

Status of REDD+ in India

Reducing Emissions from Deforestation and forest Degradation (REDD) in developing countries is based on the idea of rewarding projects, programmes for actions that reduce greenhouse gas (GHG) emissions. In many developing countries, REDD has the potential to deliver large cuts in emissions at a low cost within a short time frame and, at the same time, contribute to reducing poverty and sustainable development.

1.1 India's National REDD-plus Strategy

Government of India is in the process of developing its National REDD plus strategy. Ministry of Environment, Forests and Climate Change (MoEF&CC) has prepared a draft national REDD Plus Policy and Strategy. The document is web hosted for public comments and will be released soon after taking into account the public comments. Similarly, to facilitate REDD plus at National level among all stakeholders, government has also prepared a 'REDD plus Reference Document'. These documents will serve as a reference/guiding document for implementing REDD plus actions in India. India's draft national REDD plus strategy aims at enhancing and improving the forest and tree cover of the country thereby enhancing the quantum of forest ecosystem services that flow to the local communities.

1.2 Institutional Mechanism for REDD-plus at National Level

The Government of India has established a REDD-plus Cell in the Ministry of Environment, Forests and Climate Change having the task of coordinating and guiding REDD-plus related actions at the national level, and to discharge the role of guiding, and collaborating with the State Forest Departments (SFDs) to collect, process and manage all relevant information and data relating to forest carbon accounting. National REDD-plus Cell would also guide formulation, development, funding, implementation, monitoring and evaluation of REDD-plus activities in the States. The Cell will also assist the Ministry of Environment, Forests and Climate Change and its appropriate agencies in developing and implementing appropriate policies relating to REDD-plus implementation in the country.

1.3 Methodological issues of estimation of Forest Carbon Stocks

India's future strategy in this regard is to devolve more and more responsibility on the State Forest Departments (SFDs) to carry out the assessment and estimation of forest carbon stocks (FCS) in conjunction with the biennial exercise of assessment of forest and tree cover (FTC).

This is considered essential to improve the precision level for estimation of FCS as the State Governments are in position to cover more number of sample points. In future, the SFDs can take the responsibility of carrying out the inventories for FTC and FCS by more effectively utilizing the services of their Remote Sensing Centres/ Space Application Centre. Forest Survey of India (FSI) can act as the source for providing satellite imageries required by the States for the purpose.

1.3.1 Estimation of Forest Carbon Stocks in India

India is among the few countries to regularly use satellite-based remote sensing technology in detecting forest cover changes. The FSI has been assessing the forest cover of the country on a two-year cycle since 1987. Over the years, there have been improvements both in the quality of remote sensing data and the accuracy of interpretation techniques. The 13th biennial cycle has been completed from digital interpretation of data from year 2010-11 and published in 2013 with a minimum mapping unit of 1 ha. FSI is following the tier 2 and tier 3 of IPCC Good Practice Guidance (methodology) for carbon estimation in forests of India through a combination of remote sensing and ground-based forest carbon inventory. Methodology followed by India for estimation of biomass carbon and soil organic carbon (SOC) has the potential of being developed and adopted as a general REDD plus methodology for assessing changes in forest carbon stocks at national level in a country over a stipulated period.



Photo Credit: Photo was taken in India in 2014 by Haiderali44 (from Flickr)

1.3.2 National Forest Reference Level

India gives highest priority to fixing of the reference level for carbon stocks in its forest and tree cover with a view to making assessment, monitoring, verification and reporting of baseline forest carbon stocks and incremental forest carbon stocks. Reference level in essence will be a baseline forest carbon stocks position corresponding to a specific year, which may be called as the 'zero year. The 'reference year' would need to be fixed with consensus amongst intra-country stakeholders which would include the Central Government, State Governments, forest experts and scientists, local community and civil society. It is presumed that the starting point for fixing a forest reference level will be backed by sound logic, time series of scientific historical data, and milestones of relevant legislation and/or policy prescriptions. The reference level would need to be agreed at the technical level, *i.e.*, amongst scientific organizations, and subsequently at the government level involving the Central and the State Governments. Currently Forest Survey of India has been entrusted with working out the reference level for India taking into account national circumstances and rationale.

Box 1. REDD-plus Policy and Definitional Issues

India needs to work upon the definitions of REDD-plus activities listed in paragraph 70 of the decision 1/CP.16 to be able to implement the same in its national context and circumstances. Specifically, more insight into understanding the definition of sustainable management of forest (SMF) is required to steer its proper application in forestry mitigation actions in different parts of the country. In ensuring the safeguards for the rights of local communities and indigenous people, involvement of civil society and state forest departments is needed in working out provisions and modalities under the extant Forest Rights Act, and approaches of Joint Forest Management (JFM) and Community Forest Management (CFM).

1.3.3 Safeguards and Safeguards Information System (SIS)

Developing countries are expected to follow safeguards, as mandated various COP decisions with a view to ensure full participation of indigenous peoples, local communities and other stakeholders, and conservation of natural forests and biodiversity in implementing the REDD-plus activities. India intends to ensure that all REDD-plus incentives available from international sources will flow fully and adequately to the local communities which participate in management or manage the forest resources or are dependent on the forest resources for sustenance of their livelihood. Part of the incentives are expected to be invested in conservation and improvement of the ecosystem services like biodiversity and non-timber forest produce (NTFP). Local communities would be encouraged to develop micro plans to incorporate such priorities. Various acts and legislations mentioned earlier in the chapter are strong testimony to Government of India's commitment to implement REDD-plus safeguards involving participating communities and conservation of its natural forests.

Box 2: CAMPA fund for REDD plus pilot programmes

There is a high potential for the CAMPA funds to complement or contribute to REDD Plus funding. CAMPA fund is established to compensate the forestry land in lieu of mining or other development activities that cause deforestation. The CAMPA funds are intended for undertaking compensatory afforestation, assisted natural regeneration, conservation and protection of forests, infrastructure development, wildlife conservation and protection and other related activities. Carbon revenues accrued from these activities could also be shared using similar provision used for other forest produce sales revenues by participating communities. Most of the states have already developed benefit sharing mechanism under JFM for sale of timber and NTFPs (Rawat, 2012).

A system for providing information on how safeguards for ensuring participation of local communities, and conservation of natural forests and their ecosystem services will be developed while implementing result based REDD plus actions. In India, tribal communities, forest dwellers and other local communities have always enjoyed legal safeguards to practice their customary rights and traditions. India has had a fairly successful initiative involving local communities for protection and management of government forests. Joint Forest Management (JFM) ensures a fair share in the forest produce for the protecting communities. Promulgation of the Forest Rights Act (2006) has further strengthened the legal framework in the country for safeguarding the rights of local communities. Also, India will adopt, as appropriate, the modalities of the system as agreed under COP decisions, for providing information on safeguards to the UNFCCC. In order to ensure that relevant safeguards as agreed by the COP decision are respected

throughout the implementation of a REDD plus project, the project developer may be asked to give a written commitment that all relevant national laws/legislations/rules/acts/ have been respected and not violated during the implementation of the REDD plus project.

1.3.4 REDD plus Pilots in India

A few REDD-plus project activities have already been started in India. A brief description of few REDD-plus pilots is given below:

(i) Uttarakhand REDD Plus pilot project: Indian Council of Forestry Research and Education (ICFRE) has initiated a REDD-plus pilot project in the *Van Panchayat* (Village Community Forests) of Uttarakhand (India) in the year 2014. Community managed forest like *Van Panchayats* (Community Forests) in Uttarakhand are example of community control over forests. REDD-plus actions are being initiated as demonstration activities in these forests. With sizable potential sequestration of carbon and biodiversity conservation *Van Panchayats* in Uttarakhand selected in consultation with Uttarakhand Forest Department.

(ii) ICIMOD-ICFRE Transboundary REDD+ Programme: This programme focuses on capacity building for implementing REDD+ in the North-eastern Himalayas. Protocols on MRV and SIS shall be developed under this pilot programme.

(iii) Forest Plus by USAID: USAID's new Forest-Plus program will accelerate India's transition to a low-carbon economy by taking the United Nations Collaborative Program on REDD+ actions to scale began in 2012. This program will strengthen India's capacity to develop systems for forest carbon measurement and monitoring, as well as conduct greenhouse gas inventories, and support the application of science and technology for improved and more cost-efficient management and monitoring systems. The program will also support short-term collaborative research on carbon estimation methodologies in various Indian ecosystems.

(iv) Umiam Sub-Watershed REDD-plus Project, Meghalaya: A pilot project in the East Khasi Hills in Meghalaya being run jointly by a California-based non-profit organization, Community Forestry International (CFI) and the Mawphlang community (Meghalaya). They have been working together in the Umiam basin watershed region to develop a REDD-plus Project in East Khasi Hills District of Meghalaya and finally registered in 2011 with Plan Vivo. The total project area is 17,052 ha. The net CO₂ additionality per year on account of avoided Deforestation and degradation and afforestation in the project area works out as under:

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|------------------------------------|----------------------------|
| ◆ Gross | 27,246 mt.CO ₂ |
| ◆ Reduction at 60% level of Gross: | 16,348 mt. CO ₂ |
| ◆ Subtract Leakage 30%: | 4904 mt. CO ₂ |
| ◆ Net CO ₂ : | 11,444 mt. CO ₂ |

The project is registered with Plan Vivo.

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