



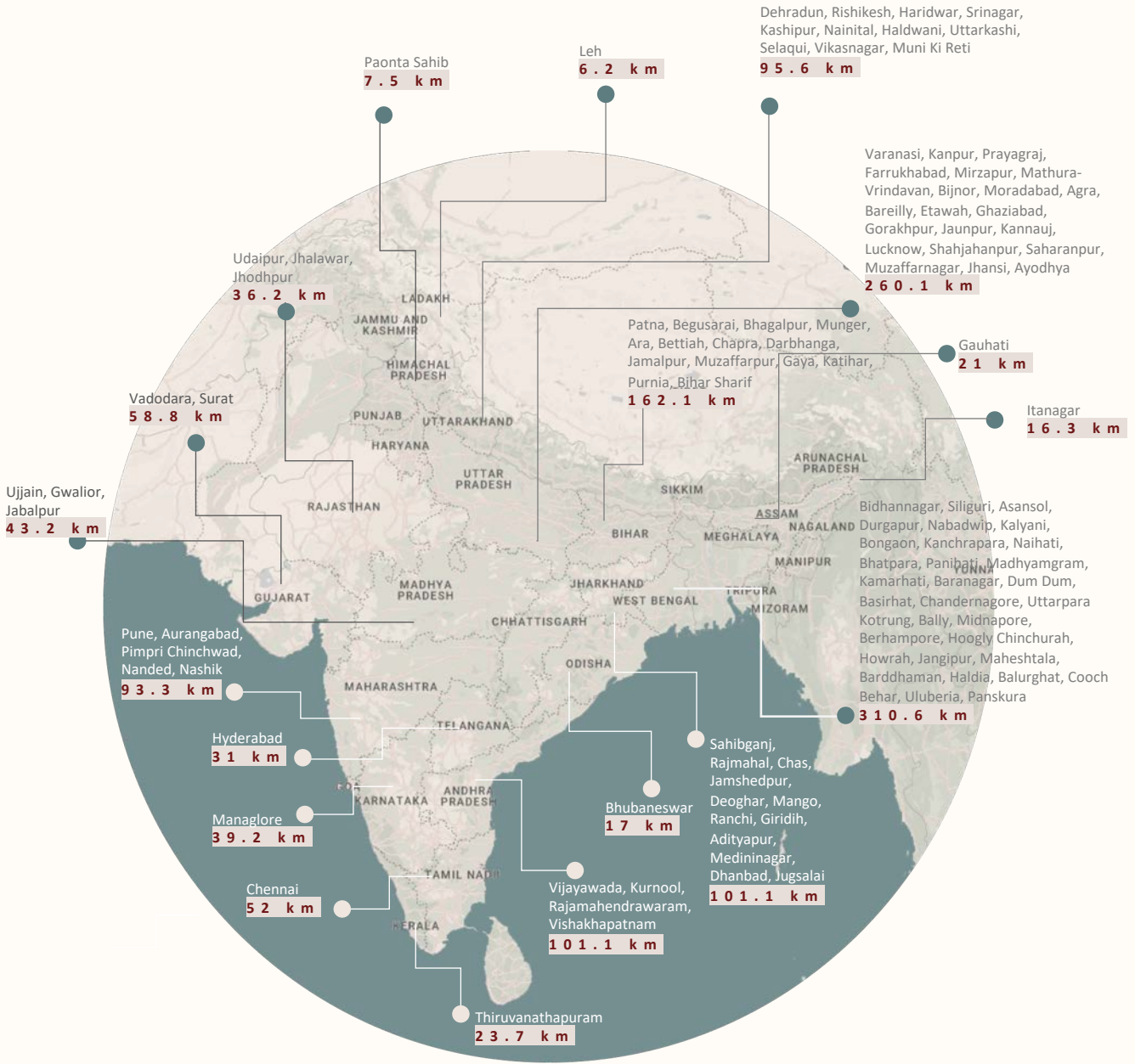
# RIVER CITIES ALLIANCE

QUARTERLY NEWSLETTER

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# CITIES SNAPSHOT



## RIVER LENGTH



119  
CITIES



19  
STATES



78  
RIVERS



28  
RIVER BASINS



96  
AMRUT CITIES



31  
SMART CITIES

# MAKING RIVER-SENSITIVE MASTER PLANS' TRAINING WORKSHOP ORGANISED



To expand the knowledge sharing and capacity building in Northeast India,



## KEY TAKEAWAYS

Getting river-sensitive components prioritised for more than 50 draft master plans of towns in Assam

Enhancing the river-connect with the people of Assam through regional festivals like 'Basant Panchami Mela

Activating river edges for public access, and strengthening the livelihood potential of the Brahmaputra river through master plan instruments and decisions.



Organised a two-day workshop in Guwahati on **'MAKING RIVER-SENSITIVE MASTER PLANS'** on 20 – 30 May 2023.

Over **50 planners** from across the state attended the workshop.

## WORKSHOP ON 'WATER AND RIVER SENSITIVE URBAN DEVELOPMENT' HELD FOR ARCHITECTURE AND PLANNING STUDENTS



An inception workshop on 'Water and River Sensitive Urban Development' was conducted at the Amity School of Architecture and Planning, Amity University, Noida with students of B.Plan, B.Arch, and M.Arch, on 2 May 2023, by the Water and Environment Vertical at NIUA.

The workshop aimed at helping students understand the value of rivers in mainstreaming river-centric thinking into a city's long-term vision. The session helped the students orient themselves to the different projects being undertaken by NIUA for holistic management of urban rivers.

# NIUA-NMCG ORGANISE 'RIVER CITIES ALLIANCE GLOBAL SEMINAR'



WORLD BANK



ASIAN DEVELOPMENT BANK



Japan International  
Cooperation Agency



Bank aus Verantwortung



To expand the scope of the River Cities Alliance (RCA) outside India, the National Mission for Clean Ganga (NMCG) in association with the NIUA organised the 'River-Cities Alliance Global Seminar: Partnership for Building International River-Sensitive Cities' on 4 May 2023 in New Delhi.

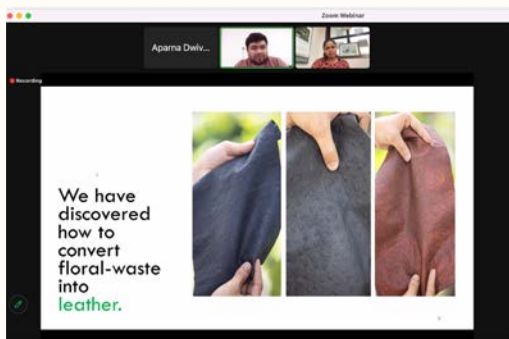
The seminar witnessed participation from Embassies/High Commissions of select countries and their respective river cities in order to highlight objectives, achievements, and potential collaborative outcomes of RCA. State Missions for Clean Ganga (SMCGs) and funding agencies like World Bank, ADB, JICA & KfW also took part in the discussions.

## BRAINSTORMING MEETING FOR MAINSTREAMING 'RIVER-CENTRIC THINKING' INTO ACADEMIA

NIUA and the National Mission for Clean Ganga (NMCG) organised a brainstorming session with the Heads of 18 diverse educational institutes across India on 22 May 2023. Some of the key suggestions that the Professors made for strengthening river thinking in academia included;



## THE 'RECYCLING FLOWER WASTE INTO USEFUL PRODUCTS' WEBINAR



A webinar centered around the remarkable story of a start-up that is revolutionising the recycling of flower waste into useful products was held on 23 June 2023. Apurva Misal, Co-Founder and Head of Marketing and Sales at PHOOL was the distinguished speaker.

He shared the extraordinary possibilities that arise from recycling flower waste, and how it can bring about positive changes for both the environment and society.

## 'MANAGING URBAN RIVERS – FROM PLANNING TO PRACTICE' TRAINING WORKSHOP



NIUA and NMCG organized a two-day training workshop on 'Managing Urban Rivers – From Planning to Practice' in Nainital, Uttarakhand on 15 -16 June 2023. The workshop brought together officials from 11-member cities of the River Cities Alliance (RCA) in the state.

The participants delved into the intricacies of urban river management, focusing on the implementation of the innovative Urban River Management Plan (URMP) framework. 19 dedicated officials participated, who represented cities such as Nainital, Kashipur, Srinagar, Haridwar, Muni Ki Reti, Vikasnagar, Rishikesh, Haldwani-Kathgodam, Dehradun, Rudrapur, Ramnagar, and Bhawali.

NIUA AND NMCG ORGANIZED A TWO-DAY TRAINING WORKSHOP ON 'MANAGING URBAN RIVERS - FROM PLANNING TO PRACTICE' FOR RCA MEMBERS FROM WEST BENGAL IN KOLKATA, WEST BENGAL ON 27 -28 JUNE 2023.



The workshop was a wonderful platform for knowledge sharing, networking, and capacity building in urban river management.

**over 40 participants from 24 ULBs participated** and gained valuable insights and practical strategies to implement in their respective cities. The participants delved into the intricacies of urban river management, focusing on the implementation of the innovative Urban River Management Plan (URMP) framework.

K E Y L E A R N I N G S

- A river is not a standalone feature. It is a system of interconnected elements. Managing the river means managing this system.
- Several actions for urban river management require a long-term commitment. Cities need to be prepared for a sustained effort to achieve positive outcomes.
- The role of the Municipal Commissioner/Executive Officer in urban river management is crucial. They possess the convening authority to bring together different agencies and stakeholders, enabling effective coordination of actions and efforts.
- Turning challenges into opportunities is not just rhetoric. It is practically possible. Participants learned about innovative initiatives such as utilizing water hyacinths for creating books, sarees, and artifacts, as well as using plastic waste in the construction of roads.
- Citizens have a pivotal role in sustainable river management. Cities must involve them in the journey.



# MANAGING URBAN RIVERS – FROM PLANNING TO PRACTICE' TRAINING WORKSHOP

NIUA and NMCG organized a two-day training workshop on 'Managing Urban Rivers – From Planning to Practice' in Nainital, Uttarakhand on 15 -16 June 2023. The two-day training program on Urban River Management Plan Framework received participation from more than 18 cities from Uttar Pradesh. The participants deliberated on the 10-point agenda of URMP and how the same can be implemented in their respective cities.



## KEY HIGHLIGHTS OF THE DAY 1



1. Sh. Vishal Singh, Municipal Commissioner, Ayodhya Nagar Nigam emphasized on the importance of managing the urban rivers in a holistic manner through URMP framework.



2. Sh. Praveen Mishra, APD, SMCG-UP talked about the initiatives that are being taken in the state for the rejuvenation of Ganga and its tributaries



3. The Urban River Management Framework was introduced and experience from cities like Ayodhya, Moradabad and Bareilly was shared with the participants



4. Pilibhit and Badaun onboarded in the River Cities Alliance



5. City officials visited three sites (1) Samda lake, which is being rejuvenated by the development authority, (2) Flower waste processing site, where PHOOL.CO is upcycling the flower waste into incense stick and cones (3) Guptar ghat on the bank of Sarayu river developed by Ayodhya development authority and irrigation department

# Cities Corner : Ayodhya

How Ayodhya is  
Strengthening its  
Relationship with the  
Saryu River



Ayodhya is a city that needs no introduction. With strong connotations to our traditional belief, the city is fast becoming a hub for tourists from across the country. That the area under Ayodhya Development Authority is set to grow from 133 to 873 square kilometers speaks volumes of the extent of expansion that has been envisaged. While there is going to a spurt of development going forward, it is crucial to ensure that this development does not come at the cost of the environment. One of these vital environmental features in the city is the Saryu River, which so far has been bereft from pollution concerns. However, the burgeoning development that is planned in the future can tilt this delicate balance. To ensure a symbiotic relationship in the river, going forward, in 2022, the city embarked on the preparation of the river management plan for the Saryu River.

Incidentally, Ayodhya is a member of India's River Cities Alliance that was established by the National Institute of Urban Affairs (NIUA) and the National Mission for Clean Ganga (NMCG) in 2021. The objective of the River Cities Alliance is to create a platform for river cities across India to ideate and discuss solutions for managing different aspects of urban rivers.

NIUA and NMCG provide handholding support to any member city that is interested in enhancing its relationship with their rivers. Ayodhya decided to leverage this and requested support from NIUA for the preparation of the river management plan for the city. At the onset, NIUA introduced the city officials to the national framework that they had developed in 2020 for managing urban rivers. The framework which is called Urban River Management Plan (URMP) framework requires cities to take actions against ten agenda items, covering environmental, social, and economic aspects. This framework is markedly different from the conventional approach to manage rivers in India that has solely focused on pollution control. Because the URMP framework considers several aspects beyond mitigation of pollution, it is more holistic and if implemented correctly, creates a premise for sustainable management of rivers.





**ENVIRONMENT**



**ECONOMICS**



**SOCIAL**

Box 1: The ten-point agenda of the Urban River Management Plan framework

Among the first activities that the city did was to form a Working Group for the preparation of the URMP for Ayodhya. The Working Group was chaired by the Municipal Commissioner and featured representation from diverse government agencies such as the Ayodhya Municipal Corporation, Ayodhya Development Authority, Forest Department, Tourism Department, Irrigation and Flood Control Department, Jal Nigam, NGOs, and local universities. The purpose of the Working Group was to drive the preparation of the Plan as well as to facilitate inter-departmental coordination and cooperation, which is so vital for interdisciplinary plans of this nature.

A fundamental step for any Plan is developing a robust baseline to understand the 'status quo' of the existing conditions on the ground vis-à-vis different parameters. Ayodhya also followed the same procedure and developed several spatial maps and databases to inform decisions making. One such map, for example, marked the location and areas of all water bodies (lakes and ponds) in the city. Another marked the areas within the city that are not serviced by the existing sewer network. These baseline maps provided valuable and tangible insights to the Working Group to identify and propose actions (or interventions) that need to be taken up on a priority basis against the ten-point agenda of the URMP framework. Over a period of four months, the Working Group decided upon nineteen interventions for Ayodhya's URMP that would be implemented over the next five years. The following sections highlight some of these interventions.

One of the issues that emerged strongly from the baseline analysis was the lack of a robust database of water bodies in the city. Some of the water bodies have been geotagged marked on GIS layers. However, these are only point locations with no other information available besides their coordinates. To plug this gap, one of the interventions under Ayodhya's URMP is for the city to prepare a comprehensive repository of the water bodies in the city on a GIS-based portal. At a minimum, this database will have information about the physical, chemical, and ecological parameters for each water body. City officials will use the 'Urban Water Body Diagnostic Tool' for this purpose which has been developed by NIUA and UNESCO. Such an inventory will provide valuable insights into the status and

condition of each waterbody, allowing for targeted interventions.

While one bank of the Saryu River in Ayodhya is inhabited, the opposite edge of the river is pristine and untouched by human activities. The URMP recognizes that unless regulatory measures are put into place today, there is a high possibility that the pristine area may succumb to development pressures. To prevent this from happening, the URMP has earmarked a buffer width (also called riparian buffer) of 30 meters from the edge of the river throughout its length in the city. This buffer will feature a combination of green-grey bioengineering solutions for urban flood control, integrating ecological benefits without compromising on the rights of locals and tourists visiting Sarayu.

The URMP for Ayodhya also emphasizes strongly on the reuse of treated wastewater. Currently, there is hardly any reuse. However, the city acknowledge the importance of reuse to reduce the demand for freshwater from the Saryu and in the process helping it sustain its natural functions. To begin with the city will ensure that only treated wastewater is used for fulfilling the water requirement of parks and gardens within three kilometers of all sewage treatment plants. In due course, the treated wastewater will be used for other purposes such as washing buses, cleaning roads, and developing artificial water bodies for groundwater recharge.

Ayodhya's URMP also features several eco-friendly practices for tourism and enhancing river-related livelihoods. For example, the city will replace traditional diesel-powered boats with solar-powered e-boats for boating

activities at Guptar Ghat and Ram ki Paidi. This shift will reduce pollution and contribute to a more environmentally friendly tourism experience. Another initiative involves promoting community-based organic farming through agritourism. River islands and floodplains in Ayodhya offer fertile soil and water availability, making them suitable for agriculture. Native crops such as Indian mustard, millets, and oilseed cultivation, have been strongly promoted in the Plan.



*Box 2: Glimpse of the Saryu-based tourism activities in Ayodhya*

Through another novel initiative, the URMP for Ayodhya has proposed the setting up of a river sanctuary. The purpose of this sanctuary is to protect the rich biodiversity of the Saryu River—Gharials, Gangetic dolphins, Freshwater turtles, and the rare Gangetic Shark. The Ayodhya Development Authority along with the State Forest Department, Irrigation and Water Resources Department, and Tourism Department, would coordinate efforts to establish and manage the sanctuary, ensuring controlled and regulated activities that prioritize wildlife conservation over tourism.



A river, in so many ways, is a city's greatest environmental asset. How a city manages this asset will go a long way in determining its sustainable development trajectory. Ayodhya has taken steps in the right direction by developing a dedicated plan for the River Saryu. As the city starts implementing the interventions proposed in the Plan, it takes a step further towards the grand ambition of making Ayodhya a world class city.

A central tenet of Ayodhya's URMP is to strengthen the citizen-river connect, bringing more people to the river, thereby creating a social value for the river. Therefore, the Plan proposes a dedicated river-based sensitization program to involve schools, colleges, and youth organizations in river conservation and rejuvenation activities. Under the program, dedicated spaces along the river stretch have been earmarked for schools and colleges to organize classes, allowing youth to learn more about the Sarayu River and develop sensitivity towards it. The Plan also proposes celebrating an annual 'Sarayu Nadi Utsav' where activities like cleanliness drives, yoga sessions, and cultural programs will be organized.



Box 4: Saryu Aarti performed on the banks of the river