



## **Webinar: Groundwater and Riverine System: Challenges, Opportunities, and Solutions for Rapidly Urbanizing Ganga Basin**

**Webinar Proceedings: 4th August 2021**

Centre for Science and Environment (CSE), New Delhi has partnered with the National Mission for Clean Ganga (NMCG), Ministry of Jal Shakti, Govt. of India for a unique 3-year action research and capacity building initiative: Making water sensitive cities in the Ganga basin.

The initiative is under the National flagship programme for improving river health and water flows in rivers of the Ganga basin – Namami Gange. This initiative is part of the series of ongoing efforts by NMCG aimed at ensuring convergence of Namami Gange Mission with other national flagship urban missions (AMRUT, Smart Cities, Swachh Bharat Mission, HRIDAY, NULM) and other missions related to water resource management (Atal Bhujal Yojana, Jal Jeevan Mission, Jal Shakti Mission).

School of Water and Waste of CSE has been leading the movement on sustainable urban water management, especially Water Sensitive Urban Design and Planning (WSUDP), Green Infrastructure (GI), and Water Efficiency and Conservation (WEC) through its research, advocacy, and capacity building initiatives in India, and the global South.

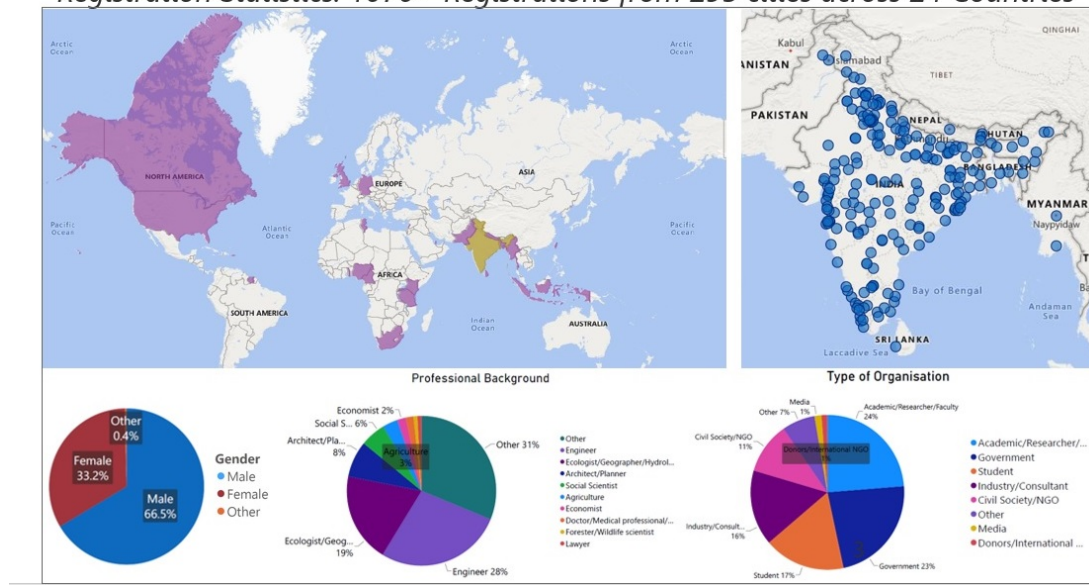
On 4th August 2021 a webinar: Groundwater and Riverine System: Challenges, Opportunities, and Solutions for Rapidly Urbanizing Ganga Basin was organised by CSE with NMCG, aimed at capacity building, awareness, and action research for promoting sustainable urban groundwater management for improved river health in Ganga basin cities.

The webinar has received an overwhelming response with 1070+ registrations. The webinar has witnessed more than 50% of the registrants as attendees, with an attendance of 596 as unique viewers. Besides it, the event had 1200+ live stream viewership through various social media platforms. Participants from 295 cities across 24 nations worldwide took part in the webinar, with 67% male and 33% female participation. The attendees belonged to diverse fields, including engineers, architects, planners, social scientists, etc. They represented private consultancies, Government departments, academic institutions, NGOs, etc.

*Summary of Registrations*

## Registration Statistics (updated)

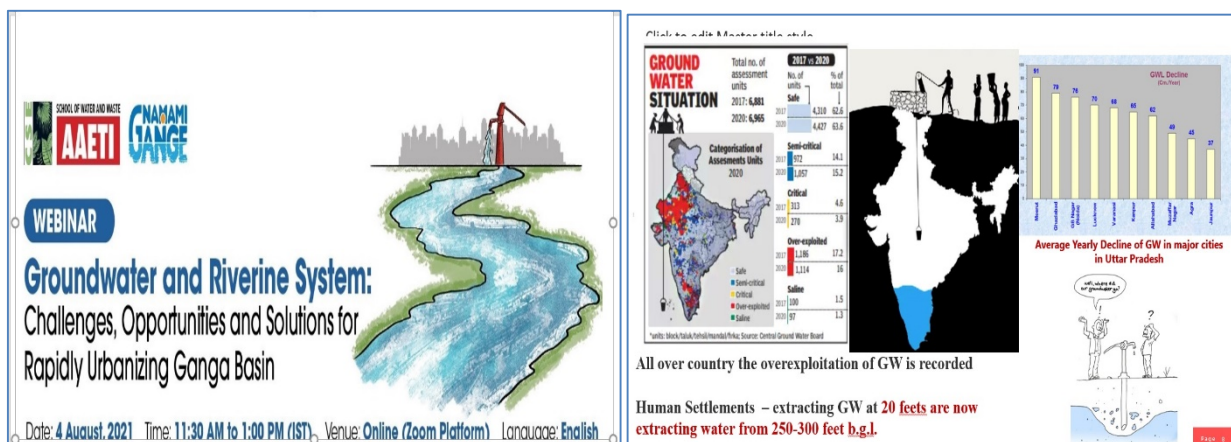
Registration Statistics: 1070+ Registrations from 295 cities across 24 Countries



## Welcome Address

Dr. Suresh Kumar Rohilla, Senior Director at CSE, welcomed the speakers and participants and provided an overview of the groundwater and its condition in an urban environment. He set the context of the webinar and talked about the challenges, issues, and opportunities available in the urban environment for groundwater management. He also shared the latest research on the groundwater level and urban flooding in smart cities in India and the potential of stormwater harvesting in addressing issues related to urban flooding.

*Snapshots from Presentation by Dr Suresh Kumar Rohilla, CSE*

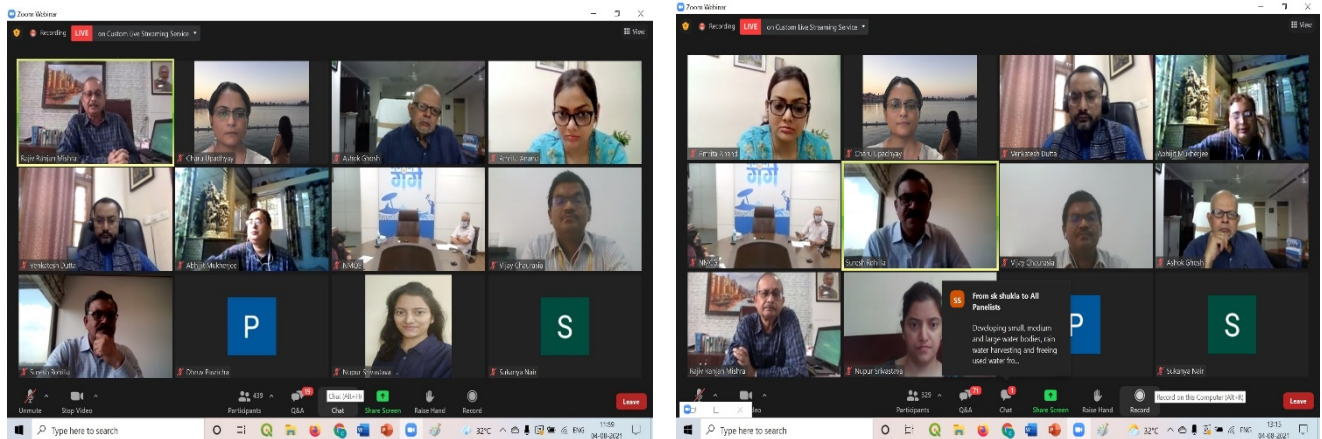


Shri Rajiv Ranjan Mishra (IAS), Director General, NMCG, shared his views and experiences of the National Mission for Clean Ganga (NMCG) and stressed proper groundwater management in cities to ensure river health in urban limits.

He said that we feel groundwater is under our control, and that's the crux of the problem.

Groundwater is an invisible resource, and in India, it used to be considered and used as a private good, while it is more a common pool resource. We should now focus on policies for better groundwater management. There is a need to incorporate groundwater management practices into water-sensitive urban designs and planning.

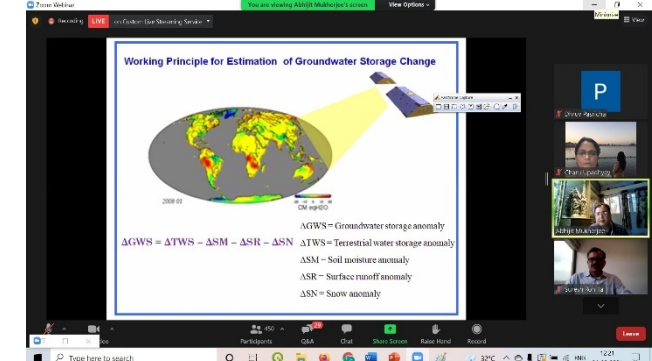
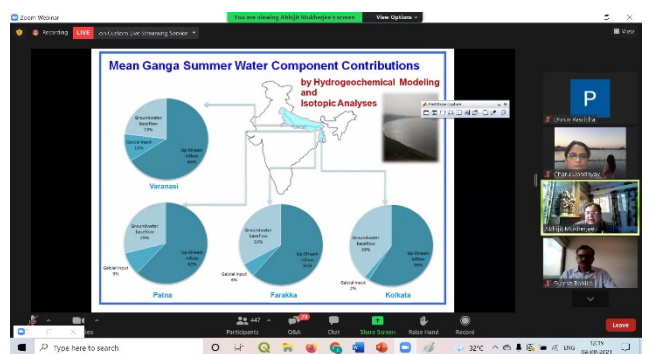
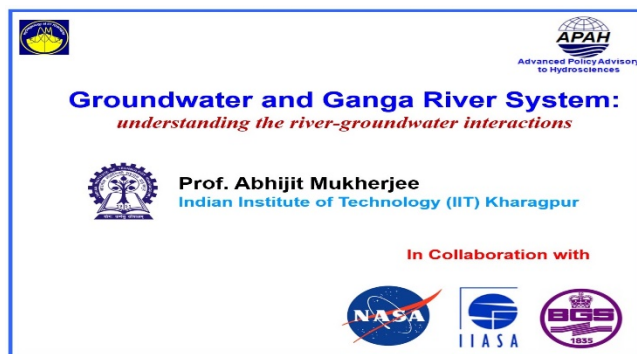
*Snapshots from webinar during the talk of Shri Rajiv Ranjan Mishra, NMCG*



His address was followed by the presentation of Prof. Abhijit Mukherjee on the topic Groundwater and Ganga River System: Understanding the River Groundwater interaction.

Prof Mukherjee shared detailed research work and findings of the groundwater and river interaction along the Ganga basin. While explaining about groundwater and river interactions, he told that nowadays at many places, the stretches of the Ganga River are drying up due to groundwater level depletion.

*Snapshots from the Presentation by Prof Abhijit Mukherjee, IIT , Kharagpur*

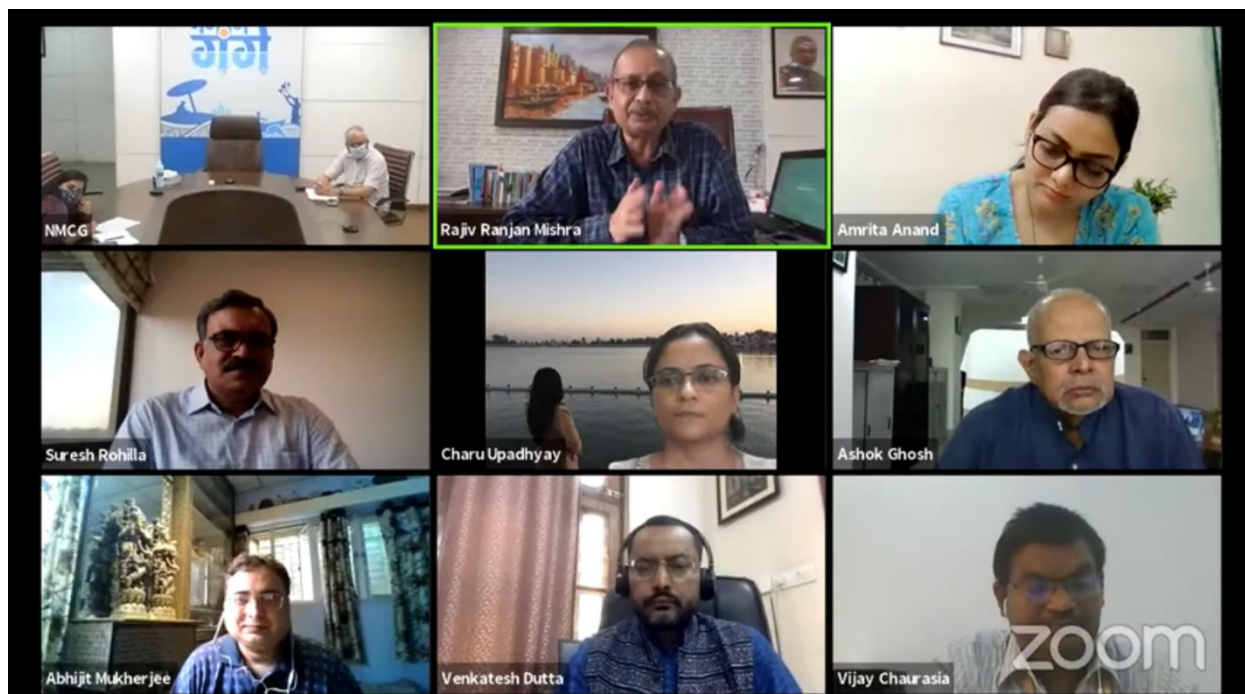


The talk of Prof. Mukherjee was followed by a short discussion session by Dr. Vijay Kumar



Chaurasiya, Adviser, CPHEEO, MoHUA; Prof. Venkatesh Dutta, BBAU Central University, Lucknow, U.P.; and Dr. Ashok Ghosh, Chairman, Bihar State Pollution Control Board. The experts shared their views and experience about the subject.

*Snapshots from the Discussion by invited Experts*



The event was concluded by Dr. Rohilla after the Q&A session followed with a vote of thanks to all the honorable speakers and the participants.

### **Feedback from Participants**

1. Akhilendra Tiwary- India- "This is one of the best presentations on groundwater I ever attended, many thanks, sir."
2. Dr. Mukesh Sharma- "Highly eye-catching data from 1970- 2016, regarding pollution, & decline the water table as well as surface water flow".
3. Gnaneethi Haritha – “Wonderful Session Sir, Excellent Insights with facts and figures- A lot to understand on this topic. The materials (presentations, videos, etc.), were relevant and enhanced learning”.
4. Maitrayee Choudhary- “Thank you, Prof. Mukherjee, for this very informative lecture. This is an Eye Opener”.

5. Karan Behar- “Kudos, Prof., for a highly informative seminar”.
6. Oindrilla Basu- “thank you, sir, for your informative and inspiring talk.

Here is the recording of the webinar: <https://youtu.be/iRn6o5zIcxo>

<https://www.cseindia.org/webinar-groundwater-and-riverine-system-challenges-opportunities-and-solutions-for-rapidly-urbanizing-ganga-basin-10902>