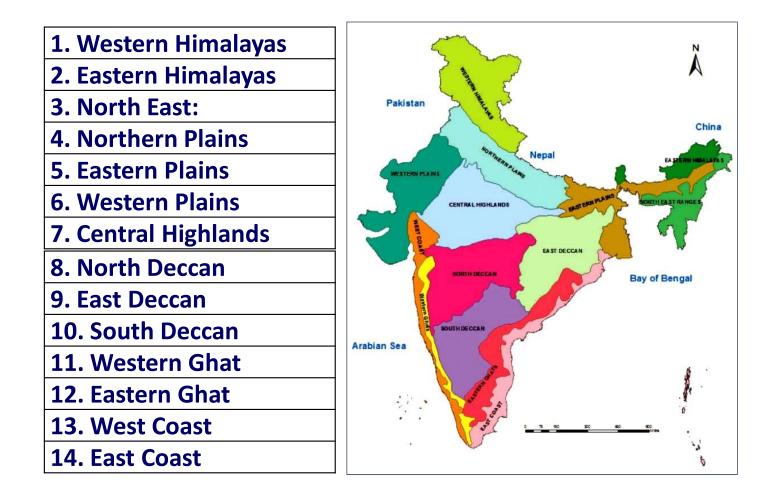
## **Implementation of REDD+**

**REDD+** activities need to be implemented in three phases:

- 1. Phase 1 is the development of National Strategy or Action Plans and capacity-building
- 2. Phase 2 is the implementation of National Strategy or Action Plan and results-based demonstration activities
- 3. Phase 3 is the evolvement into into results-based actions that should be fully measured, reported and verified

Massive capacity building is needed for implementing all phases of REDD+ actions

#### The Strategy: Sub-national REDD+ Approach (at Physiographic zone level)



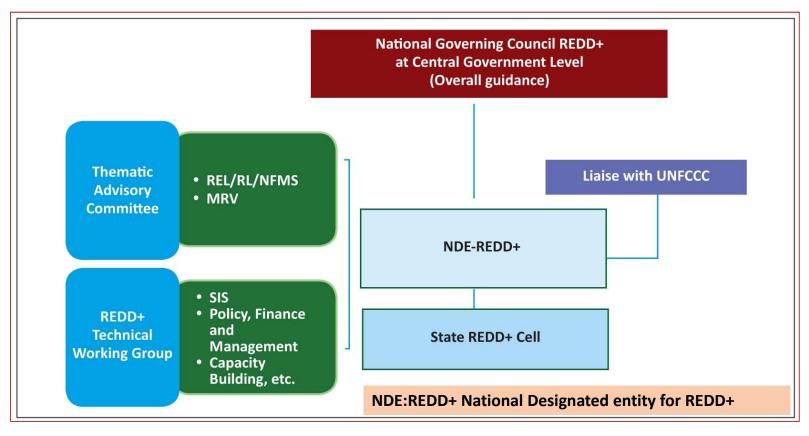
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## Salient Features of National REDD+ Strategy 2018

- Cover all the REDD+ activities (reducing emissions from deforestation, reducing emissions from forest degradation, conservation of forest carbon stocks, sustainable management of forest and enhancement of forest carbon stocks)
- Identified drivers of deforestation and forest degradation
- Strategies for addressing the identified drivers
- Finance for implementation of REDD+ activates to be mobilized from internal and external funding
- Forest productivity enhancement through R&D
- Capacity building of all cadres of the State Forest Departments
- Building a cadre of community foresters
- Green skill development

## Implementation Framework

## Creation of a REDD+ Governing Structure at Government of India Level



## Implementation Framework: NGC-REDD+ at National Level

<ol> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> <li>8.</li> <li>9.</li> <li>10.</li> <li>11.</li> <li>12.</li> <li>13.</li> <li>14.</li> </ol>	Union Minister for Environment, Forest and Climate Change: State Minister for Environment, Forest and Climate Change: Secretary, Ministry of Environment, Forest and Climate Change: Director General of Forests and Special Secretary, MoEFCC: Director General, ICFRE: Additional Director General of Forests (FC), MoEFCC: Additional Secretary (Climate Change), MoEFCC: Director General, FSI: Inspector General of Forests (NAEB), MoEFCC: Joint Secretary (Climate Change), MoEFCC: Joint Secretary, Ministry of Agriculture and Farmers Welfare: Joint Secretary, Ministry of Tribal Affairs: Principal Chief Conservator of Forests (4) (nominated by MoEFCC): REDD+ Experts (2) (nominated by MoEFCC): Inspector General of Forests (Forest Policy), MoEFCC:	Chair Co-Chair Member Member Member Member Member Member Member Member Member Member Member Member Member	Composition of NGC-REDD+
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NGC-REDD+ mandated to oversee and coordinate implementation of National REDD+ Strategy and suggests amendments as deemed fit.

To develop the guidance for flow of incentives from Central Government to the State Governments, and also from State Government further down to the local communities.

#### **Thematic Advisory Group**

It will advise and oversee the aspects of National Forest Monitoring System and Forest Reference Level. FSI will play key role in this group.

#### **Constitution of the Thematic Advisory Group:**

- 1. Director General, FSI:
- 2. Dy. Director General, FSI (I/C Forest Inventory):
- 3. Representative of Director General, ICFRE:
- 4. Representative of PCCFs of 2 States:
- 5. Inspector General (Forest Policy), MoEFCC:
- 6. REDD+ Expert (To be nominated by Chair):
- 7. Senior Deputy Director (Forest Inventory), FSI:

Chair
Member
Member
Members (2)
Member
Member
Member Secretary

## Technical Working Group

C	t will advise on the matters related to safeguards, policy, apacity building. CFRE will play lead role in this group.	finance, management and
	<b>Constitution of the Technical Working Group:</b>	
	1. Director General, ICFRE:	Chair
	2. Dy. Director General, (Research), ICFRE:	Member
	3. Representative of DG, FSI:	Member
	4. Representative of Director, IIFM:	Member
	5. Members of Civil Society/NGO/ Forest User Grou	ps (JFM etc): Members (2)
	6. Representative of PCCFs of 2 States:	Members
	7. REDD+ Expert (To be nominated by Chair):	Member
	8. Dy. Inspector General (Forest Policy), MOEFC:	Member
	9. Assistant Director General (BCC), ICFRE:	Member Secretary

# National Designated Entity for REDD+ (NDE-REDD)

1.	Director General of Forests and Special Secretary, MoEFCC:	Chairman
2.	Additional Director General of Forests (FC), MoEFCC:	Member
3.	Additional Secretary (Climate Change), MoEFCC:	Member
4.	Inspector General of Forests (Forest Policy), MoEFCC: National F	REDD+ Focal Point & Member
5.	Inspector General of Forests (NAEB), MoEFCC:	Member
6.	Joint Secretary (Climate Change), MoEFCC:	Member
7.	Joint Secretary (Green India Mission), MoEFCC:	Member
8.	Director General, ICFRE/Representative of ICFRE:	Member
9.	Director General, FSI/Representative of FSI:	Member
10.	External REDD+ Experts (2) nominated by the Chair:	Member
11.	Representative of SFD (2) nominated by the Chair:	Member
12.	Dy. Inspector General of Forests (Forest Policy), MoEFCC:	Member Convener

## Revamping of National Designated Entity for REDD+ (NDE-REDD+)

- NDE-REDD+ facilitate the establishment of State REDD+ Cells and capacity buildings of SFDs
- Liaison with UNFCCC and other international bodies on REDD+ related issues and mobilizing REDD+ finance
- Approval of national and state level REDD+ proposals for submission to the funding
- Supervising the effective implementation of National REDD+ Strategy
- Overseeing the implementation of REDD+ SIS and its timely periodic communication to UNFCCC
- Facilitating the development of State REDD+ Action Plans and its implementation by the states

# State REDD+ Cell

The strategy devolves major responsibility for execution of REDD+ activities to the State Forest Departments. States will create a REDD+ Cell in the State Forest Department

**Composition of State REDD+ Cell** 

- **1. Principal Chief Conservator of Forests & HoFF:**
- **2.** Principal Chief Conservator of Forests (Planning/Budget):
- **3. PCCF/APCCF (nominated by Chairman):**
- 4. APCCF/ CCF (Monitoring):
- 5. Regional APCCF, MoEFCC or his representative:
- 6. Two REDD+ Experts (Nominated by Chairman):
- 7. Representative of prominent NGO:
- 8. APCCF/CCF/CF (In-charge of Afforestation):

Chairman Member Member Member Member Member Member Nodal Officer

States to develop their S-RAP

## **Implementation Roadmap**

- Establishment of a NGC-REDD+ coordinating and guiding REDD+
- Creation of a REDD+ Cell in the State Forest Departments
- Capacity building of all cadres of the SFDs
- Skill development of community youths for activities like ANR, tree nurseries, soil and moisture conservation, fire protection, weed, insects and pests, agro forestry, tree fodder production, NTFP management, bioenergy production, and biodiversity and ecotourism management activities
- Creation of additional infrastructure for SFDs, technical expertise, trained manpower for forest C measurement
- Need to start pilot studies to test addressing different REDD+ activities Deforestation, degradation, Conservation, SMF, Enhancement of C stocks
- Results will also lead to form national policies on PES





For further details, contact:

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