

# World Water Day

"Groundwater: Making The Invisible Visible"

SEMINAR ON-  
PLACE OF GROUNDWATER IN WATER SECURITY  
22 MARCH 2022



## SEMINAR PROCEEDINGS

India Collaboratory  
School of Planning and Architecture, New Delhi  
4 - Block B, Indraprastha Estate, New Delhi - 110002

## SEMINAR ON-PLACE OF GROUNDWATER IN WATER SECURITY 22 MARCH,2022

To observe World Water Day on 22 March 2022, the Water Security and Sustainable Development Hub – India Collaboratory at the School of Planning and Architecture (SPA), New Delhi, organized a seminar of four lectures by international and national experts, followed by a panel discussion on the “Place of Groundwater in Water Security” in line with the broader theme of ‘Groundwater: Making the Invisible, Visible’.

The event was live streamed on YouTube and was conducted in both physical and virtual modes. For this event, we invited resident welfare associations, senior officials of the Central Groundwater Board and Delhi Jal Board, eminent scholars and academicians from national and international universities, and students currently enrolled in undergraduate, postgraduate, and doctoral programmes in SPA New Delhi and IIT Delhi. The narrative of this event was to address the various challenges of groundwater in Delhi, to deliberate on those measures that could be adopted to tackle the highlighted challenges, and to comprehend the role that groundwater could play in promoting water security in Delhi. We aimed to achieve this by engaging diverse viewpoints on the issues that surround our critical relationship with groundwater against the backdrop of a tenuous future with regards to ensuring global water security.

The event was publicised on social media platforms such as LinkedIn, Facebook, and Twitter, as well as Basecamp, the Hub's internal communications platform.

To kick start the proceedings of the seminar, Prof. Dr. Ashok Kumar (Principal Co-Investigator and Dean, Academics and Student Affairs) provided a brief overview on what the “Water Security and Sustainable Development Hub” has set out to accomplish over the five year period. As moderator for the morning session, Prof. Kumar briefly introduced the seminar’s topic and explained the purpose of the event. After welcoming the participants, two presentations were made: (i) “Groundwater and Tectonics”, by Prof. Saumitra Mukherjee from Jawaharlal Nehru University, focused on how seismic activities affect groundwater, using Delhi NCR as a case study; (ii) “Groundwater – Status, Issues and Solutions”, by Mr. Tejdeep Singh of Central Ground Water Board, argued that water is “intelligent” by highlighting its unique properties, noting the distinctions between various types of soils, and briefly articulated the qualitative aspects of groundwater with reference to Punjab.

There were two more presentations in the morning session. In the first presentation, Prof. Shashank Shekhar from Delhi University spoke on “The Role of Groundwater in Delhi’s Water Security”. He focused on how appropriation of groundwater for various uses in Delhi could help in achieving water security for Delhi. The second presentation, titled “Groundwater Conservation for Wetland Rejuvenation” by Prof. Dr. Meenakshi Dhote from SPA New Delhi, emphasized the need to better plan groundwater recharge and rainwater harvesting in the local context in natural settings. A quick recapitulation was made by our young researcher, Ms. Beenish Mushtaq.



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Opening the afternoon session, Prof. Dr. P.S.N. Rao, Director SPA New Delhi, set the tone and context of the panel discussion. Prof. Richard Dawson, Director of the Water Security and Sustainable Development Hub, addressed the participants in the beginning of the panel discussion. In his address, Prof. Dawson remarked on the resonance of the World Water Day theme of “Making the Invisible, Visible” with the work of the Hub, and how Water Sensitive Planning in cities could make the invisible visible via Green Infrastructure Planning, and “clever and intelligent” planning and design of cities in developing countries. Prof. Dawson also highlighted the valuable work researchers at SPA New Delhi are doing and encouraged young researchers to fully realize the objectives of the Hub. Prof. Dawson also talked about the setting up of the Centre for Water Studies at SPA New Delhi.

The subject of the panel discussion was the “Place of Groundwater in Water Security” and was moderated by Prof. Kumar. The panellists included: Prof. Dr. Saumitra Mukherjee, Professor Geology and Remote Sensing, School of Environmental Sciences, Jawaharlal Nehru University; Mr. Tejdeep Singh, Scientist ‘D’, Senior Hydrogeologist from Central Ground Water Board, Delhi; Prof. Dr. Shashank Shekhar, Department of Geology, University of Delhi; Prof. Dr. Meenakshi Dhote, Department of Environmental Planning, SPA New Delhi; Prof. Dr. Rabidyuti Biswas, Department of Physical Planning, SPA New Delhi; Mr. V. P. Sharma, Retired Chief Engineer, Delhi Jal Board; Mr. S. Ghulam Sajjad, Retired Executive Engineer, Delhi Jal Board; Dr. Arti Grover, Head of Department of Landscape Architecture, SPA New Delhi; and Mrs. Chitra S. Jain, New Friends Colony Resident Welfare Association, Delhi.

The panel discussion proved to be a fruitful exercise in exchanging competing ideas about water security and sustainable development. Several key points were highlighted in the panel discussion. First, water security is viewed very differently by academicians and Delhi Jal Board practitioners, emphasising pragmatic aspects of water management. Second, both geogenic and anthropogenic events will continue to affect groundwater resources, which itself depends on our water consumption, which is also linked to our energy consumption. Third, considering our dependence on water resources for energy generation, rejuvenation of our water bodies and wetlands is critical to ensure water security as these natural resources augment the existing water resources for sustaining water supplies to human settlements.

Prof. Dr. R. Biswas summarized the highlights of the seminar and gave a vote of thanks. We believe it was a great learning experience for all present both physically and virtually. We hope to organize several similar events soon in the near future and come up with such valuable collaborations and deliberations.

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