

GREENLIGHTS FOR NATIONAL MISSION FOR CLEAN GANGA

प्रविष्टि तिथि: 08 DEC 2025 3:27PM by PIB Delhi

Digital twin of Ganga has been sanctioned under the Centre of Excellence at IIT (Delhi) to assist data-driven decision making in the National Mission for Clean Ganga and other agencies of Government. Hydrological modelling, assessment of groundwater stress, identification of hotspots, scenario analysis, and monitoring of basin water resources are at the core of this project, which helps in ensuring objectivity and transparency in the decision-making process. Use of artificial intelligence, mathematical simulations and planning tools have been envisaged in the project concept.

Hybrid Annuity based Public Private Partnership (PPP) projects under the National Mission for Clean Ganga (NMCG) introduce an innovative financing approach for sewerage infrastructure. The key objective is to link payments to the actual performance of sewage treatment plants (STPs). NMCG has sanctioned a project for interception and diversion (I&D) and STP for pollution abatement of river Mahananda in Siliguri Municipal Town, West Bengal at an estimated cost of Rs 361.86 crores under hybrid annuity PPP mode.

Traditionally, there was a concern that during the Operation and Maintenance (O&M) phase, private operators paid less attention to proper O&M because monthly payments were relatively small compared to the larger payments received during the construction phase. This sometimes resulted in non-compliances and poor operational responsiveness.

To address this issue, a new financing model has been developed in which a significant portion of the construction payment is deferred and released during the O&M phase as annuity, based on the satisfactory performance of the STP.

Under this model, the government pays only 40% of the capital cost during the construction period. The remaining 60% of the capital cost along with interest is paid to the concessionaire as annuity over a 15-year O&M period. This structure ensures that both the government and the private sector share financial risks. The concessionaire's performance is assessed against specific Key Performance Indicators (KPIs) defined in the concession agreement, and annuity payments are released only when performance standards are met.

These projects do not involve any user charges or tariff collection. The entire project cost is borne by the Government and provided to State Government as central grant-in-aid.

Glacier melt study has been sanctioned to the National Institute of Hydrology with an aim to establish a real-time monitoring network across the Bhagirathi and Alaknanda basins (up to Devprayag), covering all head streams and associated key glacier regions such as Gangotri, Satopanth, Khatling, Pindar, Chorabari, etc. The project includes assessment of glacier mass balance, melt-runoff contributions, and climate-change impacts using satellite data, field observations, and SPHY modelling, and development of a Web-GIS dashboard for NMCG. The envisaged objectives of the project include assessment of the effects of rising temperatures on glaciers and risks by using the data generated under the project.

The information was provided by THE MINISTER OF STATE FOR JAL SHAKTI **SHRI RAJ BHUSHAN CHOUDHARY** in a written reply to a question in Rajya Sabha today.

ND

(Rajya Sabha USQ 898)

(रिलीज़ आईडी: 2200355) आगंतुक पटल : 565
इस विज्ञप्ति को इन भाषाओं में पढ़ें: Urdu , हिन्दी , Tamil