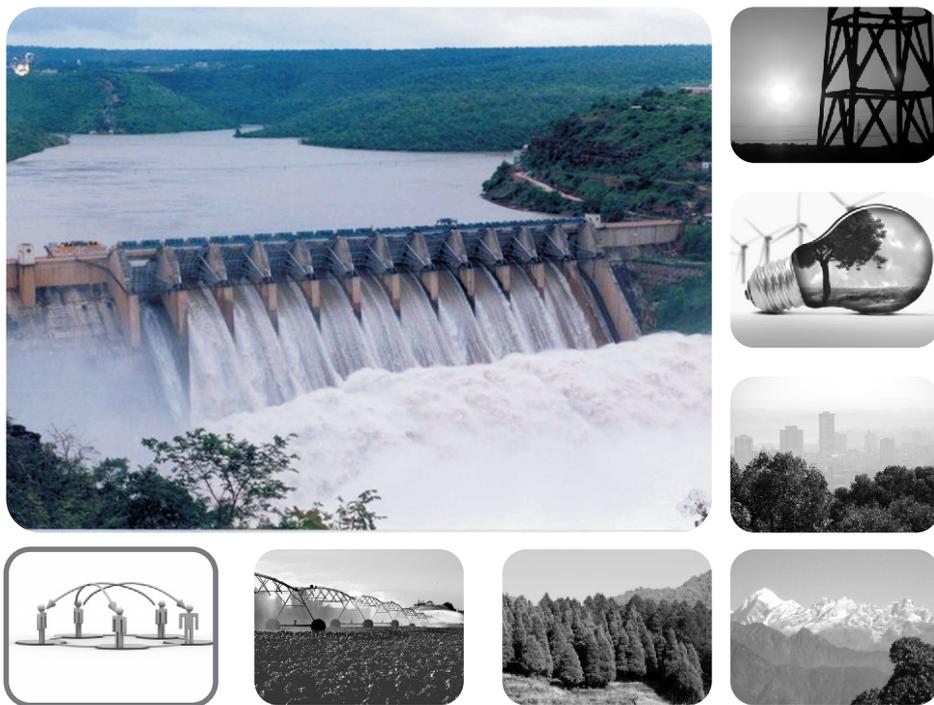


# National Water Mission



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

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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:**

**V. Shivanjani** is a Researcher with the Environment and Climate Change Programme at the Centre for Development Finance (CDF), IFMR LEAD.

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## 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.

## Introduction

The National Water Mission (NWM) has been envisaged within the NAPCC, with the core objective of “*conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management*” (Comprehensive Mission Documents for National Water Mission, 2011)<sup>1</sup>. It is to be noted that the NWM mandate is considerably broad in scope, in that it attempts to streamline the focus of key stakeholders in this domain to adopt an integrated approach to conserving and efficiently managing water resources. The specific orientation towards addressing climate concerns in this regard is embedded within its relatively larger agenda, which includes monitoring the key activities of the Ministry of Water Resources (MoWR). The Mission document, formulated by the MoWR, received Cabinet approval in April 2011, and brings within its scope several ongoing water sector schemes and initiatives in a significant attempt at integrated water resource management (surface and ground water resources across irrigation, industrial and domestic use purposes).

The cross-cutting and multi-disciplinary nature of ongoing programmes in the water sector along with the relatively significant role of State governments<sup>2</sup> in their implementation has been duly acknowledged by the NWM. The Mission document has been compiled in a consultative manner, based on technical inputs provided by sub-committees<sup>3</sup> constituted that looked into the following areas of focus:

1. Policy and Institutional Framework
2. Surface Water Management
3. Ground Water Management
4. Domestic and Industrial Water Management
5. Efficient Use of Water for Various Purposes
6. Basin Level Planning and Management

Consequently, the Mission outlines five goals across which major initiatives have been envisioned as well as aligned from ongoing schemes pertaining to the development and management of water resources in the country:

1. Comprehensive water data base in public domain and assessment of impact of climate change on water resource
2. Promotion of citizen and State action for water conservation, augmentation and preservation
3. Focused attention to vulnerable areas including over-exploited areas
4. Increasing water use efficiency by 20%
5. Promotion of basin level integrated water resources management

The targets provided in the Mission are along the lines of review of governing policies and guidelines, empowering stakeholders towards water use efficiency, undertaking research studies to assess climate change impacts on specific water resources, capacity building and sensitisation activities. However, these are broad components, without disaggregation of specific milestones to be attained by the end of the Twelfth Plan Period.

<sup>1</sup> Comprehensive Mission Documents for the National Water Mission available at <http://wrmin.nic.in/forms/list.aspx?lid=267&Id=4>

<sup>2</sup> Water is a State subject under List - II of the Seventh Schedule of the Constitution of India, with issues pertaining to inter-State rivers and water dispute settlements coming under the Centre's purview.

<sup>3</sup> These have been consolidated in Volume II of the Mission Document.

The following section discusses the progress of the NWM<sup>4</sup> across the policy functions of *Finance, Administration, Monitoring, Reporting, Evaluation & Revision* and *Compliance & Enforcement*.

## Tracking the Mission's Progress

The NWM originally proposed a total outlay of Rs. 89,101 Crores, which was then revised to Rs. 69,394 Crores<sup>5</sup>, after taking into account the strategies and specific areas of intervention proposed to be initiated on a priority basis. This is also on account of the close linkage identified between proposed NWM activities and ongoing water sector schemes. These prioritised strategies have been spelt out in the Mission document, along with an Operationalisation Plan. However, with the recent approval of the scheme 'Implementation of NWM' under the 'Major and Medium Irrigation'<sup>6</sup> sector, there is greater clarity on the initial roadmap for the Mission's agenda.

There have been key developments even prior to the launch of this scheme under the NWM. An important milestone since the Mission was approved is the creation of the Water Resources Information System (WRIS) in 2010 (currently reflecting the fourth version, with data collected up to April 2013)<sup>7</sup>. It addresses the NWM's goal of placing a comprehensive database on water resources in the public domain. Therefore this creates a platform to collate information on various water resource parameters hitherto stored by multiple agencies and Departments, and could act as a valuable decision making tool for various stakeholders. Another notable step is the revision of the National Water Policy in 2012. This increases the thrust on the conjunctive use of water resources (both ground and surface water). While this had been in discussion even earlier, it has been revised with the renewed focus brought back by the NAPCC agenda. Similarly, the Mission has also anchored several workshops/events to bring climate change issues in water resource management into the focus of the projects undertaken by the Central and State governments.

### Finance

An expenditure head under the NWM was formed during the years 2012-13 and 2013-14<sup>8</sup> to operate with a token allocation for preparatory activities until it received a formal approval of the Expenditure Finance Committee (EFC) recommendation as a scheme in 2013. Other activities include human resource & capacity building and restructuring of the Central Water Commission (CWC) for the promotion of basin level integrated water resources management (goal 5 of the NWM).

The NWM has received an approval from the Ministry of Finance (MoF) for Rs. 196 Crores for the Twelfth Plan Period, as against the Planning Commission allocation of Rs. 1,390 Crores for the 'Implementation of NWM' scheme. This has thus far been utilised towards establishment of the Mission Directorate, approval of pilot projects and conducting workshops/round tables for discussions with stakeholders. A Plan outlay of Rs. 40 Crores has been earmarked for the year 2014-15 under this scheme with six key deliverables<sup>9</sup>, and its activities are at an initial stage of progress. A separate budget of Rs. 100 Crores has also been allocated for Human Resource Development (HRD) and Capacity Building for the NWM.

<sup>4</sup> Information in this regard reflects developments up to March 2015

<sup>5</sup> Rs. 3,576 Crores for Central Sector and Rs. 65,818 Crores for State sector schemes, as per Volume I of the Mission document.

<sup>6</sup> Outcome Budget 2014-15 of the MoWR

<sup>7</sup> This is hosted at <http://www.india-wris.nrsc.gov.in/>

<sup>8</sup> Outcome budgets and Annual Reports of the MoWR indicate nil utilization for 2012-13 and Rs. 0.71 Crores for 2013-14 against revised estimates of Rs. 0.25 Crores and Rs. 2 Crores, respectively under the 'Implementation of NWM' scheme.

<sup>9</sup> Outcome Budget 2014-15 of the MoWR

There are several ongoing schemes implemented by State governments that have strong inter-linkages with the NWM mandate; these are to be facilitated by the Mission through appropriate guidance, but financing would rest with the existing budgetary mechanism for State Sector schemes.

## Policy Administration

The MoWR is the nodal Ministry overseeing the progress of the NWM and the National Institute of Hydrology (NIH) is the nodal agency within the MoWR to ensure effective implementation of the Mission. The MoWR also houses the Mission Secretariat. This is to be headed by a Mission Director, and supported by two Advisors for Technical and Coordination & Monitoring aspects of the Mission. This has been set up; however a full-time Mission Director is yet to be appointed. There are four dedicated Climate Change Cells created as per the NWM mandate in the NIH, CWC, Central Ground Water Board (CGWB) and Brahmaputra Board (BB). This is the arrangement at the Central level.

The Mission Secretariat's role is to advise States on integrating the management approaches to the various water uses; however it rests upon the States to undertake steps to formulate State and District level plans and choose an appropriate institutional setup. For instance, Meghalaya has a State Water Mission and has made amendments to its Water Act to create a State Water Advisory Board.

An important entity in coordinating various research initiatives under the NWM mandate is the Indian National Committee on Climate Change (INCCC), which was formed in 2012 with its secretariat at the NIH. It is under the administrative control of the Mission Director, NWM. It oversees the approval and progress of research studies relating to assessment of impact of climate change on water resources, downscaling of climate change models and relevant adaptation strategies. Currently nine proposals of studies on downscaling Global Circulation Models are under consideration for funding under the NWM (e-Book: Ministry of Water Resources, 2015).

## Monitoring, Reporting, Evaluation & Revision

The Mission Secretariat (with one Advisor for Coordination & Monitoring) and Climate Change Cells mentioned earlier form the monitoring mechanism for the Mission at the Central level. At the State level, the Department of Water Resources is envisaged to take up this function. This is yet to gain momentum at the State level. It is important to note that implementation of the NWM can be intensified only with accompanying State Water Missions and commensurate planning from the State budgetary resources as well. Hence a well-defined monitoring system would become evident only once this milestone is addressed.

The Mission Secretariat plays an active role in bringing together various stakeholders to discuss, share and brainstorm ideas to be taken up on a pilot basis. This is expected to get suitably fed into schemes in the form of revisions/expansion of scope to address climate change concerns.

It has also been observed that the NWM mandate has identified the scope of ongoing initiatives with which its objectives could be mainstreamed. There are NWM activities that have been budgeted for, even before the launch of the Central Sector scheme. There is yet to be a formal platform to collate both and systematically report progress for the purpose of monitoring. An exclusive online portal to present consolidated NWM developments has been proposed, but is yet to be created. Currently NWM details are being gathered through updates and standard disclosures on the MoWR website, as is the case for routine schemes and initiatives supported by the budgetary resources of the Ministry.

## Compliance & Enforcement

The NWM is advisory in nature, by attempting to orient ongoing initiatives towards addressing climate change concerns, as well as greater water use efficiency and conservation. As mentioned earlier, the Mission Secretariat currently addresses this by facilitating exchange of ideas and best practices to be adopted by the States. With the State Water Missions under development, there are other State-level initiatives towards improved management and regulation, not otherwise prescribed by the NWM. In this context, it would rest upon the States to determine the extent to which the NWM mandate is absorbed into relevant avenues of implementation.

Specifically, the CWC has released the Guidelines for Improving Water Use Efficiency in Irrigation, Domestic & Industrial Sectors<sup>10</sup> in November 2014. These indicate sector-wise scope to conserve water and improve efficiency through various regulatory, pricing, audit, technological upgradation and outreach measures. It is also proposed to create a National Bureau of Water Use Efficiency<sup>11</sup> (NBWUE) under the Environment (Protection) Act, 1986 to promote and regulate efficient water use across sectors. This has been allotted Rs. 50 Crores, out of the Rs. 196 Crores sanctioned for the Twelfth Plan Period. Once the Bureau is formalised and constituted with well-defined scope, the compliance and enforcement aspects can be better assessed exclusively through the Mission.

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<sup>10</sup> Available on the MoWR at [http://wrmin.nic.in/writereaddata/Guidelines\\_for\\_improving\\_water\\_use\\_efficiency.pdf](http://wrmin.nic.in/writereaddata/Guidelines_for_improving_water_use_efficiency.pdf)

<sup>11</sup> This is expected to address goal 4 of the NWM on increasing water use efficiency by 20%.

## Key Observations

1. **Broad Mission mandate:** The NWM has a very broad mandate (to monitor MoWR activities, as well as channelise initiatives towards climate change resilience) – so it would be valuable to delineate aspects that have an exclusive climate orientation, which require greater technical collaboration. This has been recognized through the Mission to an extent. For instance, technical assistance in select areas of integrated flood management and aquifer mapping has also been sourced with support from the Asian Development Bank and World Bank, respectively.
2. **Programming NWM as a Central Sector Scheme:** The set of Mission activities to be undertaken is dynamic and evolving, though the two Volumes of the NWM documents provide elaborate lists in this regard. It is expected to become more systematised following the recent announcement of the Implementation of the NWM as a Central Sector Scheme. As a consequence, financial utilization is set to receive a boost as well.
3. **Scope for capacity building:** The nature and extent of capacity building could be better envisioned after the delineation mentioned above. The Mission Secretariat is working towards sensitising stakeholders on this front through regular outreach efforts.
4. **Complementary role of State governments:** In matters of regulatory efforts, the States' potential contribution is considerable in complementing the Centre in achieving the Mission goals. Coordination of State level implementation and compliance would become clear once State Water Missions are finalized.
5. **State schemes and NWM:** There are several ongoing schemes implemented by State governments that have strong inter-linkages with the NWM mandate; these are to be facilitated by the Mission through appropriate guidance, but financing would rest with the existing budgetary mechanism for State Sector schemes.

## Recommendations

1. **Need for concerted efforts towards exclusive tracking of NWM activities:** NWM-relevant activities have been budgeted for, even prior to the launch of the 'Implementation of NWM' scheme. This is on account of the *de facto* mandate of the Central and State governments in regulating and conserving water resources. Therefore a greater effort in tracking and understanding the status of actual implementation is important for monitoring as well as revising interim goalposts.
2. **Institutional strengthening:** The proposed mechanism for monitoring and ensuring compliance to Mission guidelines has to be suitably established. There is a need to appoint a full-time Mission Director in this regard, to maintain and enhance the momentum of progress achieved thus far. State level counterparts also have to be vested with NWM-specific responsibilities in this regard.
3. **Need to expedite State level action plans:** States need to respond to the Centre's call for expediting their finalisation of State Water Missions, and consequently form Climate Change Cells (CCC) at the Departmental level (in case not already formalised). Various aspects of implementation and compliance are contingent upon the States' efforts on this front.

4. **Systematised dissemination and reporting of key milestones:** It is important to establish an exclusive platform for reporting Mission progress, given the extensive scope of water resource management and multiple user groups. With the recently announced NWM scheme, this could supplement the MoWR's efforts in tracking Mission activities. It would also facilitate streamline areas of the Mission that require the engagement of other Ministries and government agencies.

## Conclusion

The NWM has a broad mandate that covers a wide range of ongoing water sector initiatives. The Mission acknowledges the importance of conducting suitable impact assessments and pilot studies to integrate climate change concerns within the ambit of water resource development and management. It duly acknowledges the need to augment technical capacity with inputs from institutions like the National Institutes of Technology (NITs), Indian Institutes of Technology (IITs) and the Indian Institute of Science (IISc) as well as actively sensitise stakeholders at the grass root level regarding water use efficiency. Industry collaborations have also been mooted in this regard.

Despite the launch of an exclusive NWM scheme as recently as 2013, it is notable that information relating to the progress on select goals of the Mission until then has also been available through the MoWR's routine and ad-hoc disclosures. In this regard, it would be of immense value to systematise dissemination of NWM-relevant progress in a single platform, as is already under consideration. Along with the WRIS, this could serve as an important tool for strengthening internal decision making as well as enhancing the alignment of future activities with ongoing water sector schemes.

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