



UNDP in India: Addressing Climate Change

UNDP in India is committed to the cause of protecting the global environment and has been engaged in climate relevant activities for over a decade. The overall objective has been to support the Government of India in meeting its national commitments under the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, and building national capacity for sustainable use and protection of natural resources. These initiatives are funded through resources from UNDP, GEF (Global Environmental Facility) and resources from the Montreal Protocol (the Montreal Protocol is an international treaty designed to protect the ozone layer by phasing out the production substances believed to be responsible for ozone depletion) to achieve environmental goals in line with the national priorities.

The Climate Change activities of UNDP India include:

- technical assistance and capacity building of all stakeholders to address climate change issues and meet commitments under the UNFCCC and the Kyoto Protocol,
- mitigation of greenhouse gas (GHG) emissions with a focus on the energy sector
- developing adaptation strategies to cope with the impacts of climate change.

These initiatives have resulted in enhanced capacities through:

Availability of reliable baseline information (on institutional and technical capacities); strengthened institutional capacity for climate protection and development of GEF and Clean Development Mechanism (CDM) projects (CDM is an arrangement under the Kyoto Protocol allowing industrialized countries with a greenhouse gas reduction commitment to invest in projects that reduce emissions in developing countries), advancement of energy efficiency and cleaner energy technologies and services. In addition to these specific initiatives that directly deal with the global environmental problem, UNDP is including climate change responses in all its programme areas, such as poverty, governance and disaster management.

Technical assistance and capacity building

Technical assistance and capacity building include a project on 'Selected options for stabilizing GHG emissions for sustainable development' which is designed to identify specific investment projects and assess related institutional and policy options for stabilising GHG emissions. UNDP also facilitated the 'Asian Least-Cost Greenhouse Gas Abatement Study (ALGAS) project, the Initial National Communication to the UNFCCC (NATCOM) and the National Capacity Needs Self Assessment (NCSA). As a follow up to the Initial NATCOM, UNDP India is now supporting the implementation of a project to prepare the Second National Communication to the UNFCCC.

In addition, UNDP India is providing institutional support to the Government of India through the Ministry of Environment and Forests (MoEF) to access environmental financing by strengthening the GEF Cell in the Ministry; and building capacities of state governments and agencies to develop CDM projects.

Mitigating Climate Change

UNDP India recognizes the urgency to mitigate GHG emissions through sustainable energy interventions, which should enable growth for all. The organization facilitates activities for GHG reduction by improving energy efficiency in different economic sectors. Promotion of cleaner and renewable energy fuels are carried out by technology demonstrations. This is also to demonstrate their financial viability. These projects, apart from reducing the GHG emissions also enhance access to energy in rural areas.

Promoting energy efficiency

UNDP promotes cleaner energy across different sectors of the economy with particular focus on the industrial, commercial and transport sectors.

Initiatives have been taken up in energy intensive small and medium enterprises (SMEs). In the steel re-rolling mills, entrepreneurs have received assistance to enhance energy conservation by the use of technologies that emit less carbon. Similar initiatives in the tea processing units will help reduce the biomass being used as fuel, and in the brick kilns to reduce coal consumption.

Within the transport sector, UNDP India is looking at pilot projects in nine cities with a view to improving urban transportation. Another project in the pipeline addresses the energy efficiency of Indian Railways.

In addition, UNDP India has initiated a project to support promotion of energy efficiency standards to help reduce the GHG emissions. It is also partnering with civil society groups to encourage green ratings of buildings. To bring energy and environment consciousness in industry, environmental impact assessments are being promoted. Other programmes that are planned will look at advanced technology in electric motors, green cremation systems, and energy efficiency in new commercial buildings.

Cleaner energy fuels

UNDP India promotes resource assessments and commercialization of cleaner and renewable energy fuels and technologies – with particular focus on livelihood generation. The technologies include the capturing of coal bed methane (CBM), transforming waste to energy. Key to the success of many of the renewable initiatives has been the involvement of the communities so that the activities can be taken forward. These initiatives were supported through appropriate technologies (e.g. biogas-based cooking, biomass-based power generation), through capacity building as well as support in financing.

UNDP India supported the first large initiative on small hydro in India. This initiative helped pilot implementation of 20 projects, which led to the development of a database for small hydro plants, and helped rural communities to gain access to energy for enterprises. The project enabled the government to look at the tariff policy for renewable energy projects for the first time. In recent years, programmes have been supported to convert waste to



energy through bio-methanation. The gas generated was used for heating and electricity. The substrates used were solid (e.g. vegetable and slaughter-house wastes, municipal waste, and cow dung), liquid (e.g. industrial effluents) and some hazardous waste such as leather shavings. An ongoing project 'Biomass Energy for Rural India (BERI)' is addressing the removal of barriers to promote biomass as clean technology. A 'Power Purchase Agreement' was signed between the Gram Panchayat (local governance body) and the electricity distribution company owned by the government for the first time in India. A collaboration between public, private and gram panchayat is underway to establish a power plant with equity share. In this regard, the Renewable Energy for Rural Livelihoods (RERL) project is an important project. These initiatives align with the Government's national schemes of Remote Rural Energy and Village Energy Security Programmes. The lessons learnt at the policy level would be utilised to replicate the models in the 18,000 un-electrified villages in India.

The Coal Bed Methane project, in the eastern part of India, demonstrates that the large scale production of methane gas in coal mines is technically and economically viable. The methane captured from these mines will be used for power and as fuel for cars.

Other initiatives

Under the Small Grants Programme of GEF-UNDP, approximately 60 climate change mitigation projects have been supported. These were designed to remove the cultural, institutional, technical and economic barriers, and promote dissemination of accessible and sustainable measures (technology, policy and practises) at the grass root level.

UNDP is one of the implementing agencies for the Montreal Protocol in India. UNDP has assisted the Government of India in the phasing out of chlorofluorocarbons (CFCs) in the consumption sector. Approximately 400 metric tons of CFCs in the foam, commercial refrigeration, servicing and carbon tetrachloride (CTC) sectors have been phased out so far. A pipeline of Persistent Organic Pollutants projects (Persistent organic pollutants (POPs) are organic compounds that are resistant to environmental degradation) is being developed with the MoEF.

Adaptation to Climate Change

UNDP India recognizes the importance of integrating effective adaptation strategies into planning at national and local levels. This helps in assessing climatic vulnerabilities, identification of gender sensitive adaptive strategies, expansion of livelihood options of vulnerable communities and building resilience to adverse impacts of climate change. UNDP India plans to develop risk transfer options for better response to the climatic impacts, as part of the UNDP India's Disaster Recovery and Management programme.

UNDP Country Programme from 2008 to 2012

In the new UNDP Country Programme cycle, UNDP India will continue to support the Government's efforts to meet commitments under multilateral environmental agreements through a two-pronged approach. This involves leveraging of additional environmental

finance as well as fostering strategic partnerships on the ground, that seek to safeguard environmental resources. UNDP will also support national efforts at strengthening the capacities of governments and communities, to effectively cope with and adapt to climate change.

Strategic initiatives and partnerships with a focus on the poor are being developed for greenhouse gases and national environmental benefits. These initiatives build upon ongoing efforts and involve the private sector. Other areas are designing interventions focusing on the poor so that technical solutions reach them and policies are adapted to include their needs. An additional initiative looks at environmental governance and the capacity development of state and district level officials, and elected representatives in the planning, implementation and monitoring of climate change measures.