



Mid-term Review of National Hydrology Project

Why in News

Recently, the **Union Minister of Jal Shakti** has reviewed the progress made under the **National Hydrology Project** (NHP) in its mid-term.

Key Points

▪ National Hydrology Project:

- It was started in **2016** as a **Central Sector Scheme** with **100% grant to implementing agencies** on **pan India basis**.
- It is an **initiative of the Ministry of Jal Shakti** and is **supported by the World Bank**.
- It has a **budget outlay of Rs. 3680 crore** to be spent over a **period of 8 years**.
- **Aim:**

- To improve the extent, reliability and accessibility of water resources information.
- To strengthen the capacity of targeted water resource management institutions in India.
- To facilitate acquisition of reliable information efficiently which would pave the way for an effective water resource development and management.

◦ Project Beneficiaries:

- Central and state implementing agencies responsible for surface and/or groundwater planning and management, including river basin organizations.
- Users of the **Water Resources Information System** (WRIS) across various sectors and around the World.

▪ Project Components:

- **Water Resource Monitoring System:** WRMS focuses on improving the extent, timeliness and reliability of water resources data.
 - Establishment of Hydromet Observation Networks.
 - Establishment of **Supervisory Control And Data Acquisition** (SCADA) Systems for Water Infrastructure.
 - Establishment of Hydro-Informatics Centers.
- **Water Resources Information System:** WRIS supports strengthening of national and sub-national water information centers with web-enabled WRIS through standardization of databases and products from various data sources/departments.
 - Strengthening of WRIS.
 - Establishing state WRIS.
- **Water Resources Operation and Planning System:** WROPS supports the development of interactive analytical tools and decision support platforms 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 and groundwater.

- Development of Analytical Tools and Decision Support Systems.
- Purpose Driven Studies.
- Piloting Innovative Knowledge Products.
- **Water Resources Institutions Capacity Enhancement:** WRICE aims to build capacity for knowledge-based water resources management.

- Water Resource Knowledge Centres.
- Professional Development.
- Project Management.
- Operational Support.

▪ **Mid-term Review:**

- The NHP has been termed as a **project of National importance** since it establishes a **nationwide 'Nodal' 'one point' platform for all states to collaborate and share data** pertaining to water resources.
- Significant progress has been made in the fields of WRMS, WRIS, WROPS and WRICE.
- Under the NHP, a nationwide repository of water resources data, **National Water Informatics Centre (NWIC)** has been established.
- NHP is focusing on establishment of **Real Time Data Acquisition System (RTDAS)** on pan India basis, which **would complement the manual data acquisition stations** and would lay a strong foundation for informed decision making for better water resources management.
- Through the NHP, the management of water resources shall **witness a sea change since it will adopt an integrated approach and make use of cutting edge technology.**
- **Concerns:**
 - Collecting data from scattered agencies posed a major bottleneck in effective water resource management and also a stumbling block in important policy level decision making.
 - The lackadaisical approach and lack of interest shown by previous Governments has resulted in unavailability of reliable historic data.
- **Suggestions:**
 - Authorities should be directed to share the valuable works carried out under NHP in public domain and encourage academia, universities/research institutes globally to contribute towards this initiative.
 - Simultaneously, there is a need to further improve the water resources dissemination platform India-WRIS to take care of the requirements and aspirations of various stakeholders like [Central Water Commission \(CWC\)](#), [Central Ground Water Board \(CGWB\)](#), [National Water Development Agency \(NWDA\)](#), [National Institute of Hydrology \(NIH\)](#), etc.

Way Forward

- A lot of data-driven developments are expected to follow naturally over the course of time in the government as well as the private sectors and academic and research institutions, that hold the potential of transforming the water sector of the country from an age-old experience-based system depending largely on personal judgement to an optimised, transparent system where it is possible to holistically assess the impact of decisions across the sectors in advance, before they are actually made.

[Source: PIB](#)

