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 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 to 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- 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 wider global South.

The launch event followed with a webinar was organized on 27th of July, 2021 aimed at engaging 1300+ number state / municipal functionaries and other sector players involved in promoting sustainable urban water management. The event was attended by 43% Government officials, with 990+ registrations from 240 cities across 33 countries worldwide. Apart from the registrations, the event was live streamed and approx. 1600+ viewers watched the event through the online social media platforms. The attendees belonged to diverse fields, including engineers, architects, planners, social scientists, etc. They represented private consultancies, govt. departments, academic institutions, NGOs, etc.

Summary of Registrations

Registration Statistics: 990+ Registrations from 240 cities across 33 Countries

- Gender:
  - Male: 38%
  - Female: 62%

- Professional Background:
  - Academics: 10%
  - Inhabitants/Planner: 10%
  - Doctor/Medical Professional: 5%
  - Entrepreneurs: 5%
  - Researcher: 5%
  - Agriculture: 3%
  - Consultant: 2%
  - Engineer: 2%
  - Environmentalist/Geographer/Hydrologist: 2%
  - Social Scientists: 1%

- Type of Organization:
  - Government: 43%
  - Non-Government: 57%
Launch Event

Dr. Suresh Kumar Rohilla, CSE kick-started the launch event by providing an overview of the CSE-NMCG programme, its vision, aim, objectives and upcoming events planned for the 1st year. He introduced CSE-SWW, the water programme and shared CSE’s journey towards water sensitive urban design and planning through capacity building, research and technical support. He set the context by talking about global water challenges, and how the changing climate will aggravate the water issues, especially in the global south. He also shared the latest CSE research on status of groundwater table 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

At the CSE-NMCG launch event, Ms Sunita Narain, Director General, CSE stressed that issues like dwindling water supply, pollution abatement, urban flooding, groundwater depletion, etc. cannot be addressed in isolated missions and programmes; and that there is need for a paradigm shift in urban water management to overcome these issues, and strengthen resilience in face of a changing climate. She argued that the focus must shift to a circular economy approach; where cities move beyond from consuming excess freshwater and generating sewage, to a system of decentralized water resource management, with focus on sustainable demand-supply mechanisms using traditional and modern technologies. “Water Wisdom comes from being Water Prudent, Water Sensitive”, Ms Narain quoted.

Snapshots of Presentation by Ms Sunita Narain, CSE
Shri Rajiv Ranjan Mishra, Director General, NMCG shared how the Namami Gange programme aims to move beyond installing STPs for pollution abatement, and focus on water-sensitive cities and communities in order to ensure river health in urban limits. He stressed on strengthening linkages of the river and its floodplains with the larger urban areas and the need to incorporate the river-sensitive approaches in city master plans. He also focused on the importance of convergence of the various urban missions, so that the authorities can go beyond isolated targets and deliver on the demands of the citizens.

_Snapshots from talk by Mr Rajiv Ranjan Mishra, NMCG_

**Webinar: Mainstreaming Water Sensitive Urban Design and Planning (WSUDP) in Ganga basin cities – Challenges & Opportunities**

The launch event was followed by a webinar on ‘Making Ganga Basin Cities Water Sensitive’. The panelists included Dr Suresh Rohilla- Senior Director, CSE, Shri G. Mathi Vathanan- Principal Secretary, Housing and Urban Development Dept. (HUDD), Govt. of Odisha, Ar. Vandana Menon, Independent Consultant, New Delhi and Mr Stanley Samuel, CEO, Ecosoft Pvt. Ltd., Singapore.

Shri Mathi Vathanan presented the rainwater harvesting initiatives recently taken up by the HUDD. He showcased that based on the knowledge support provided by CSE on rainwater harvesting in parks and open spaces, HUDD has been able to implement more than 12,000 rainwater harvesting structures in 111 towns and cities of Odisha. He focused on how the programmes/ processes and designs were simplified, in order to scale-up the initiative from pilot implementation to city-wide and state-wide application within 75 days.

_Snapshots from Presentation by Shri Mathi Vathanan, HUDD Odisha_
Taking the webinar forward, Dr Rohilla showcased how the WSUDP, Green Infrastructure and Water Efficiency and Conservation can be integrated with the urban planning and development process. He shared various findings from CSE research on stormwater harvesting in parks and open spaces to address issues related to localized urban flooding and groundwater depletion. Focusing on the Ganga basin States, he mentioned the potential of WSUDP for select parks of Uttar Pradesh in Lucknow, Prayagraj, Kanpur, Moradabad and Varanasi and highlighted how run-off in excess of 2,400 Mil. L can be harvested in these cities from their existing park infrastructure.

Ms Vandana Menon shared the case example of rainwater harvesting system implemented in the Nizamuddin East Colony, New Delhi. She described the role of community participation and ownership of rainwater harvesting strategies and infrastructures, and how the residents have been able to implement these systems and keep them running for almost two decades. She has also highlighted the WSUDP approach (with focus on rainwater harvesting) towards integrating the urban water cycle with planning and development of parks and open spaces and showcased the outcomes with the increased water table over a period of time with the implementation of the system.
Mr Samuel focused on various strategies to strengthen urban water resilience, and how water-sensitive designs, circular economy and water efficiency measures can go a long way in addressing local and city-level issues, and ensuing water security for all. He shared his experience and learnings on in-situ wastewater treatment and reuse projects implemented in Madhya Pradesh and Maharashtra. He highlighted the importance of nature-based solutions, decentralized planning and community participations as key ingredients to develop a water-secure world.

Snapshots from presentation by Mr Stanley Samuel, Ecosoft Pvt. Ltd

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

Snapshots from Q & A Session