



Centre for River Sensitive Cities

KEY ACHIEVEMENTS



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National Institute of Urban Affairs (NIUA)
and
National Mission for Clean Ganga (NMCG)
Collaboration





Creating national level frameworks and advisories

- 1** Framework for Urban River Management Plan (URMP)
- 2** Strategic Guidelines for "Making River-Sensitive Master Plans"
- 3** Manual and web tool - "Urban Water Body Diagnostic Tool"
- 4** Advisories on multiple aspects related to urban river management

Institutional mechanisms for urban river management

- 5** National "River Cities Alliance - A Collaborative Effort in making River Sensitive Indian Cities"
- 6** Engagement with Town Planners of river cities for integration of river-thinking in long-term planning

Implementation

- 7** Urban River Management Plans for Kanpur, Ayodhya, Chhatrapati Sambhajnagar, Moradabad and Bareilly
- 8** Integrating river-thinking in Draft Master Plan Delhi, 2041

Advocacy and Capacity Building

- 9** National Sponsored Thesis Competition on "Re-imagining Urban Rivers"
- 10** Knowledge Products on River Interaction with Cities
- 11** Online Certification Courses on Urban River Management
- 12** Book entitled "Managing Urban Rivers: From Planning to Practice"
- 13** DHARA (**D**iving **H**olistic **A**ction for Urban Rivers) - first annual meeting of the River Cities Alliance



FRAMEWORK FOR URBAN RIVER MANAGEMENT PLAN (URMP)



National Institute of Urban Affairs (NIUA) & National Mission for Clean Ganga (NMCG) developed a unique first-of-its kind strategic framework for managing urban river stretches, called the “Urban River Management Plan”. This framework was launched on 4th November 2020, in the presence of Sh. Gajendra Singh Shekhawat, Hon'ble Minister for Jal Shakti, GoI.

The framework essentially requires all cities to plan and implement their actions under a ten-point agenda to ensure that the cities act as inter-related operational units working towards a common vision for the river.

The framework is quite unique on several counts.

- It uses a systems approach to address environmental, economic and social aspects of river management.
- It has been developed as a generic framework that is applicable for any river city. Yet, the framework allows for city-specific nuances to be captured.
- It has been designed to complement and synergise with existing plans and on-going missions in the city.
- It focuses on both long-term interventions as well as short-term interventions.

Recent Developments

- NIUA and NMCG are preparing the URMPs for 60 cities, with the support of the World Bank and other implementing partners.
- ATI (West Bengal), RCUES (Uttar Pradesh), Centre for Good Governance, CEPT University, USAID have expressed interest to integrate URMPs in their training modules.



Creating national level frameworks and advisories

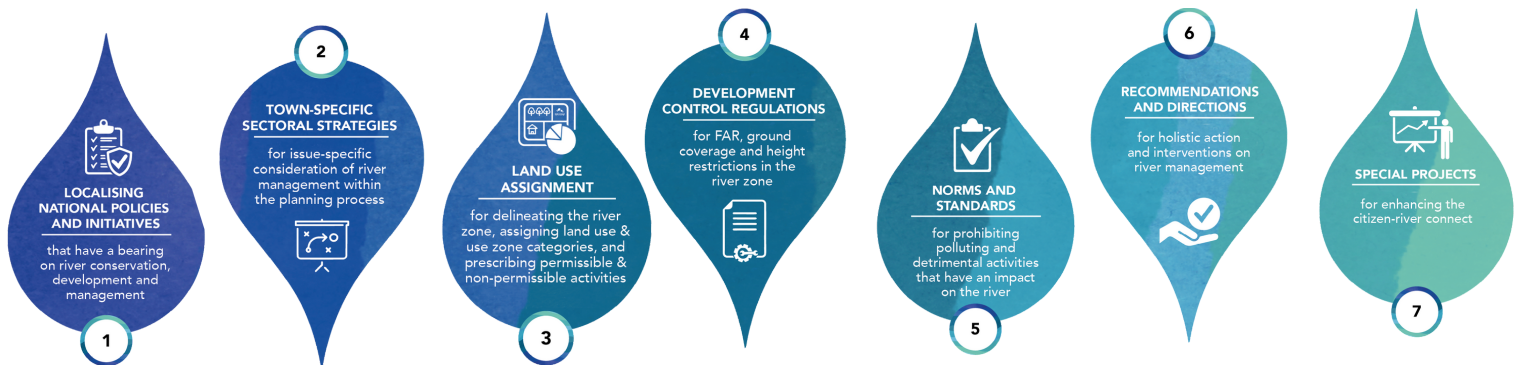
STRATEGIC GUIDELINES FOR MAKING RIVER-SENSITIVE MASTER PLANS

National Institute of Urban Affairs (NIUA) & National Mission for Clean Ganga (NMCG) developed Strategic Guidelines for "Making River-Sensitive Master Plans". The purpose of this guidance document is to help city planners across the basin, and the country at large, understand how to integrate river-sensitive thinking into a Master Plan.



These guidelines were launched on 20th June 2021, in the presence of Sh. Gajendra Singh Shekhawat, Hon'ble Minister for Jal Shakti, GoI.

The document elaborates on seven tools and instruments within Master Plans that can be used to address various river-related urban challenges.



Cities interested in Specialised Training

UTTAR PRADESH

- Meerut
- Agra
- Varanasi
- Prayagraj
- Kanpur
- Lucknow
- Gorakhpur
- Moradabad
- Ayodhya

PUNJAB

- Gurdaspur
- Amritsar
- Jalandhar
- Kapurthala
- Ludhiana
- Ropar
- Firozpur
- Patiala
- Sangrur
- SAS Nagar

UTTARAKHAND

- Haridwar
- Rishikesh
- Shrinagar

MAHARASHTRA

- Malakapur
- Pandharpur
- Khalapur
- Kopergaon
- Kannad
- Bhandara

RAJASTHAN

- Kota
- Ajmer
- Jaipur
- Bikaner
- Udaipur
- Jodhpur
- Bharatpur
- Alwar

DADRA & NAGAR HAVELI

- Silvassa

KARNATAKA

- Bagalakot
- Belagavi
- Mudhol
- Hospet
- Hampi
- Kampli
- Sedam
- Davanagere
- Honnalli
- Koratagere
- Mysore
- Srirangapattana
- Kushalanagara

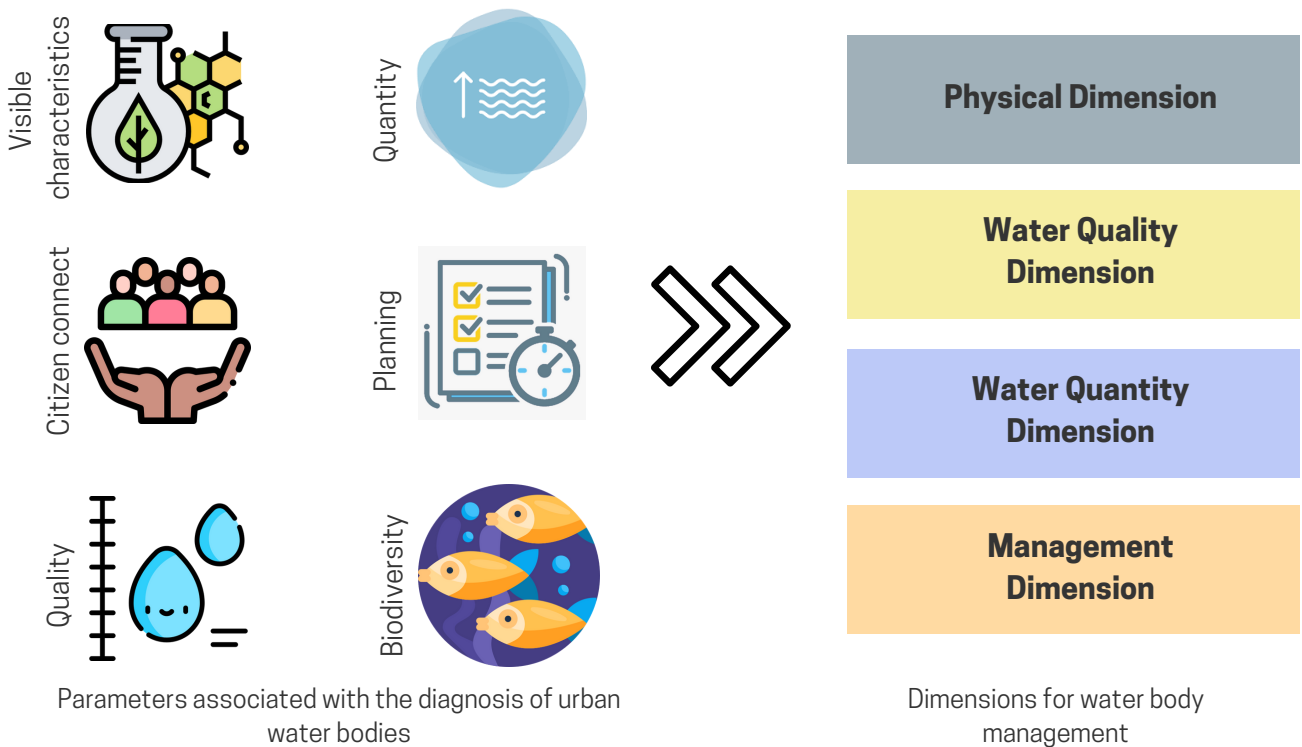
MANUAL ON URBAN WATER BODY DIAGNOSTIC TOOL

The National Institute of Urban Affairs (NIUA) and UNESCO, New Delhi have conducted a research study aimed to create a decision support system for cities to manage the water bodies within their jurisdiction. The outcome of this project is an Urban Water Body Diagnostic Tool that is meant to help city officials in identifying and prioritising actions for rejuvenation of water bodies within any city. This has further been converted into a web-based tool (<http://uwdtool.in/>) by NIUA and NMCG.



The diagnostic tool is based on assessing the status-quo of urban water bodies, in terms of various physical, chemical, biological, and management parameters. Importantly, the tool helps in conducting a rapid assessment that a city can perform easily and periodically in order to identify immediate actions for their management.

The tool was pilot tested to assess the status of water bodies in Visakhapatnam.



Creating national level frameworks and advisories

ADVISORIES/ TOOLKITS/ SOP FOR MANAGING URBAN RIVERS

The National Institute of Urban Affairs (NIUA) and NMCG are preparing advisories, toolkits, SOPs, and compendiums, with a view to manage the urban rivers in a sustainable manner. Based on the available technical information and city experiences, these documents will guide the cities about various aspects of urban river management. Looking at the requirements of Indian river cities, the following documents are being prepared.



Advisory on **“Funding Avenues for River-related Interventions”**



Advisory on **“Planning and Development of Riverine Islands”**



Standard Operating Procedure (SOP) for **“Large Gatherings on River Banks”**



Compendium on **“State-of-the-art Technologies for Water/river Management”**



Digital tool for **“City Water Balance”**



White paper on **“Comparison and Contrast of State Action Plans on Climate Change”**



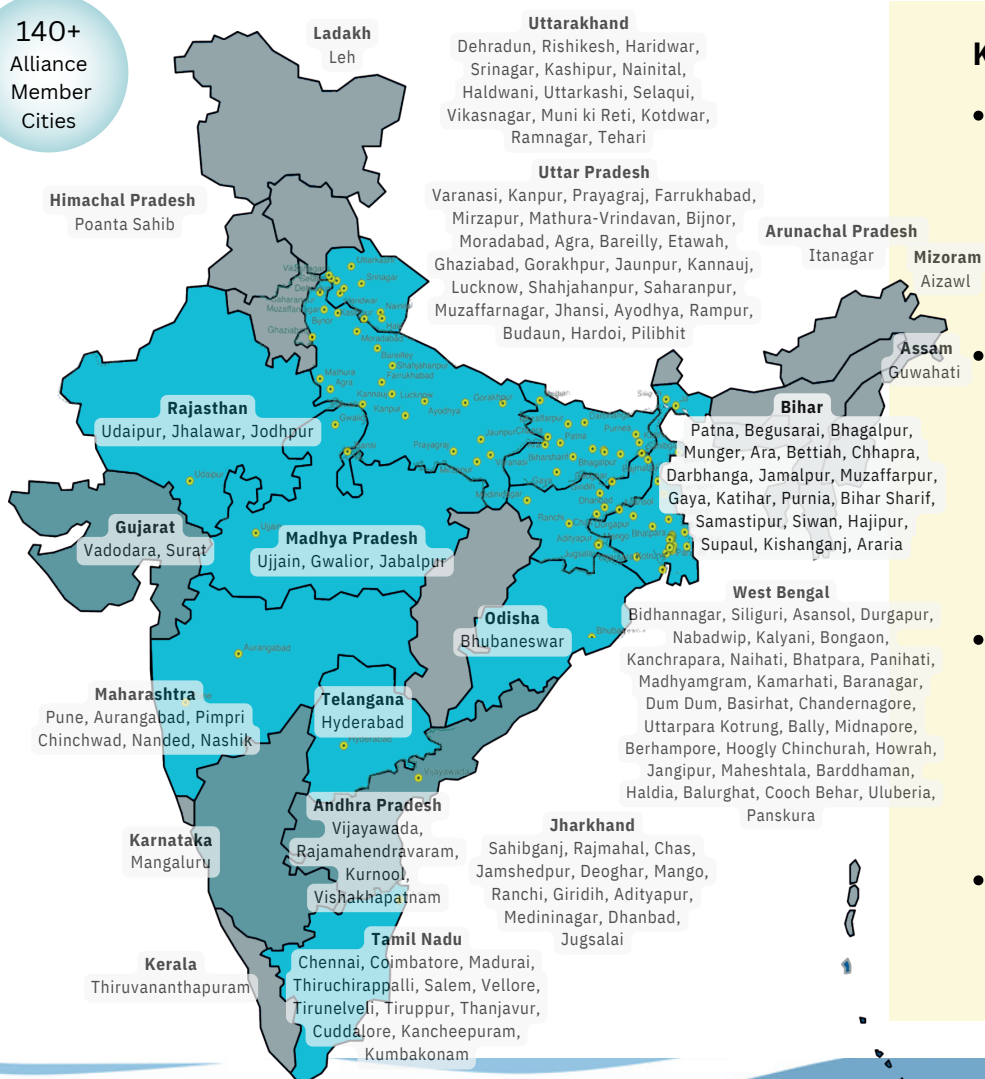
NATIONAL “RIVER CITIES ALLIANCE - A COLLABORATIVE EFFORT IN MAKING RIVER SENSITIVE INDIAN CITIES”

National Institute of Urban Affairs (NIUA) & National Mission for Clean Ganga (NMCG) set up a first-of-its-kind “River Cities Alliance” (RCA) of thirty cities across India (map below). It was formally launched on 25 November 2021, in the presence of the Sh. Gajendra Singh Shekhawat, Hon'ble Minister for Jal Shakti and Sh. Durga Shanker Mishra, Hon'ble Secretary, Ministry of Housing & Urban Affairs.



The World Bank, Embassy of Denmark, UN Environment, Asian Infrastructure Investment Bank, US Army Corps of Engineers and Stockholm International Water Institute have expressed interest to partner and support the Alliance.

140+ Alliance Member Cities



Key Objectives of RCA

- To discuss and exchange information on aspects that are vital for the sustainable management of urban rivers
- To receive dedicated technical and handholding support for implementing interventions for river-sensitive development
- To have access to state-of-the-art knowledge, frameworks, and tools for urban river management
- To help strengthen the governance aspects related to urban river management

Institutional mechanisms for urban river management

ENGAGEMENT WITH TOWN PLANNERS FOR INTEGRATION OF RIVER-THINKING IN LONG-TERM PLANNING

National Institute of Urban Affairs (NIUA), National Mission for Clean Ganga (NMCG) & Town and Country Planning Organisation (TCPO), have been jointly organising Brainstorming Workshops on 'Mainstreaming River thinking into a Master Plan, with the Chief Town Planners and Senior Town Planners of various States and Union Territories (UTs) in India.



The purpose of these workshops is to collectively deliberate on the guidance documents on river-sensitive planning, and explore their application within the river cities in India.

To introduce this concept to the cities, a discussion was organised on 27th August 2022, with the representatives from 23 States/ UTs including Uttarakhand, Bihar, Uttar Pradesh, Jharkhand, Tamil Nadu, Maharashtra, Kerala, Madhya Pradesh (<https://youtu.be/oT3gjhlmLak>)

Moving forward, multiple hands-on training on 'river sensitive planning' are also being conducted with the planning & development authorities of a number of river cities.



Implementation

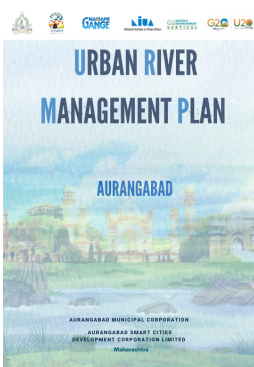
URBAN RIVER MANAGEMENT PLANS (KANPUR, AYODHYA, CHHATRAPATI SAMBHAJINAGAR, MORADABAD & BAREILLY)

National Institute of Urban Affairs (NIUA) & National Mission for Clean Ganga (NMCG) supported the cities of Kanpur, Ayodhya and Chhatrapati Sambhajnagar in preparing their Urban River Management Plans (URMPs). The URMP for Ayodhya and Chhatrapati Sambhajnagar were recently launched on 13th Feb '23 by Shri Gajendra Singh Shekhawat, Hon'ble Minister of Jal Shakti.

Also, NIUA and WWF India are supporting the cities of Moradabad and Bareilly in preparing their URMPs (ongoing).

The URMPs propose a set of interventions in the form of tangible and practical actions, for managing the rivers under a ten-point agenda (or objectives), to ensure the “nirmal” and “aviral” nature of the rivers in the city.

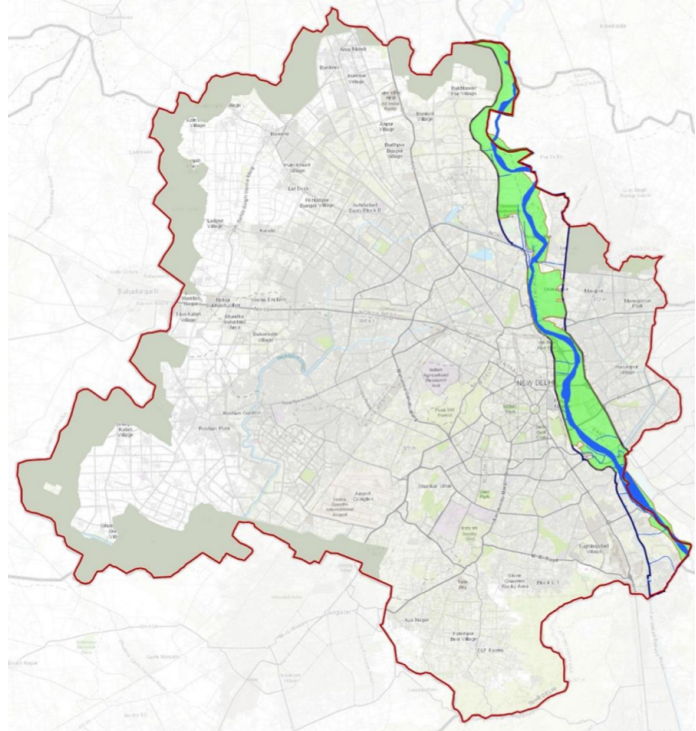
- As a first step, core working groups were set up in the city, to lead the development of the URMP.
- Next, rapid baseline assessments were carried out to understand the ground reality of river-related issues faced by the city.
- On the basis of the rapid baseline assessment, the URMP interventions were identified.



INTEGRATING RIVER-THINKING IN DRAFT MASTER PLAN DELHI, 2041

The National Institute of Urban Affairs (NIUA) in association with the Delhi Development Authority (DDA), has prepared the draft Master Plan for Delhi (MPD) 2041. The guidance documents mentioned earlier have been extensively adopted in the draft MPD-41.

Delhi has adopted a two-pronged approach to rejuvenate the River Yamuna and bring it back to the forefront. This includes specific strategies for management of the river zone as well as broader integrated water management strategies across the city, like:



- Delineation of 1 in 25 year floodplains, or any criteria mandated by competent authority
- Earmarking River Zone (Active floodplain) and Riverfront (Regulated)
- Identification of specific areas as **'interactive zones'**
- **Comprehensive River Development Plan** shall guide protection of the floodplain, as a multi-agency initiative
- **300 m wide green buffer** along the river edge, where ever feasible (Wild grassing or ground-cover for 25-30m and trees beyond)
- **75-100 m wide greenways** along the embankments to encourage **river-people connect** (provision of cycling, walking trails and other spaces for passive activities near the river)
- De-silting of existing wetlands and creating new wetlands by deepening existing depressions, for **catchment of floodwater**
- **Specifically earmarked locations** for socio-cultural and agriculture activities in the flood plains (minimising all adverse impacts of these activities on the river)
- Enhancing public awareness about value of floodplains through media

NATIONAL SPONSORED THESIS COMPETITION ON 'RE-IMAGINING URBAN RIVERS'

National Institute of Urban Affairs (NIUA) & National Mission for Clean Ganga (NMCG) have been organising a national level thesis competition on “Re-imagining Urban Rivers” as a means to sensitise and encourage next generation planners and practitioners to take up projects for harmonious integration of cities and rivers.

The purpose of this sponsored thesis competition is to tap into the intellect and creativity of students to arrive at innovative solutions for re-imagining the outlook and management of rivers that flow through cities and their associated features. This competition provides an opportunity to the selected students with relevant academic background to win a sponsorship, by aligning their academic thesis research with the themes of the competition.

The first season of this competition was launched in 2020. So far, 3 seasons of the competition have successfully completed, with more than 45 riverine project ideas, from students representing prestigious institutions like School of Planning & Architecture, Indian Institute of Technology, National Institute of Technology, CEPT University, Sushant University, SVNIT, Jamia Millia Islamia, Academy of Architecture, Dr. Bhanuben Nanavati College of Architecture, Vignana Bharathi Institute of Technology, Fergusson College, etc.



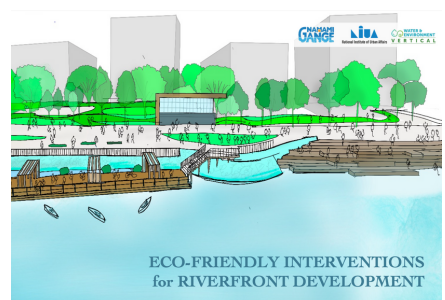
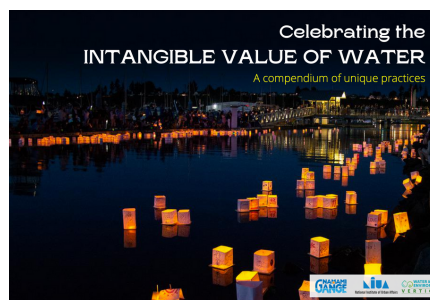
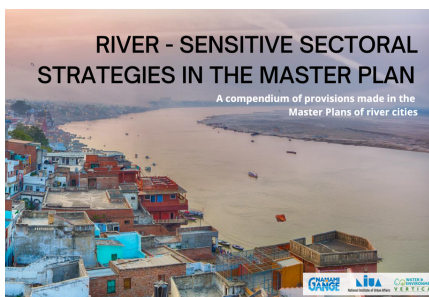
Hardeep Singh Puri
@HardeepSPuri

Commendable effort by @NIUA_India to promote spirit of innovation among youth by engaging with them through programmes such as ISCFP, NUDMFP, Smart Move, Thesis Competition & the new iNIUA repository which innovates solutions for modern urban issues.
niua.in/innovation/

KNOWLEDGE PRODUCTS ON RIVER INTERACTION WITH CITIES

National Institute of Urban Affairs (NIUA) & National Mission for Clean Ganga (NMCG) have produced several knowledge products to help improve the understanding about the interactions between the rivers and cities, with a view to manage these interactions in a sustainable manner. These products share technical information and city experiences about various aspects of urban river management. These products include:

- Comparison & Contrast of River Consideration in the Master Plans of Selected Cities
- Innovations in Urban River Management
- A Compendium of River Management Plans
- Celebrating the Intangible Value of Water - a compendium of unique practices
- Eco-friendly Interventions for Riverfront Development
- River-Sensitive Sectoral Strategies in the Master Plan
- Harnessing the Economic Potential of a River
- Traditional & Indigenous Practices for Climate Resilience in India



ONLINE CERTIFICATION COURSES ON URBAN RIVER MANAGEMENT

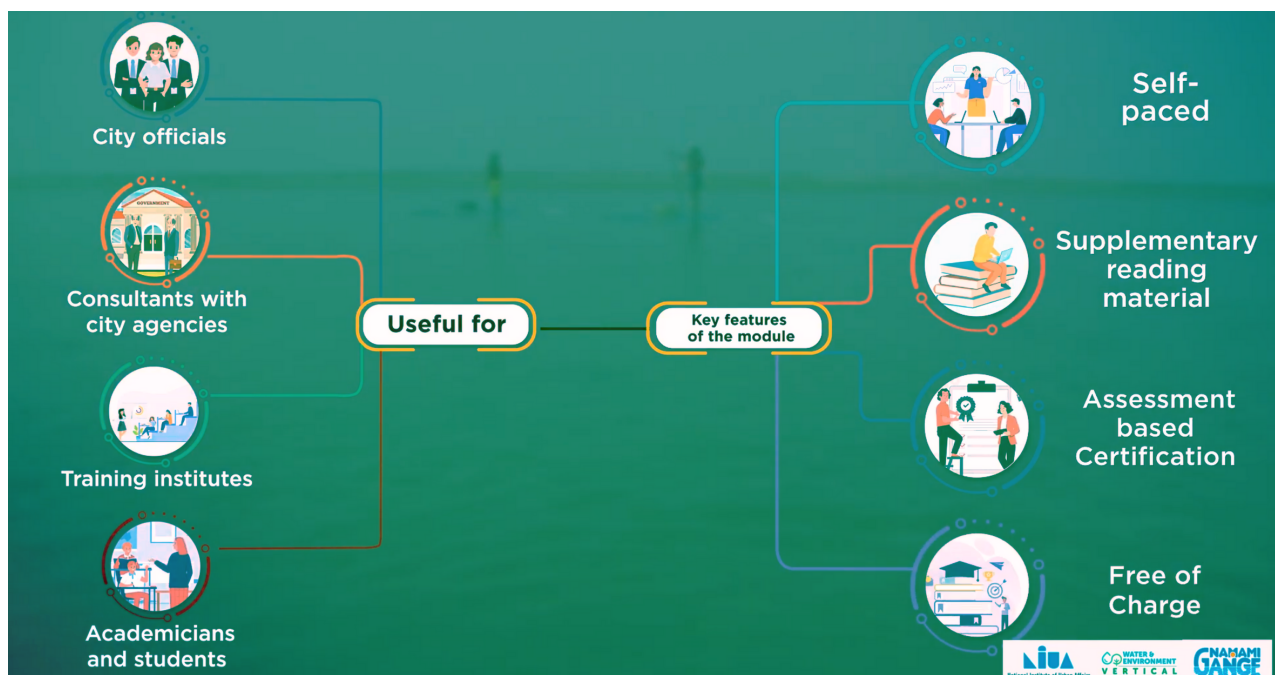
For wider dissemination of the the two key frameworks on Urban River Management prepared by the National Institute of Urban Affairs (NIUA) & National Mission for Clean Ganga (NMCG), the team has produced two Online Certification Courses -

- Online Certification Module on 'Managing Urban Rivers: From Planning to Practice'
(https://nulp.niua.org/learn/course/do_1136550052517314561308)
- Online Certification Module on 'Making River Sensitive Master Plans'
(https://nulp.niua.org/learn/course/do_1136550347906744321351)

Some of the key features of the modules are-

- Developed in the form of Green screen video lectures
- Self paced courses
- Can be accessed free of charge
- Evaluation in the form of multiple choice assessment
- Complemented with supplementary reading material
- Assessment based NMCG and NIUA certification

These modules will be useful for city officials, consultants engaged with city agencies, state planning departments, city planning & development authorities, training institutes, and academicians & students, to enhance. their knowledge on multiple aspects of urban river management.



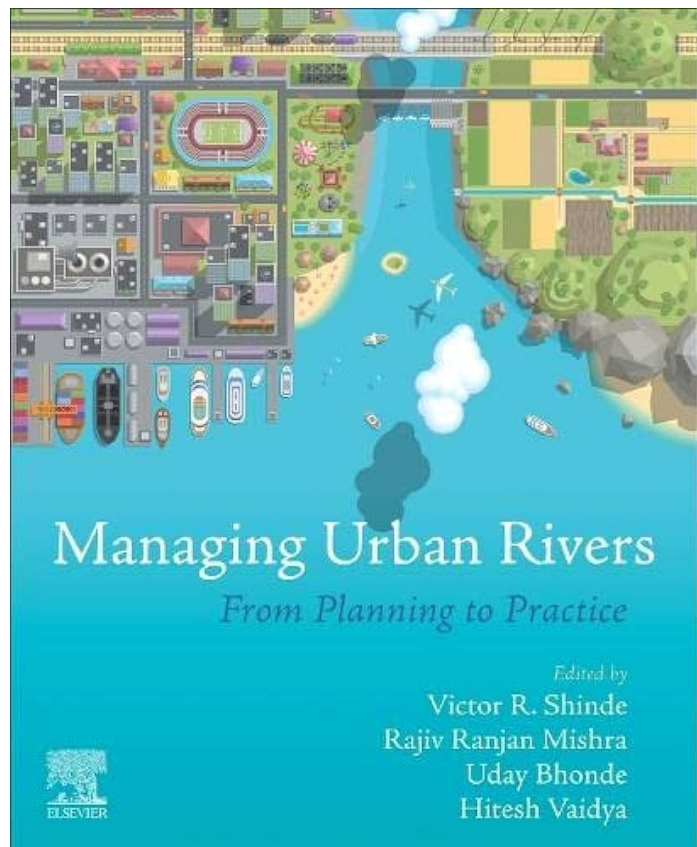
BOOK ENTITLED "MANAGING URBAN RIVERS: FROM PLANNING TO PRACTICE"

National Institute of Urban Affairs (NIUA) & National Mission for Clean Ganga (NMCG) are developing an edited book entitled "Managing Urban Rivers: From Planning to Practice". The objective of the book is to capture the different facets of river management that would be needed for integrating the river within the development landscape of cities in a sustainable manner.

The contents of the book cover the entire spectrum of urban river management from planning to actual on-the-ground implementation. It is meant to be a one stop destination for knowledge on urban river management. The book has eighteen chapters, each written by a national/international expert.

Key features of the book:

- Presents practical, global case studies in almost every chapter
- Provides recommendations for best practices based on lessons from different successful case studies, and well as the expert insights of the authors
- Features contributions from global experts for a unique and specialised approach to the topic of urban rivers



DHARA 2023

FIRST ANNUAL MEETING OF THE RIVER CITIES ALLIANCE

Driving **H**olistic **A**ction for **U**rban **R**ivers (DHARA 2023), the first annual meeting of the members of RCA, was hosted in Pune on 13-14 Feb '23. The primary objective of DHARA 2023 was to provide member city representatives (Municipal Commissioners/Executive Officers, and Senior officials) with an opportunity to spend dedicated time brainstorming, discussing, and learning solutions for urban river management. It featured representation from RCA members; central and state government dignitaries; think-tanks; NGOs, students, and young leaders; national and international experts; funding agencies; private sector; media, and others.

DHARA 2023 specifically looked to:

- Inspire member cities to proactively take up progressive action for urban river management in their cities.
- Shed light on some of the unaddressed issues and challenges for river management in cities, which would help NIUA and its partners in preparing a work plan.
- Facilitate inter-city dialogues and communication to promote peer-to-peer learning.

The Hon'ble Prime Minister of India, Sh. Narendra Modi, also expressed his delight, and best wishes, for the success of DHARA 2023.



सत्यमेव जयते

प्रधान मंत्री
Prime Minister
MESSAGE

It is heartening to learn about the organization of Driving Holistic Action for Urban Rivers (DHARA 2023) Forum in Pune by National Institute of Urban Affairs (NIUA). The fact that the NIUA is serving as the Urban 20 (U20) Technical Secretariat under India's G20 Presidency enhances the pride and honour associated with the occasion.

The U20 theme for 'ensuring water security' underlines one of the major concerns facing nations and societies the world over. Water availability is extremely crucial, especially given the challenges of the 21st century.

Water for every household and every field is essential for individual life and the economy. Fast-paced growth of a nation is inconceivable without water security. One of the priority areas of U20 is to promote urban water security. Good health of rivers is of critical importance in increasing the water security of cities.

Rivers have always occupied a central place in India's heritage and ethos and have traditionally been sources of spiritual inspiration, cleansing and penance. A critical component of the environment and our ecosystem, we have accorded divine status to rivers, worshipping them as a life-giving mother.

River conservation is one of our highest priorities and a way of life in different parts of the country. For the last few years, we have made Namami Gange a template in our mission of river conservation, particularly in urban areas. We are striving to introduce a new thinking on river cities. The establishment of 'River Cities Alliance' (RCA) connecting 95 river cities across the country is one such step in this direction.

The participation of Central and State government dignitaries, international and national experts, NIUA and National Mission for Clean Ganga (NMCG), think tanks, NGOs and thought leaders will lead to engaging discussions on a wide gamut of issues including innovative solutions such as lake and pond rejuvenation, decentralized used water management, enhancing river-related economy, groundwater management and flood management.

The presence of international experts will offer an insight into interesting solutions such as sponge cities, reuse of used water, river health monitoring, pollution control, water sensitive city design and floodplain management practiced in different parts of the world.

Amrit Kaal of next 25 years is an opportunity to develop an important dimension - 'Water Vision @ 2047' to achieve the collective goal of water conservation and enhancing water security and building a glorious, self-reliant India and through it, a better world.

Best wishes to all the stakeholders for successful deliberations at DHARA 2023 and develop a futuristic vision to enhance water security.

(Narendra Modi)

New Delhi
माघ 21, शक संवत् 1944
10th February, 2023





NATIONAL INSTITUTE OF URBAN AFFAIRS (NIUA)

Ministry of Housing and Urban Affairs, Government of India
Core 4B, 1st Floor, India Habitat Centre (IHC),
Lodhi Road, New Delhi – 110003
Telephone: 011 2461 7517 (ext. 214)
urvers@niua.org, <https://niua.in/waterandenvironment/>



NATIONAL MISSION FOR CLEAN GANGA

Ministry of Jal Shakti (Department of Water Resources, River Development & Ganga Rejuvenation) Government of India,
1st Floor, Major Dhyan Chand National Stadium,
India Gate, New Delhi - 110002
Telephone: +91-011-23072900 (901)
admin.nmcg@nic.in, www.nmcg.nic.in