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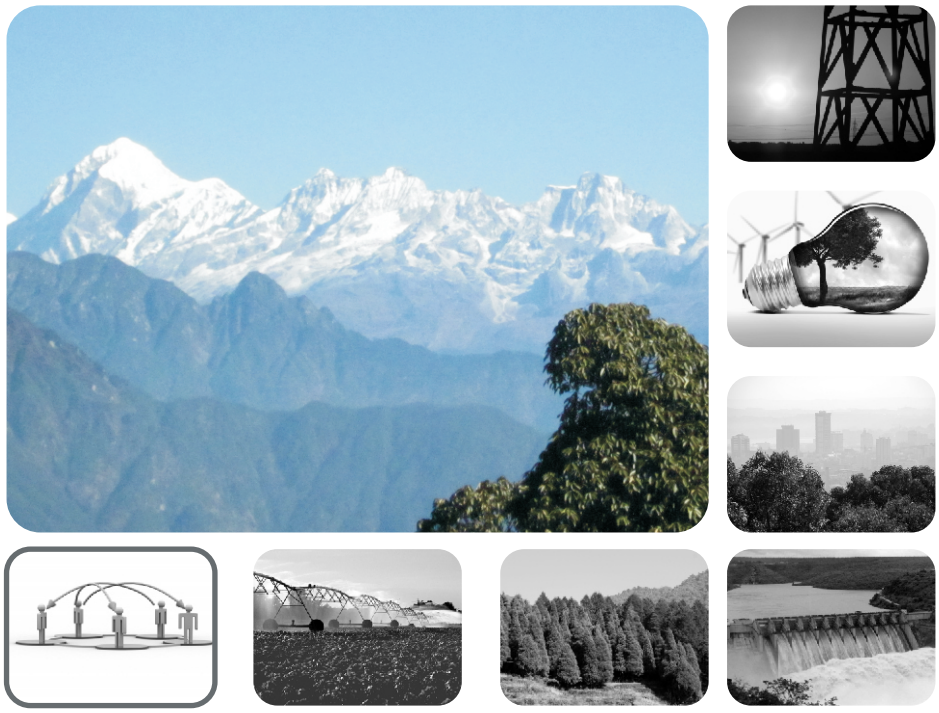
National Mission for Sustaining the Himalayan Ecosystem



Mission Brief prepared as part of the Study: Implementation of the National Action Plan on Climate Change (NAPCC) - Progress & Evaluation

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National Mission for Sustaining the Himalayan Ecosystem

June 2015

This is one of the eight-brief series prepared as part of the Study titled `Implementation of the National Action Plan on Climate Change (NAPCC) – Progress & Evaluation'. The Study report, along with the eight briefs, can be accessed at **http://ifmrlead.org/napcc-progress-and-evaluation/**

Author:

Vivek Venkataramani is a Researcher in the Environment and Climate Change Programme at the Centre for Development Finance (CDF), IFMR LEAD.

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2nd Floor, Buhari Towers, No.4, Moores Road, Chennai – 600 006
Phone: +91 (44) 4010 1308, 4010 1331 | **Website**: http://ifmrlead.org/

About the Study

This Study has been undertaken to provide pointers to facilitate effective implementation of the National Missions under the NAPCC, as well as to highlight key policy aspects that augur well to further this national mandate. Specifically, the Study has sought to track the progress achieved by each of the National Missions since their launch up to March 2015 and also evaluate them through the lens of core policy implementation functions.

Using a combination of desk research and expert interviews, the Study has consolidated informed insights on strategies to accelerate and enhance the efficacy of the Missions' implementation, apart from documenting details of their progress. The Study team has interacted with key Government officials, domain experts in affiliated technical and academic institutions and independent research organizations to gain perspectives from all relevant stakeholders in this context. A distinct format has been followed for reviewing the Missions which have achieved quantifiable progress against their targets.

The findings of this Study were disseminated at a policy workshop, hosted by IFMR LEAD in June 2015 at New Delhi, bringing together policymakers from the concerned Union Ministries, bilateral agencies and other relevant stakeholders. The event marked a focused dialogue on the progress of the NAPCC thus far as well as the way forward for the Missions. Inputs from the workshop have been incorporated into the Study report. While the Study objectives, methodology adopted and findings across Missions have been summarised in this report, detailed findings on each Mission have been elaborated in individual Mission briefs.

Background

The National Mission for Sustaining the Himalayan Ecosystem (NMSHE) is designed to provide a support system in terms of environment protection and sustainability measures through scientific research in the Indian Himalayan Region (IHR). While the Mission was launched in June 2010, it received formal approval from the Union Government only in February 2014. It was initiated on the premise of the high degree of vulnerability of local communities living in this region to impacts of climate change. It seeks to enhance the environment of such a vast region which is diverse in terms of its topography, agro-climatic zones, development trajectories, etc. The Mission is all encompassing in terms of the sectors covered and scientific disciplines involved.

In the context of its wide ranging objectives, the Mission outlines a set of targets that are to be achieved by the end of the Twelfth Plan period through sub-Missions and indicates associated ballpark cost figures for the same. Subsequent deliberations after the Mission's approval finalized six task force institutions which were the designated coordinators for implementing its activities. Most of the institutions in this task force are existing bodies with predefined objectives and work areas which overlap with the components of the NMSHE. Hence they have been assigned the roles of taking forward specific research and implementation of activities under the Mission. The details of the designated task force institutions are given below:

TABLE 1: DETAILS OF THE DESIGNATED TASK FORCES FOR NMSHE

Task Force	Nodal Agency/Organization
Natural and Geological Wealth	Wadia Institute of Himalayan Geology (Department of Science and Technology)
Water, Ice, Snow resources including Glaciers	National Institute of Hydrology (NIH) - Ministry of Water Resources
Forest Resources and Plant Biodiversity	G.B. Pant Institute of Himalayan Environment and Development (GBPIHED)
Micro Flora, Fauna, Wildlife and Animal Populations	Wildlife Institute of India (WII) – Ministry of Environment, Forest & Climate Change (MoEF&CC)
Traditional Knowledge Systems	Jawaharlal Nehru University (JNU)
Himalayan Agriculture	Indian Council of Agriculture Research (ICAR) - Ministry of Agriculture and Farmers' Welfare

Source: NMSHE Mission Document

Tracking the Mission's Progress

Given the Mission's agenda which is mostly to carry out specific scientific research backed activities spread over the twelve Himalayan States through six task force institutions, it has been extremely challenging to track its progress through this study. This is further enhanced by the dispersed set of activities being funded by several implementing bodies with or without an intended Mission objective in mind. Hence along with tracking this Mission across the core functions of policy implementation (*Finance, Policy Administration, Monitoring, Reporting, Evaluation & Revision* and *Compliance & Enforcement*), snapshots of progress made by each of the task force institutions has been provided in this section.

Finance

Of the Mission's estimated cost of Rs. 1,500 Crores for the Twelfth Plan Period, a budget of Rs. 550 Crores was approved in February 2014. The Department of Science &Technology (DoST), which is the nodal agency for this Mission, is expected to spearhead its programmes and coordinate plans with the six task force institutions to initiate and supervise their undertakings.

The task force institutions are expected to submit a plan highlighting the programmes they plan to undertake in the next 5-7 year period seeking budgetary approvals from the DoST. Based on interviews[1] it is understood that all six task force institutions have been approved and are in the process of seeking approvals for their proposed plans and budgets.

The JNU has been in the forefront of making progress in this regard as they submitted a five year plan, including programmes, proposed set of coordinating agencies, budgetary requirements, etc. to the DoST in 2014. This was then revised upon further discussion with DoST and resubmitted for final approval. Apart from this, the JNU has been conducting capacity building workshops for the last two years on Himalayan Glaciology at a cost of around Rs. 80 Lakhs approved by the DoST. This initiative has mostly been supported by the Swiss Development Agency (SDA) as part of their *Indian Himalayas Climate Adaptation Programme* (IHCAP). It has also submitted a five year plan to the DoST to undertake assimilation of existing traditional knowledge systems and develop strategies to further enhance them. This was estimated to be carried out at an estimated cost of Rs.10 Crores. A Glacier Consortium has been signed with 4 universities from the IHR for conducting glacial research in this context. This includes the JNU (Department of Geography) and has been signed at a cost of Rs.18 Crores.

In November 2013, the GBPIHED submitted a detailed proposal to DoST for implementation of their task force activities and received approval from DoST in September 2014. An amount of Rs. 8.45 Crores has been sanctioned for a five year period.

In the case of NIH, proposals including programmes to be developed and undertaken by them have been submitted to the DoST and are awaiting approval.

[1] The study team has discussed implementation progress with the DoST and the task force institutions on a periodic basis during the study period. The end date till which information was gathered in this regard varies between the different institutions depending on the expected progress indicated by them. The funds approved and allocated also are as per interviews conducted and are approximations.

The Wildlife Institute of India (WII) was approved as part of the task force in August 2014 along with a budgetary sanction for initiating Mission activities. Along with a State of Knowledge Report, the WII was to submit an inception workshop report before seeking further funding for the coming financial year. They have also initiated procurement of equipment to set up a laboratory on landscape ecology for research purposes. Other institutions of the task force are in a similar stage of initiation, where either detailed plans have been submitted for approval or are awaiting fund allocation to augment human resource capacity to initiate the proposed plans.

To summarize the financing mechanism followed by the DoST for funding the task force institutions, each of them is annually funded based on the plans submitted by them. They are expected to submit a status report to indicate both the financial and technical progress achieved during the completed financial year before seeking further funding.

Policy Administration

The Mission document did propose a dedicated professional group under the Ministry of Science & Technology (MoST) with a specific fund within the DoST. But currently, the Mission Directorate is housed within the DoST with a small team to lead the implementation of activities for the Mission. The earmarking of an exclusive fund for this purpose is unclear at the moment. Other agencies responsible for coordinating the Mission activities under the supervision of DoST are the six task force institutions which are expected to play very specific roles within the ambit of their operations and expertise. The MoEF&CC and the MoES are expected to contribute to the Mission implementation on a need basis.

In terms of providing a supporting policy environment, the MoEF&CC, along with the GBPIHED, released a set of guidelines and best practices (Governance for Sustaining Himalayan Ecosystem: Guidelines and Best Practices, 2009). However this was not prepared with the objective of guiding governance in the IHR in the context of NMSHE. Apart from these guidelines, there are no significant guidelines from the DoST to other implementing agencies.

It is unclear as to whether the proposed advisory council consisting of technical experts which was expected to play the role of a think tank in monitoring the Mission's progress has been set up. As of December 2014, the National Centre for Himalayan Glaciology, which was to be set up to undertake human capacity building programmes in the IHR, had not been established. The study team, through its interviews, has also understood that States have been funded approximately Rs. 2 Crores each (differs across States) for setting up Climate Change Cells (CCC) within their Departments which are expected to coordinate activities between the task force institutions and the State Departments. Seven out of twelve States have already received funding for establishing these cells and are in the process of equipping them with adequate resources.

Every institution in the task force has been requested to submit a Detailed Project Report (DPR)[2] indicating the list of activities they plan to undertake in the next five year period indicating their cost estimates. Upon scrutiny, the DoST will approve such budgets and provide funding on an annual basis.

[2] A standard template for the Detailed Project Report to cover plans for the coming five years is being provided by the DoST to the task force institutions.

Given the nature of work proposed by the Mission, the task force institutions are expected to complement each other in a particular region in terms of their work. For instance, it was quoted by an expert that the Ganga River basin has been chosen as a long-term monitoring site where all the six task force institutions would have to work simultaneously, with contributions based on their core competencies. Information from one institution is to feed into the research of another and hence strict coordination would have to be effected in this regard. Based on the interviews with the task force institutions it was found that a common platform to link the task force heads has been set up through an e-group. The task force members are expected to discuss areas of work, procedures to followed, technology, etc. and achieve maximum coordination between them through this arrangement. Evaluating such a mechanism would be fruitful as the Mission advances to a stage of active implementation. The DoST is expected to facilitate coordination between the task force institutions and the State CCC officers through a similar platform.

Lastly, since the areas of work are dispersed and are being carried out by six separate institutions, they have also requested the DoST to facilitate knowledge and data sharing to enhance data portability.

Monitoring, Reporting, Evaluation & Revision

The progress of the Mission was to be monitored by a High Powered Committee (HPC) biannually under the MoST. Secondly, an Advisory Council of technical experts was to be constituted for the NMSHE which was to play the think tank function and assist in the monitoring of the Mission progress. This was to be headed by the Secretary, DoST and comprise of representatives from all Task Forces. A dedicated Mission Cell on Himalayan Ecosystem was to be constituted for the purpose of coordination and reporting to the various committees and oversight groups.

Lastly, each of the task force institutions was expected to set up a technical monitoring committee consisting of domain experts. These committees were likely to meet periodically to monitor and review the progress made by their own institution and their peers.

The Mission had also envisaged continuous monitoring and analyses of indicators of environmental change in the region. The research components were expected to focus on ecological indicators of environmental change. For instance, indicator cryospheric sub-groups could be related to snow conditions, glaciers, and permafrost, etc. The DoST was to coordinate with other relevant Ministries like the MoWR and MoES on a need basis to provide relevant scientific and meteorological data. However given that the Mission is at a nascent phase of implementation, such mechanisms could not be evaluated at this stage.

Compliance & Enforcement

The Mission does not include an exclusive strategy to ensure compliance to mandates and guidelines with the implementing agencies and other stakeholders. As observed in the Green India Mission (GIM), relevant sectoral policies, law and acts are expected to play a role in this context. Secondly, the guidelines and programmes can percolate into the States' activities only if the latter have corresponding programmes, regulatory bodies and legislations to be enforced. Hence, the Mission could be mostly dependent on conventional regulatory systems for ensuring compliance in its activities. The establishment of CCCs in all the States might be crucial in this regard.

Mission Summary

The Mission is yet to reach a stage of full-fledged implementation in most of its components but such an evaluation at this juncture highlights key areas that the nodal Departments need to focus on beforehand. The Mission is largely being implemented through its six task force institutions which have been assigned scientific but varied roles and components within it. Each of them has been approved during different times in the last year with varying budgets depending on their detailed annual or five year plans. Each task force institution is expected to provide a technical and financial progress report at the end of every financial year after which fresh funds would be disbursed for future activities. After receiving budgetary sanctions and allocations, most of the institutions are at varying stages of building technical and human resource capacity to carry out Mission activities. Once the Mission advances to the stage of actively implementing its programmes, the task force institutions would be required to coordinate with Climate Change Cells of all Himalayan States to identify plausible overlaps and integration with proposed State Action Plan on Climate Change (SAPCC) activities. Discussions to merge Mission activities with ongoing Departmental programmes are in the offing.

Recommendations

1. ***Highest levels of coordination between the implementing agencies:*** The Mission is unique in its vast geographical scope of activities to be undertaken, States covered, implementing agencies involved and communities affected. It is imperative for the DoST to ensure paramount levels of coordination between the following agencies:

   i. The task force institutions
   ii. The task force institutions and the DoST
   iii. The CCCs and the task force institutions
   iv. The CCCs of the 12 Himalayan States
   v. The DoST and the Himalayan State Departments
   vi. The MoEF&CC and DoST

   This gains greater prominence as all of the above mentioned bodies would often be required to work or supervise implementation at a common geographical region. They might also be dependent on each other for relevant data sharing and communication which again needs to take place on either a periodic or need basis.

2. ***Frequent consultation between stakeholders:*** The NMSHE involves requires greater coordination and cooperation amongst State bodies even for its forest management and environment conservation activities. Hence more frequent consultations are recommended between the DoST and other stakeholders in the IHR.

3. ***Effective communication and dissemination platform for Mission activities****:* Given the disseminated efforts that need to be invested towards carrying out activities across the 12 States, continuous M&E of programmatic design and their impacts and subsequent speedy interventions to revive dysfunctional systems is a necessity. Along with such revisions, an effective and active platform to communicate such changes to the wide range of relevant stakeholders needs to be maintained.

4. ***Inter-country collaborations:*** As the NMSHE mainly focuses on sustaining the Himalayan Ecosystem, it is important that India coordinates with its neighboring countries like Bhutan, Nepal, Tibet, etc. which are part of this ecosystem. Impacts due to climate change would affect all of these countries. Hence cross-border collaborations and climate initiatives are to be expedited as proposed in the Mission document. Climate Change Cells in each of the States could be provided such mandates after being set up.

5. ***Exclusive team for Mission implementation:*** The DoST, being a department which has been conventionally undertaking scientific research and activities, has been assigned the role of spearheading the NMSHE which is all encompassing in terms of its environmental, social, economic and scientific focus. Along with this mandate, the DoST has also been entrusted the responsibility of housing the National Mission for Strategic Knowledge on Climate Change (NMSKCC) and administering its own Departmental programmes. Hence it could benefit the impementation of the NMSHE to assign a group of programme officers with a specialization and experience in environment management to exclusively supervise operation of the Mission. This is a common feedback from experts who suggested building in-house capacity instead of outsourcing activities to external agencies and think tanks.

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For further details on this Study, please contact **Vivek Venkataramani** (vivek.v@ifmr.ac.in), Researcher in the Environment and Climate Change Programme at the Centre for Development Finance (CDF), IFMR LEAD.