

Strategic Alliance Launches Innovative Smart Laboratory on Clean Rivers (SLCR) Project in Varanasi

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A groundbreaking collaboration between the Government of India, the Indian Institute of Technology - Banaras Hindu University (IIT-BHU), and the Government of Denmark has resulted in the establishment of the Smart Laboratory on Clean Rivers (SLCR) project in Varanasi.

The SLCR project aims to leverage expertise from both nations to rejuvenate the Varuna River using sustainable approaches. The project features a hybrid lab model, combining a physical lab at IIT-BHU with an on-field living lab at the Varuna River to test and implement solutions in real-world settings.

The project is supported by the Indo-Danish Joint Steering Committee (JSC), which provides strategic guidance and reviews progress. Additionally, the Project Review Committee (PRC) and Multi-Stakeholder Working Group (MSWG) oversee quality control and coordination among stakeholders.

The SLCR Secretariat, a joint initiative of NMCG and IIT-BHU, will manage day-to-day activities and project development. The project has received initial funding of Rs. 16.80 crore from the Ministry of Jal Shakti and an additional 5 crore INR grant from Denmark.

Key projects under the SLCR initiative:

- **Decision Support System (DSS) for Water Management:** This project will develop a comprehensive river management plan using hydrological models, scenario generation, and data analytics.

- **Characterization of Emerging Pollutants:** This project will identify and quantify contaminants in the Varuna River using advanced analytical techniques.
- **Holistic River Management Demonstration:** This project will implement interventions based on a holistic plan and river manual to enhance river health and regional development.
- **Hydrogeological Model of the Varuna Basin for Recharge Sites:** This project will identify optimal recharge sites for managed aquifer recharge (MAR) to enhance base flow in the river.

The SLCR project is expected to provide valuable insights and solutions for river rejuvenation in India and contribute to the broader goals of clean water and sustainable development.