

National Hydrology Project

November 18, 2019

Source: *PIB & Ministry of Jal Shakti*

National Hydrology Project was approved by the cabinet in 2016 as a central sector scheme which includes the National Hydrology Project (NHP) and the establishment of the National Water Informatics Centre (NWIC) as a repository of nation-wide water resources data. NWIC is envisaged as an independent organization with adequate administrative and financial powers under the overall control of Secretary, MoWR, RD&GR.

Project objectives

To improve the extent, quality, and accessibility of water resources information, the decision support system for floods and basin level resource assessment/planning and to strengthen the capacity of targeted water resources professionals and management institutions in India.

Key highlights

- **It is a Central Sector Scheme, with 100% grant to the States**
- Budget Outlay: about Rs3,640 Crore, with World Bank Assistance to the tune of 50% of the project cost
- Timeline: 8 years from 2016-17 to 2023-24
Lead Agency: Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation

Project Components

1. **Water Resources Monitoring Systems:** This component will **finance the establishment/modernization of new and existing hydro** met monitoring systems including meteorology, streamflow, groundwater, water quality, and water storage measurements, and construction of hydro-informatics centers that capture both water resources

and uses. This component will be **implemented by states/UTs with the support of core central agencies.** **The major activities will include**

1. Establishment of hydro met observation networks
2. Establishment of Supervisory Control and Data Acquisition (SCADA) systems for water infrastructure and
3. Establishment of hydro-informatics centers.

2. **Water Resources Information Systems:** This Component will support the strengthening of national and sub-national water information centres with web-enabled WRISs through standardization of databases and products from various data sources/departments and make comprehensive, timely, and integrated water resources information available to decision-makers for effective planning, decision making, and operations.

Some of the key activities under this component are:

1. Strengthening of India Water Resources Information System (WRIS); and
2. Regional /State Water Resources Information System.

3. **Water Resources Operations and Planning Systems:** This component will support the **development of interactive analytical tools and decision support platform that would integrate database, models and scenario manager for hydrological flood forecasting, integrated reservoir operations**, and water resources accounting for improved operation, planning, and management of both surface water and groundwater, based on basin approach. It has three **subcomponents:**

1. Development of analytical tools and decision-support platform (river basin modeling, streamflow forecasting, and reservoir operation systems, and irrigation design and operations)
2. Purpose-driven Support and

3. Piloting innovative knowledge products.
4. **Institutional Capacity Enhancement:** This component aims to build capacity for knowledge-based water resources management. It will support **subcomponents in the establishment of** (i) water resources knowledge centres, (ii) professional development, (iii) project management, and (iv) operational support.

Beneficiaries

The project has two groups of direct beneficiaries:

1. Central and state implementing agencies (IAs) responsible for surface water and/or groundwater planning and management, including river basin organizations (RBOs) and
2. Users of the WRIS across various sectors and around the world. The ultimate beneficiaries will be the selected farm communities which benefited from pilot projects for water management; rural and urban water and power users; populations affected by floods and droughts, especially poor rural people, and farm families who may benefit from improved irrigation water supply and management; stakeholders across the energy, inland waterways, environment, and agriculture ministries; research and educational institutions; students and researchers; and non-governmental organizations, civil society organizations, and the private sector.