



Development and Management of Nationally Appropriate Mitigation Actions (NAMAs) in India

Objective

The objective of this project is to contribute to the achievement of the Indian climate goals and to introduce the experiences made into the policy formulation process by piloting and proofing the NAMA concept in Waste and Forestry Sector. By piloting the developed NAMA concepts, the project develops necessary capacities and instruments for accessing climate finance and inculcate behavioral changes of waste segregation and use of improved cook stoves in the waste sector and forestry sector, respectively. The project also takes over the interface function for all BMU IKI (International Climate Initiative) projects and activities in India. At the same time, the project supports the organisation of the Indo-German Environmental Forum.

The project has the following indicators:

Waste

1. Mitigate 60,000 tCO₂e emission through Municipal Solid Waste (MSW) management by supporting recycling and processing in two pilot cities; Goa and Varanasi.
2. Urban Local Bodies (ULBs) are supported to submit 1 proposal for project financing through national or international climate finance sources.
3. Outreach to 200,000 people for raising awareness on source segregation of waste.

Forest

1. Mitigate at least 84,000 tCO₂e emission reduction/sequestration from reduced fuelwood consumption due to sustained adoption of fuelwood saving technologies, specifically clean cooking stoves in 25% of the targeted number of households in at least two districts of Assam, and from assisted natural regeneration and reduction of forest degradation.

2. Support the state in preparation and submission of proposal to access national and international funds for implementing the NAMA.
3. Outreach to 200,000 households, technology adoption in 15,000 households.
4. Support plantation in 1000 ha of land in 6 forest divisions.

Activities

Waste NAMA

1. Primary data driven study across 21 cities conducted for Management of Dry Waste.
2. CO₂ emission mitigation potential of waste diversion from landfills assessed using Solid Waste Emissions Estimation Tool (SWEET) for both cities.
3. Input to Draft Plastic Waste Management Bye-laws 2019 & Draft Goa MSW (Management and Handling), Cleanliness and Sanitation Rules 2019.
4. State level webinar series for waste management organised in Goa for Municipal officials.
5. 30 Tonnes Per Day Bio-Compressed Biogas Plant in Panaji, Goa. Technical Support to Directorate of Municipal Administration, Goa to standardise 5 TPD Bio-methanation Units.



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6. First Material Recovery Facility (MRF) of 5 TPD in Varanasi - with Private Sector - inaugurated in January 2020.
7. Provided Technical advisory support for 600 TPD MSW at composting plant in Varanasi, and conducted source segregation awareness programs with outreach of around 150000 people in the city.

Forest NAMA

1. Deployment of the Sukhad model of Improved Cook Stoves (ICS) completed in 8900 Households until March 2020 in Sonitpur, Cachar, Nagaon and Dibrugarh districts, Assam.
2. Facilitated 2800 LPG connections until March 2020 in Sonitpur and Cachar.
3. Training of the frontline staff of the Forest department on 'Carbon Stock Assessment of the forest ecosystems' conducted in 4 districts of Assam. A training manual in this regard was launched at the World Sustainable Development Summit 2020.
4. Videos on training and benefits of the Sukhad model ICS developed.
5. Videos on how to conduct carbon stock assessments of forest ecosystems finalised.
6. Assam Fuelwood Decision Support System finalised. This is tool for designing highly contextual and scientifically planned investment strategies for fuelwood plantations and fuelwood saving technologies at a sub-state regional level.

Achievements

The project aims that in the context of the enhanced strategic dialogue on climate and environment between India and Germany, the Indian Government has piloted the implementation of the NAMAs (both waste and forestry) and has included the made experiences and approaches into the national policy formulation process. In the view of the above, the project has initiated following till date:

- Organised the Indo-German Environmental Forum.
- Organised IKI interface workshop for all IKI projects in India.

- The project supported the Ministry of Housing and Urban Affairs (MoHUA) in mapping of priority cities for implementation of Refuse Derived Fuel (RDF) co-processing in cement kilns by providing list of cities and closest cement plants along with the suitable volume of RDF that can be supplied by the cities. The mapping study has been submitted by MoHUA to MoEFCC.
- Supporting MoHUA on formulating policy recommendations for strengthening informal sector involved in value chain of dry recyclables and improving processes and infrastructure to manage dry recyclables. A national study on mapping value chain of dry recyclables in 21 Indian cities has already been initiated after consultation with MoHUA.
- Initiated design of an online waste management decision support tool for ULBs.
- Supporting Assam State Forest Department on development of an excel based decision support system for sustainable fuelwood management.
- Supporting Assam State government in implementing activities in line with its SAPCC on reducing unsustainable fuelwood extraction from forests. Under the Plantations Labour Act, 1951 and the Assam Plantation Labour Rules, 1956, fuelwood is guaranteed to the workers in the tea estates. With the availability of cleaner fuels through the Government of India's flagship programme Ujjwala, the need for in-kind mechanism can be given a re-look. Hence looking at revising the bye law which mandates Tea estate management to provide about 228 cft (cubic feet) of fuelwood to each permanent household worker.



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