

MAKING WATER SENSITIVE CITIES IN GANGA BASIN AIMED AT IMPROVING RIVER HEALTH/FLOWS

Context setting

Set up in 1980's, Delhi – as a registered non profit society.

An institution to bridge the **gap between information and knowledge**; between knowledge and public awareness; **to influence public policies and practices** for sustainable development –




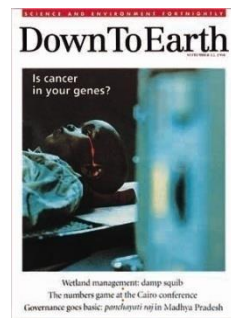


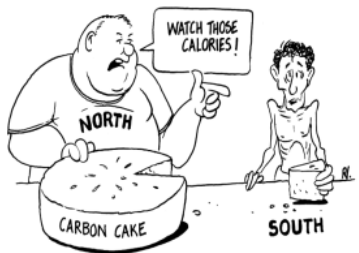

*'to promote **sustainable development with equity, participation and democracy**'.*

Need to leapfrog to new answers...

New ways of progress. About deepening democracy to secure rights and access to resources. About building institutions from national to local levels. About strengthening regulatory measures for environmental protection



40+ years, 150+ staff, learning, sharing and pushing for change

Policy research & advocacy	Documenting to build knowledge	Disseminating knowledge	Training & education
Sustainable mobility & Clean Air 	Knowledge portal	Down To Earth	Green School Programme
Sustainable habitat	Climate change Resource Centre	Gobar Times	Media Resource Centre
Sustainable industrialization 		Books 	Anil Agarwal Green College/ Environment Training Institute
Sustainable Water - Waste water management 		Films 	Regulators training
Climate change			South-South Learning, training and capacity building
Renewable energy			
Food safety & toxins			

- Awarded Stockholm World Water Prize in 2005
- CSE Regional- South Asia 2008-13
- CSE Global -2014 and beyond

A global south based think tank and capacity building institution, Linking national- global and contributing in global dialogue/ processes

CSE is designated –

- **Centre of Excellence** - Urban Development :Sustainable Water management area and Centre for **Applied Research & Capacity Building Training Entity** for Urban Local Bodies under AMRUT & SBM National Missions in **Engineering, Town Planning and Public Health Area** - designated by the Ministry of Housing & Urban Affairs, Govt. of India
 - MoU with **State Govt. of Odisha, A.P, Jharkhand.**
 - Programme cum Technical Support to **Uttar Pradesh** State Govt.
- **Nodal centre for training of Environment Regulators-** Ministry of Environment , Forests and Climate Change, Govt. of India
- **National hub for knowledge creation and capacity building –** Ministry of Jal Shakti, Government of India





Aim & Objectives

to help establish policy principles, innovative technologies and implementation strategies for water and wastewater management and

efforts directed towards meeting twin goals of laying foundations for

a water prudent society and adapting to climate change.

SWW - Capacity Building Focus Area :

Water

- » Water Sensitive Urban Design & Planning (including rainwater harvesting),
- » Green Infrastructure and Nature Based Solutions
- » Urban Lake Management
- » Water and Communication
- » Tools and Approaches for Citywide Water
- » Water Woes

Sanitation & FSM / Septage Management

- » Citywide Inclusive Sanitation (CWIS),
- » Tools and Approaches for Citywide Sanitation (including Preparing City Sanitation Plans / Shit Flow Diagram)
- » Decentralised Wastewater Treatment including Reuse
- » Faecal Sludge / Septage Treatment
- » Sanitation Safety Plan
- » SFD Week 2019

Training and Capacity Building Activities

- Short Training
- Exposure Visit
- Webinars
- Online Courses
- Knowledge Conclave
- Off Site Tailor made Training
- Alumni Networking Meeting
- **900 + fellowships (2017-22)** both International and National. Cover flight, Accommodation and Training fees.
- Participants from Global South -Africa get priority



CSE Water & Waste Programme: Education & Capacity Building Initiative

AAETI

- Working with identified partners / multipliers both state and non – state for past **12 years and beyond with 5000+ alumni**

Developing a demand driven research, capacity building and awareness creation programme.

.... aimed at mainstreaming designing and implementing affordable and sustainable citywide sanitation (incl. water) for all .



United States of America

Bill & Melinda Gates Foundation
 UB University at Buffalo
 Columbia University
 GWSP Global Water Security & Sanitation Partnership
 Global Water and Sanitation Partnership

United Kingdom

UNIVERSITY OF LEEDS
 Lancaster University
 Loughborough University
 WEDC Developing knowledge and capacity in water and sanitation

The Netherlands

UNESCO United Nations Educational, Scientific and Cultural Organization
 IHE DELFT Institute for Water Education in partnership with UNESCO

Germany

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Switzerland

World Health Organization
 eawag aquatic research

Ghana



Ministry of Water Resources and Sanitation

Rwanda



Ministry of Infrastructure



Rwanda Water and Forestry Authority

WaterAid



CSE Water Programme Partnership : Forging partnerships and building capacity across the world

Nepal



Ministry of Physical Planning and Works

guthi



Centre for Integrated Urban Development

Bangladesh

WaterAid



BRAC UNIVERSITY
Inspiring Excellence

Republic of South Africa



WATER RESEARCH COMMISSION




UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

Egypt




NWRC
National Water Research Centre

Kenya



Kenya Water Institute



Jomo Kenyatta University of Agriculture and Technology

Sri Lanka



Ministry of City Planning and Water Supply



Lanka Rainwater Harvesting Forum

Thailand



Asian Institute of Technology
1959



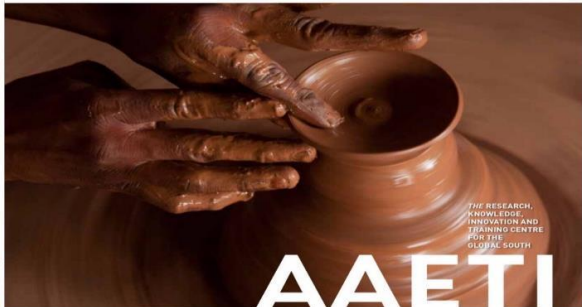
AAETI



Partners



School of Water and Waste



THE RESEARCH, KNOWLEDGE, INNOVATION AND TRAINING CENTRE FOR THE GLOBAL SOUTH
AAETI
ANIL AGARWAL
ENVIRONMENT
TRAINING
INSTITUTE



A **teaching - learning and innovation centre** that is designed to find appropriate and **affordable solutions** for key problems of **India and the global south.**



About the CSE-NMCG Programme

➤ Vision:

Making **Ganga basin cities water-sensitive** for improved river health.

➤ Aim:

Capacity building initiatives, action research and developing model projects for making cities in the Ganga basin water-sensitive, by **improving the river flow and health with water-sensitive urban design and planning.**

➤ Objectives:

- Sensitize and **build capacities of 1,300+ municipal and state functionaries**, elected representatives and other key actors as well as the National Mission for Clean Ganga (NMCG) team in making cities water-sensitive.
- Help improve **convergence of programmes** like Jal Jeevan Mission, Atal Bhujal Mission, Jal Shakti Mission, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and Swachh Bharat Mission.

➤ Programme Tenure: **3 years**



Three Year Activity Plan:

- # **40+ activities over 3 year** - 24 Training (incl. 12 no. online) , 12 webinars , annual knowledge conclaves & field exposure visits for **capacity building of 1300+ state / development authorities / municipal functionaries**
- # Develop **Practitioner's Guide (5 no.s) on thematic focus areas**
- # **Helpdesk & Web portal** for handholding support to design and implement model WSUDP intervention as model projects



Programme Highlights



CAPACITY BUILDING

To improve capacities and understanding about issues of decentralized water management and augmenting water supply through rainwater harvesting, decentralized sewage including septage management and reuse or recycling of wastewater.



RESEARCH

To secure sustainability in urban water management for improved river flow and health.



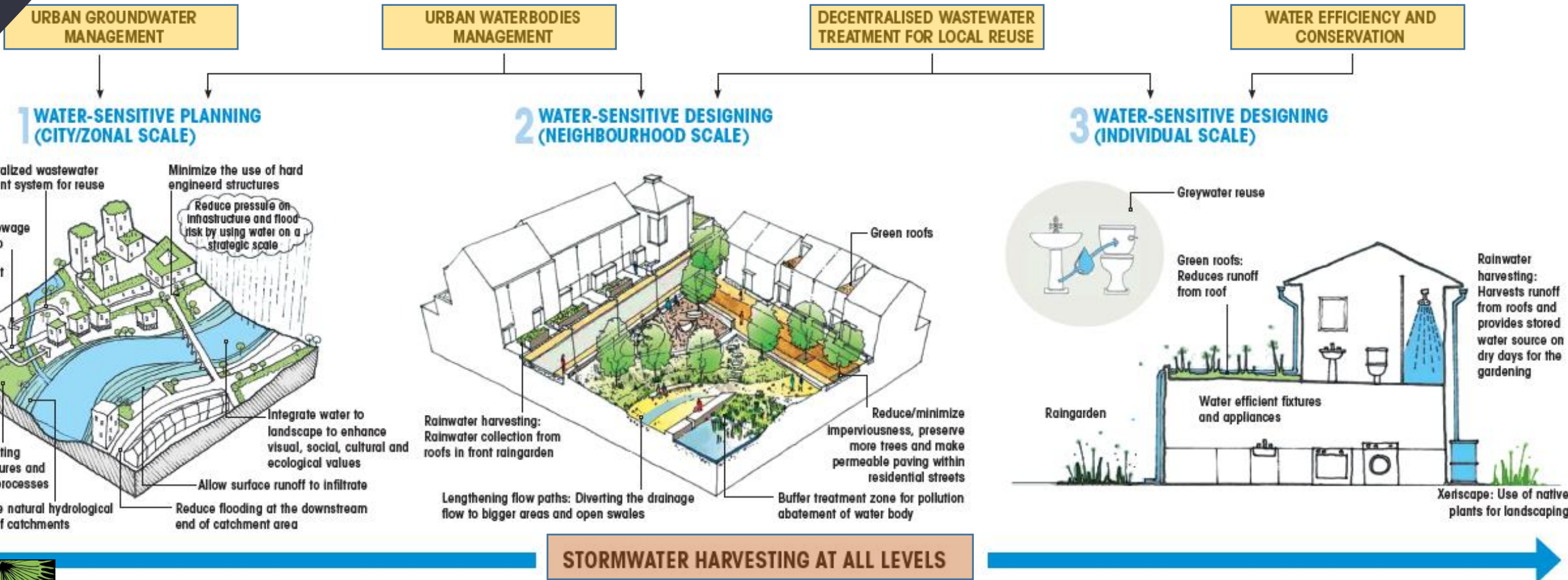
**TECHNICAL KNOWLEDGE SUPPORT
FOR MODEL PROJECTS**

To increase knowledge about best practices regarding sustainable water and wastewater management including rainwater harvesting; sewage treatment; reuse and recycling of wastewater; water efficiency; and conservation, protection and management of urban water bodies;

Key Thematic Focus Areas

The comprehensive vision of this project is to promote water- sensitivity of cities in the Ganga Basin. The vision is being achieved through five key thematic focus areas

Water Sensitive Urban Design & Planning - Concept and Approach



Capacity Building & Action Research: Oversight Planning Committee (18 members)

An advisory committee comprising sector experts to strengthen the efforts of CSE for efficient design and delivery of the proposed capacity building project has been developed.

WATER SENSITIVE URBAN DESIGN & PLANNING

RAINWATER HARVESTING, WATER EFFICIENCY & CONSERVATION AND DECENTRALISED WASTEWATER TREATMENT & LOCAL REUSE.



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SEES, BB Ambedkar
University, Lucknow



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Managing Director,
EEPCL



Himanshu Joshi
Professor, Department
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IIT Roorkee



Deepak Khare
Professor, Water
Resources Development
& Management,
IIT Roorkee



Manu Bhatnagar
Principal Director,
Natural Heritage
Division, INTACH,
New Delhi



S.K. Sharma
Groundwater Expert
Former Member
(Technical), CGWB



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Department of Earth
Sciences, IIT Kanpur



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Associate Professor
Nalanda University,
Bihar



Shashank Shekhar
Professor (Geology),
Delhi University



Mohit Ray
Independent
Environmental
Consultant
& Activist



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Associate Professor,
IIT Kharagpur



Sumit Sen
Head and Associate
Professor, Department
of Hydrology,
IIT Roorkee



Victor Shinde
Sector Coordinator for
Water and
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Nadeem Khalil
Professor, Department of
Civil Engineering,
Aligarh Muslim University



K.J. Anandha Kumar
Scientist
(Hydrogeologist)
(Retd.), CGWB



Meenakshi Dhote
HOD, Dept. of
Environment Planning,
SPA, Delhi



Ritesh Kumar
Head, Wetlands
International, South
Asia, WI-SA



Venkatesh Dutta
Professor,
SEES, BB Ambedkar
University, Lucknow

Capacity Building & Action Research: External Trainers (29 in nos.)

WEBINARS & ONLINE TRAININGS



Rajiv Ranjan Mishra
Director General
National Mission for
Clean Ganga (NMCG)
India



Sunita Narain
Director General
Centre for Science and
Environment (CSE)
India



G. Mathi Vathanan
Principal Secretary,
HUDD, Odisha



Vandana Menon
Independent
Consultant, New Delhi



Stanley Samuel
CEO Ecosoft Pvt Ltd,
Singapore



Sanjay Prakash
Managing Director
SHIFT Architects



Abhinav Pandey
Head of Studio
SHIFT Architects



Jigisha Jaiswal
C-WAS CEPT,
Ahmedabad



Victor Rana Shinde
Lead: Water and
Environment
NIUA



Somnath Sen
Retd. Associate
Professor, IIT
Kharagpur



Mr Manu Bhatnagar
Principal Director,
Natural Heritage Division,
INTACH, New Delhi



Dr Ritesh Kumar
Head,
Wetlands
International,
South Asia



Ashok Kumar Singh,
IAS,
Executive Director
(Projects),
NMCG



Dr Ravinder Kaur
Principal Scientist,
WTC,
IARI



Dr Mohit Ray
Environmental
Consultant and
Activist



Tanmay Kumar
Project Engineer
CH2M HILL



P.Z. Thomas
Managing Director
EEC Pvt. Ltd



Jamie Ewert
Monash University
CRC for Water
Sensitive Cities



Sandhya Haribal
Senior Project
Manager
CDD Society



Eli Cohen
Founder and CEO,
Ayala Water &
Ecology, Israel



**Vijay Kumar
Chaurasia**
Joint Advisor,
CPHEEO, MoHUA,



Nadeem Khalil
Professor
Aligarh Muslim
University



**Dr K.S.
Jayachandran**
(Delhi Pollution
Control Committee)



Veena Srinivasan
Senior Fellow
(ATREE), Bangalore



S. Vishwanath
Director-Biome
Environmental
Solutions, Bangalore



Vivek Jangde
Dy. General
Manager
ESTPL



**Dr Mansee Bal
Bhargava**
(EDC), Ahmedabad



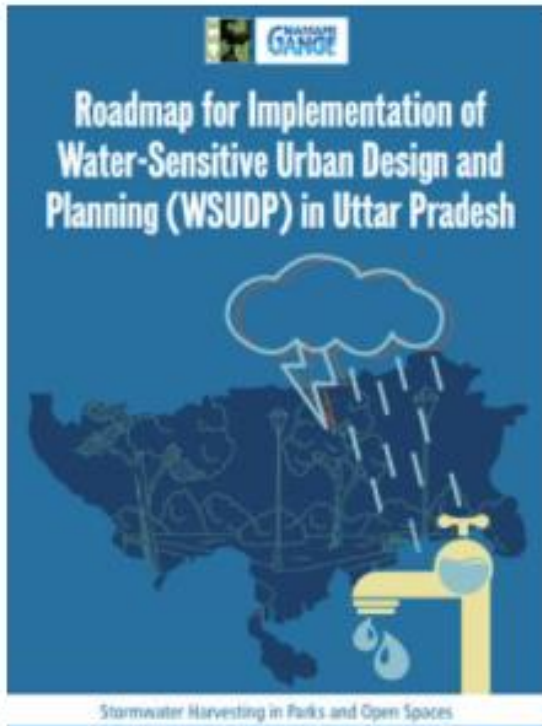
Ramveer Tanwar
Pondman
Environmentalist



Lokendra Thakka
Officer Incharge,
GoMP State
Wetland Authority

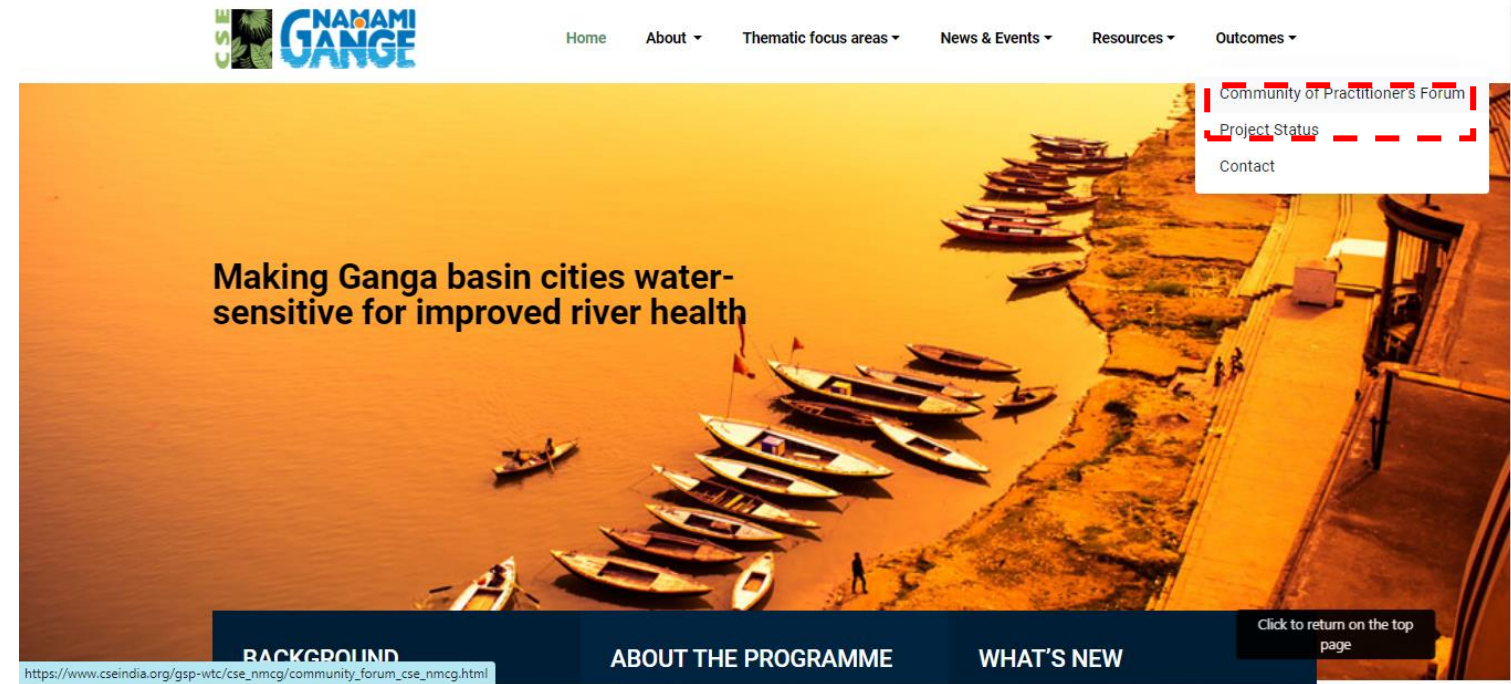
RESIDENTIAL TRAININGS

Report



Total Downloads: 837

Programme Brochure in Hindi and English



Web Portal and Helpdesk



Action Research

Technical Support

Outreach



About the Conclave cum Sensitization Workshop on Making water sensitive cities in Ganga basin aimed at improving river health/flows

The knowledge conclave is one of a series of activities under the 3-year partnership (2021-24) between Centre for Science and Environment (CSE), New Delhi, and National Mission for Clean Ganga (NMCG) for making water sensitive cities in Ganga basin' aimed at improving river health/flows.

Aim

- CSE has developed a set of learning collaterals under the NMCG-CSE partnership. To present them for peer review and to engage to develop a shared understanding of challenges and priorities in water, storm water, lakes and water bodies, decentralised waste water treatment systems and septage management challenges.
- The conclave is aimed at generating a deeper insight and engagement with key experts and city officials, academia and NGOs, on these critical issues.
- To use this opportunity to engage with a larger audience on what is appropriate for a global south water sensitive cities framework, as a contribution to river basin cities and to the global discourse.

