



PARVAT-MANTHAN
Manifestation of Clean and Sustainable Hill States

DIALOGUE ON CLEAN AND SUSTAINABLE HILL STATES

 19th June, 2023

 Silver Oak, India Habitat Centre, New Delhi



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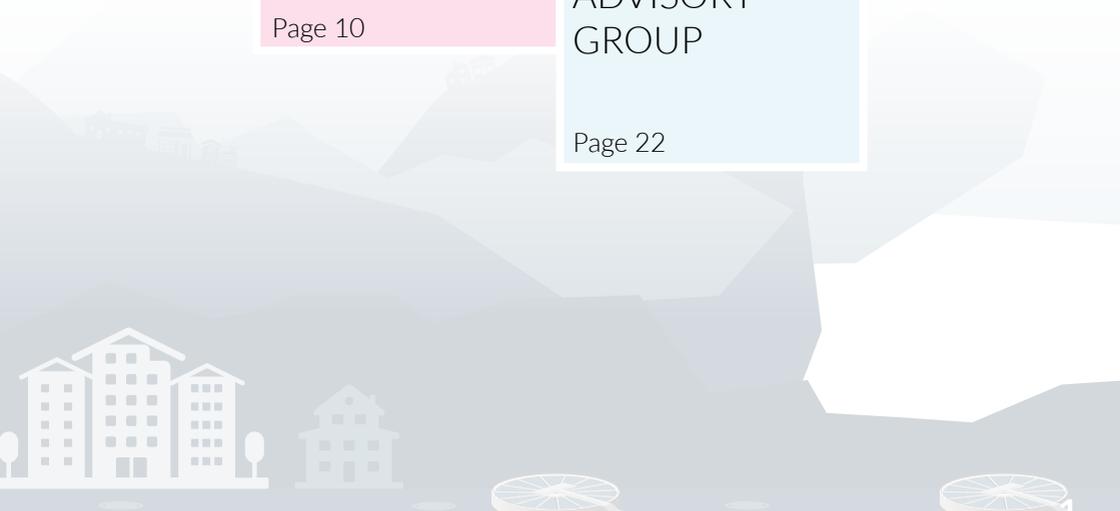
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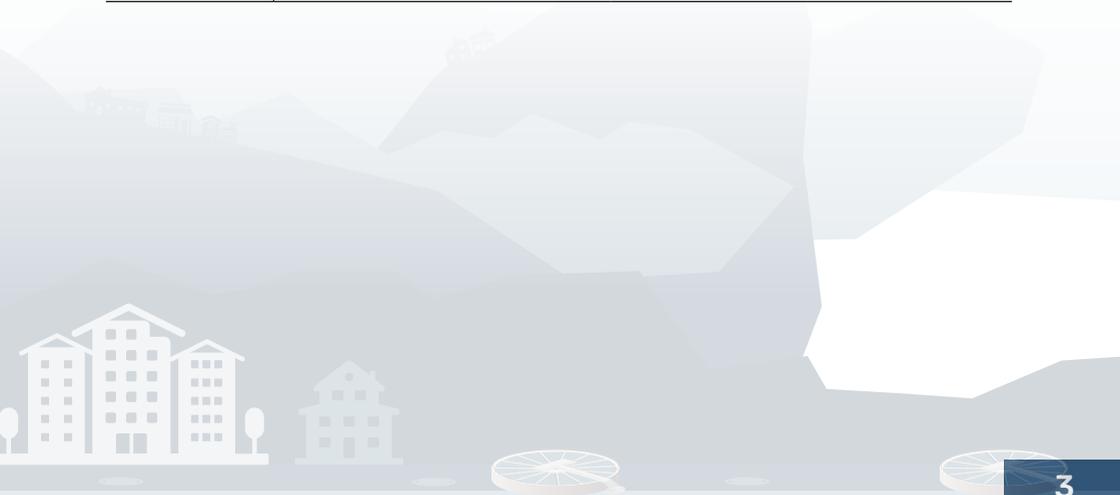
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AGENDA

Time	Session Outline	Speakers
09.30 – 10.00	Registration	
10.00 – 11.10	Welcome Remarks	Shri. Hitesh Vaidya, Director, National Institute of Urban Affairs (NIUA)
	Setting the Context for the Forum	Dr. Mahreen Matto, Team Lead, NIUA
	Voice from the Hills	Shri. Deepak Sanan, Former IAS
	Urbanization in Mountains - Trends and Impacts	Shri. Keshav Verma, Former IAS, Chairperson - High Level Committee (HLC) on Urban Planning, Ministry of Housing and Urban Affairs (MoHUA) Shri. Sushil Ramola, Immediate Past President, Integrated Mountain Initiative (IMI)
	Stories from the Global North - Approach to Sustainable Mountain Urbanisation	Smt. Divya Sharma, Deputy Head of Cooperation, Swiss Agency for Development and Cooperation (SDC)
	Intergovernmental Negotiation and Consensus Building	Dr. Pema Gyamtsho, Director General, International Centre for Integrated Mountain Development (ICIMOD)
11.10 – 11.30	Role of Philanthropy in Coalition Building to Accelerate Impact (Learnings from NFSSM Alliance)	Smt. Sakshi Gudwani, Senior Program Officer, Bill and Melinda Gates Foundation (BMGF) - India
	Chief Guest and Keynote Address	Smt. Roopa Mishra, IAS, Joint Secretary, Ministry of Housing and Urban Affairs (MoHUA) Shri. G. Asok Kumar, IAS, Director General, National Mission for Clean Ganga (NMCG), Ministry of Jal Shakti
11.30 – 11.45	Release of Rapid Assessment of Water and Sanitation in Hill States and a Short Film	
11.45 – 12.00	Tea Break	

Time	Session Outline
12.00 - 13.30	<p>Session 1: Value Proposition of the Forum</p> <p>Moderator: Shri. Deepak Sanan, Former IAS</p> <p>Objective: To assess the concept of a forum for the hill states</p> <p>Panelists</p> <ul style="list-style-type: none"> ▪ Dr. Pema Gyamtsho, Director General, ICIMOD ▪ Shri. M.T. Sherpa, IAS, Secretary, Urban Development Department, Sikkim ▪ Smt. Kezochole, Joint Director and Nodal Officer SBM U 2.0, Urban Development Department, Nagaland ▪ Shri. Sanjeev Khirwar, IAS, Principal Secretary, Housing & Urban Development Department, UT Ladakh ▪ Dr. Victor Shinde, Head, Climate Centre for Cities (C-Cube), NIUA ▪ Shri. Ramesh Negi, Former IAS, Councillor, Integrated Mountain Initiative (IMI) ▪ Shri. Tikender Panwar, Former Deputy Mayor, Shimla Municipal Corporation ▪ Shri. Manu Bhatnagar, Principal Director, Natural Heritage, Division of INTACH <p>Q&A</p>
13.30 - 14.15	Lunch Break



Time	Session Outline	
14.15 – 15.45	<p>Session 2: Complexity of Sustainable Urbanisation: Systems Approach and Holistic Planning</p> <p>Moderator: Shri. Rajiv Ranjan Mishra, Former IAS, Former Director General, National Mission for Clean Ganga; Chief Advisor, NIUA</p> <p>Objective: To discuss and understand the most pertinent points for sustainable urbanization</p> <p>Panelists</p> <ul style="list-style-type: none"> ▪ Shri. Rohit Kakkar, Deputy Advisor (PHE), Central Public Health and Environmental Engineering Organisation (CPHEEO) ▪ Dr. Umamaheshwaran Rajasekar, Director, Technical Assistance and Capacity Development, Coalition for Disaster Resilient Infrastructure (CDRI) ▪ Smt. Vanthangpuii, Deputy Director, Urban Development & Poverty Alleviation Department, Mizoram ▪ Shri. Sameer Rai, Joint Chief Architect, Mission Director - SBM (U) & Nodal Officer - AMRUT 2.0, Urban Development Department, Sikkim ▪ Prof. Saswat Bandyopadhyay, Project Director, Centre of Urban Planning and Policy (CUPP), CEPT University ▪ Smt. Yeshika Malik, Climate Change Specialist, World Bank ▪ Prof. Gaurav Raheja, Professor & Head (Architecture & Planning), IIT Roorkee <p>Q&A</p>	
15.45 – 16.00	Reflection Session and Way Forward	Dr. Mahreen Matto, Team Lead, NIUA
16.00 – 16.15	Vote of Thanks	Dr. Victor Shinde, Head, Climate Centre for Cities (C-Cube), NIUA
16.15 onwards	High Tea and Networking	



CONCEPT NOTE

Rationale

Himalayas are the world's youngest mountain ranges, tectonically alive, and one of the most marginalized mountain regions of the world. Over the past few decades, the region has witnessed rapid and unplanned urbanization which has perturbed the hydrological regimes of Himalayan watersheds and reduced groundwater recharge. Moreover, urban centres are spewing out different types of waste which are adding up challenges for upkeeping the hills and habitations in the downstream.

Large tracts of the country's northern and north-eastern states situated in this region are majorly hills and some of India's fastest growing cities are situated in these states. This region also witnesses a significant foothill of tourists every year. Due to the complex geography, the infrastructure and development activities face significant challenges impacting carrying capacity. Further, the climate crisis has already made its mark visible, and the recent Intergovernmental Panel on Climate Change report clearly states that the water cycle in the region is being affected, putting further pressure with regard to provision of essential services such as water and sanitation, on an already stressed Indian municipal system.

A growing economy like India, development and urbanization in the Himalayan region is inevitable, but it can be steered in a more sustainable manner. Thus, it is imperative that urban centers located in these areas learn from each other, and adopt planning practices that are inclusive and resilient with the ability to

mitigate and adapt to the climate crisis.

Against this backdrop, the National Institute of Urban Affairs (NIUA) in collaboration with the Bremen Overseas Research and Development (BORDA) South Asia, has conceptualized a forum for "Inclusive and Resilient Water and Sanitation in Hill Cities". The inception of the forum is timely when UN-SDG recognizes this decade as the 'Decade for Action' to achieve Sustainable Development Goals and an explicit reference to **"Human rights to a clean, healthy, and sustainable environment has been included in COP27 in 2022"**

The stage is now also set for on-the-ground action and the forum will play a prominent role in adopting Honorable Prime Minister Shri Narendra Modi's vision of India's G20 presidency which is to be **"inclusive, ambitious, decisive and action-oriented"**. This is also crucial as we gear up for Urban 20 (U20) which has water security and climate finance as core priorities.

Purpose of the forum

The purpose of the 'Forum' is to bring the common voices of the states and cities of the Himalayan region together to act and accomplish India's commitment to UN Sustainable Development Goals. This will enable states/cities to connect with experts through multi-disciplinary action research, knowledge & experience sharing and capacity building with the agenda of moving towards Citywide Inclusive and Resilient Sanitation.

Potential members and participants

- State representatives
- Officials from Urban Local Bodies (ULBs)
- City's mayors
- Local NGOs, think tanks, research organizations and expert agencies with experience in working in the hilly regions
- National nodal training institutes
- Academic institutes
- Government and non-government agencies from other countries with experience in working in hills urban context.

Constitutionalization of the forum

Moving towards the constitution of this forum, the anchor institutions have carried out a series of consultation meetings with the potential stakeholders of this forum in the region; categorized into steps shown in Figure 1:

Furthermore, the 'forum has been envisaged as a state-driven platform where the member states/cities will discuss and determine the outline and functions of the forum; where states will nominate the priority cities to be taken on-board. This will include entering into

a Memorandum of Understanding (MoU) along with the respective states and key institutions to enable better cooperation and coordination. The platform can further include technical committees and working groups for better functioning. The involvement of the identified cities from all over India will be taken up in a phase-wise approach.

Following are the broad objectives of the forum's program:-

- Formalization of the forum and setting out priorities with regard to ensuring 'Safe Water and Sanitation for All' in a hills state/city context. Constitution of a technical committee with nodal officials from each member state/city, working group and advisory group of the forum
- Development of white papers to advocate for issues and challenges relevant to the Hill context
- Develop an activity calendar in consultation with the member cities/states which would include knowledge sharing events, targeted research, training, technical and advisory support in priority areas.

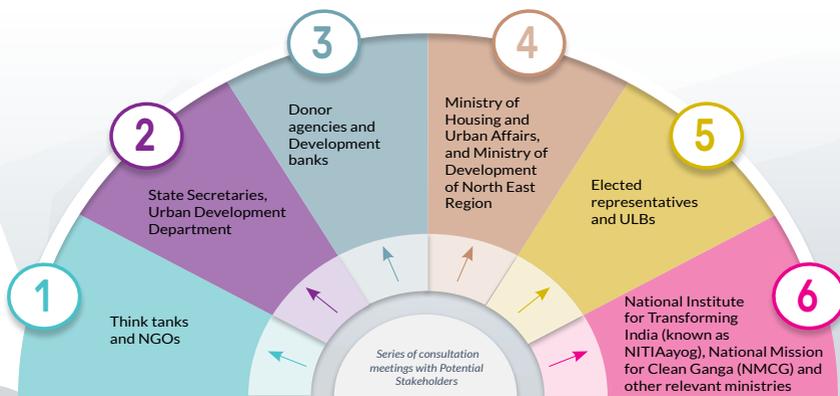
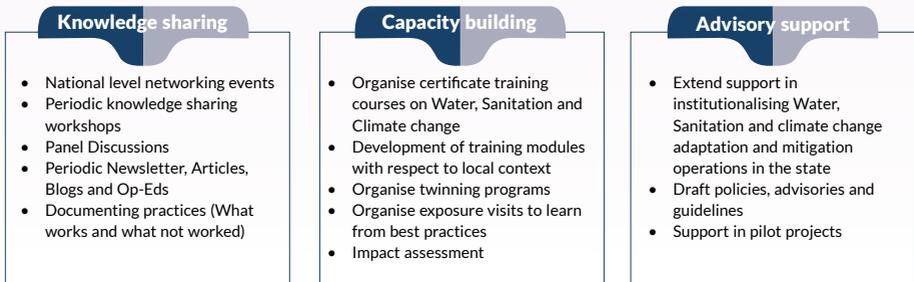


Figure 1: Series of consultation meetings with Potential Stakeholders

Proposed structure of the forum



Key activities envisaged



First consultation meet

As the first step towards the constitution of this forum, NIUA-BORDA South Asia started conducting a series of consultation meets/workshops with potential stakeholders to streamline the initiative of the forum.

The first consultation meeting was conducted with more than 40 WASH and Urban sector experts working in the Himalayan and North-Eastern regions of India, on 14-15 July 2022 in Leh, Ladakh. The meeting was organized by NIUA in partnership with BORDA South Asia, in



Figure 2: Photographs of the first consultation meet at Leh, Ladakh (PC: SCBP/2022)

association with the Directorate of Urban Local Bodies, Union Territory, Ladakh and Ladakh Ecological Development Group (LEDeG).

The aim of the meeting was to initiate a dialogue among practitioners, think tanks and academia working in inclusive and climate resilient urban sanitation to:

- Understand the gaps and challenges in different hilly regions with respect to sanitation, septage management and climate change
- Identify the roles and responsibilities that individual organizations can play within the forum
- Conceptualize and streamline a framework of the forum.

The meeting facilitated brainstorming among the participants with regard to the proposed forum's thematic areas of work, structure, functions, roles & responsibilities, operationalization, and financial sustainability.

Following are the key outputs of the meeting:

- The realisation of the absence of the urban forum in the hilly regions was collectively echoed. Emphasis was on creating a forum that is owned by the cities, has people's involvement, inclusive and sustainable in nature and provides technical know-how on infrastructure that impacts the livelihood
- A successful networking event with interdisciplinary experts who presented their views and concerns on evident climate change impact in the water and sanitation sector in the hilly areas
- A network of around 25 participating organizations working in the Hills has been created
- Identify lighthouse cities under this forum related to climate resilience and sanitation nexus; to generate evidence and amplify the learnings in other cities based on 'One size doesn't fit all' and 'what works where'.

State visits for Hill Forum



Figure 3: Meetings with State Secretaries and Directors of key public departments (PC: SCBP/2022)



Second consultation Meet

The second consultation meet was organized in partnership with the Urban Development Department, Government of Sikkim on 2nd December, 2022 in Gangtok, Sikkim to initiate a conversation between key decision makers from the 11 states and 1 Union Territory of Himalayan and North-East states of India.

In this round of the consultation meet, the voices of the hill state officials were collated to understand the ground realities, challenges and opportunities of the hill states. The meeting helped in discussing the common future and to generate ideas/ potential solutions that can help the hill states to achieve their common goal – “a better future for the hill cities of India through the lens of inclusivity and resilience”. Following are the key outputs of the meeting:

- Major challenges relating to water and sanitation in the hilly regions were discussed
- All states agreed that the lack of local hill context in national missions and policies need to be addressed on priority
- With a belief that the forum will create a bridge for the collective voice of the hilly

regions to reach the policy and decision makers at the centre, the states expressed their willingness to participate in the future deliverables of the forum by signing an Endorsement Certificate.

Operations of the forum

The Secretariat at NIUA will manage and coordinate most of the activities of the Hill Forum in the initial phase. Additionally, it is expected that the member states/cities shall provide the following support to help in the smooth functioning of the forum:

- Nominate a nodal officer/s for communications and facilitation of all activities related to the hill cities forum
- Implement the activities decided by collective consensus of member states/cities and through the annual calendar
- Nominate relevant staff for the capacity building programmes
- Participate in the webinars and expert talks organized by the Secretariat
- Handholding support in creating Lighthouse Cities



Figure 4: Photographs of second consultation meet at Gangtok, Sikkim (PC: SCBP/2022)



SPEAKERS AND PANELISTS



Shri. G. Asok Kumar,
IAS
*Director General,
National Mission for
Clean Ganga (NMCG)*

Shri G Asok Kumar, Additional Secretary, Ministry of Jal Shakti took over as the new Director General for the National Mission for Clean Ganga, Ministry of Jal Shakti. He belongs to the Indian Administrative Services Telangana Cadre 1991 batch. In the past, he has held several important positions such as Joint Secretary in the Ministry of Civil Aviation, Government of India and Director in the Ministry of Power and served as the Executive Director of Projects in National Mission for Clean Ganga.

He has worked extensively in the water sector. Before joining NMCG, he served as the Mission Director for National Water Mission where his inspiring work in "Jal Shakthi Abhiyan: Catch the Rain" campaign led to the sanction of over 9.5 lakh water conservation and rainwater harvesting structures all over India. This resulted in him receiving the popular moniker - "the Rain Man of India". Additionally, as the District Collector in 2002, he supported the construction of over 0.14 million household toilets in 1000 schools in the Nizamabad district and was responsible for providing drinking water supply to over 3 million people in Hyderabad in 2008.

He has initiated and completed infrastructure projects like the 162 Kms 8 lane Outer Ring Road, 90 MGD Krishna Phase-2 Drinking Water project, 90 MGD Godavari Drinking Water Project and many other Sewerage Treatment Plants. He has played an instrumental role in setting up India's Aircraft Accidents Investigation Bureau. He is also the Founder and the President of India Smart Grid Forum.

Shri Asok Kumar is also the recipient of several awards such as the SKOCH Award for Public Services 2021, the Jal-Mitra Award from the Government of Andhra Pradesh and the first Telangana Excellence Award by the Government of Telangana for outstanding work done in Public Administration.



Smt. Roopa Mishra,
IAS
*Joint Secretary, Ministry
of Housing and Urban
Affairs (MoHUA)*

Roopa Mishra IAS is the first woman from Odisha and the country's first married woman to win the All India Civil Services Examination in 2003. She ranked 1 in the UPSC examination in 2003. Currently she is the Joint Secretary, the Ministry of Housing and Urban Affairs (MoHUA). She was also the director of Drinking Water and Sanitation under Jal Shakti and had served as Director, water and sanitation, in the Odisha government before proceeding on central deputation. She is an MBA holder from Bhubaneshwar's Utkal University.





Shri. Keshav Verma
Former IAS, Chairperson
High Level Committee
of Urban Planning,
MoHUA

Mr. Keshav Verma is Chairman of the High Powered Committee, Urban Planning, Ministry of Urban Affairs, India. He was the founding director of the World Bank's Global Tiger Initiative, which is largely responsible for facilitating partnerships between the 13 tiger range countries and international partners to save the globe's remaining wild tigers. Throughout Mr. Verma's career, his focus has been to change the conversation about conservation and introduce innovative ideas in the field of biodiversity and conservation. Prior to his conservation work, Mr. Verma served as Sector Director of the East Asia Urban Development and Disaster Management program and the Head of Global Urban Programs for the World Bank and Municipal Commissioner of Ahmedabad, India, a city of over 6 million people.



**Shri. Sanjeev
Khirwar, IAS**
Principal Secretary,
Housing & Urban
Development
Department, UT
Ladakh

Mr. Sanjeev Khirwar, IAS, is the current Principal Secretary (Environment) and Divisional Commissioner, Delhi. He belongs to the AGMUT cadre, 1994 batch. He has a major role in implementing Water Act, 1974, Air Act, 1981 and EPA Act, 1986. He has also served as Principal Secretary (health and family welfare) where he has framed policies to improve health care services in Delhi and addressed qualitative aspects of preventive and curative care. He also worked as a Commissioner cum-Secretary to (Shipping, Civil Aviation, APWD, Power) and as a Commissioner to Food & Civil Supplies and Trade & Taxes, Government of NCT, Delhi. He initiated the "Bill Banao Inam Pao" Scheme and was part of several sub-committee on GST. He is a B. Tech graduate in computer sciences from IIT, Delhi and holds a master's degree in economics from Punjab University.



**Shri. Mingma
Tempa Sherpa, IAS**
Secretary, Urban
Development
Department, Sikkim

Shri. Mingma Tempa Sherpa, IAS currently Head of the Urban Development Department, Government of Sikkim. His inception in the Government Service was on 1991 as Under Secretary. Thereafter, he has worked in various positions all over the state of Sikkim as Sub-Divisional Magistrate and Additional District Magistrate in districts, Director, School Education, Managing Director, Denzong Cooperative (State Government PSU), Secretary, Education and Secretary, Horticulture Department.

In addition to the above, he has also done Executive Course (45 days) in the University of West London in 2013, and two short courses in IIMA. He has been heading one of the most dynamic departments and during his tenure, the Department has achieved various accolades at the State and National levels.



Shri. Hitesh Vaidya
*Director, National
Institute of Urban
Affairs (NIUA)*

Mr. Hitesh Vaidya has more than 20 years of broad-based urban development policy, project formulation, implementation and program management experience on mainly UN, World Bank, the U.S. Agency for International Development (USAID) assignments. The areas he has been associated with are urban development, urban governance and urban Infrastructure management. Poverty Alleviation has been an integral component in all the projects. Before joining the National Institute of Urban Affairs, he was the Country Representative of UN-Habitat India. He was intensely involved in providing capacity assistance to India's urban eco-system to roll-out urban flagship missions in India. His strength lies in developing institutional arrangements and project implementation strategies by facilitating effective convergence and coordination with various stakeholders.



Smt. Kezochole
*Joint Director and Nodal
Officer SBM Urban 2.0,
Urban Development
Department Nagaland*

Kezochole Rhetso is an Urban Planner by profession from Nagaland State. She obtained her Masters in Sociology from NEHU, Shillong Meghalaya and Masters in Urban Planning from the School of Planning and Architecture New Delhi. She serves in the Nagaland State Government Service; Urban Development Department. As Senior General Manager she served the Nation's flagship program of Smart Cities Mission from 2015 to 2022 and currently, she is the Joint Director Urban Development Department and State Nodal Officer for Swachh Bharat Mission (Urban) 2.0.



Shri. Sameer Rai,
*Joint Chief Architect
- Mission Director-
SBM (U) & Nodal
Officer - AMRUT 2.0,
Urban Development
Department, Sikkim*

Sameer Rai is an Architect by training with over 13+ years of experience related to assignments on design, project co-ordination, planning & policy, and stakeholder engagement. Currently, he is posted as the Joint Chief Architect in the Urban Development Department, Govt. of Sikkim and is the State Mission Director for SBM-U & Nodal Officer-AMRUT 2.0. Having a keen interest in sustainability & green economy Water sensitive urban design, traditional systems & nature based solutions, he has undergone training on Water Security, Resilience and Transitioning to Circular cities in India at UTS, Sydney including a City-wide Inclusive Sanitation course by ASCI & ADBI.





Shri. Deepak Sanan
*Former IAS, Senior
Visiting Fellow, Centre
for Policy Research (CPR)*

Deepak Sanan joined the Indian Administrative Service in 1982 and retired in 2017. He was associated with the state of Himachal Pradesh. He held various positions at the Centre and in his state. Over the years, he has been a consultant with various development organizations and has served on the staff of the World Bank.

He is currently a senior visiting fellow at the Centre for Policy Research, New Delhi. Major areas of his interest includes public policy in the areas of state capacity, land governance, public finance, urban issues, energy, water and sanitation.



Shri. Ramesh Negi,
*Former IAS, Councillor,
Integrated Mountain
Initiative (IMI)*

Ramesh Negi, a member of the Indian Administrative Service (1984 batch, AGMUT Cadre), has extensive administrative experience in various Union Territories and States including Goa and Arunachal Pradesh. In Delhi, he held significant positions such as Additional Commissioner of MCD, MD of Delhi Tourism, Chairman of Delhi Transport Corporation, CEO of Delhi Jal Board, and Principal Secretary of Urban Development.

He played a crucial role in establishing Delhi Haat at Pitampura and Janakpuri, promoting craftsmen from villages across India and providing affordable family entertainment. As MD of Delhi Tourism and Transportation Development Corporation Limited, in 2004, he was involved in organizing the Olympic Torch Relay in Delhi and providing infrastructure services for the Commonwealth Games Village in 2010.

During his tenure as Chairman of DTC, the fleet was modernized ahead of the Commonwealth Games. Ramesh Negi has also served as Finance Secretary in Daman Diu, Dadra Nagar Haveli, Goa, and Arunachal Pradesh. His coordination skills and presentations before the 14th Finance Commission secured the highest award of Central Grants to Arunachal Pradesh. As Chief Secretary of Arunachal Pradesh, he prioritized infrastructure development in remote areas and the preservation of environmental and cultural heritage. Additionally, he chaired the Delhi Commission for the Protection of Child Rights and the Fee Regulatory Committee for Private Colleges under IP University in Delhi.



Shri. Rajiv Ranjan Mishra,
*Former IAS, Former
Director General,
National Mission for
Clean Ganga; Chief
Advisor, NIUA*

Rajiv Ranjan Mishra, IAS (Retired)

Former Director General, National Mission for Clean Ganga; Chief Advisor, National Institute of Urban Affairs. An alumnus of IIT, Kanpur; Rajiv Ranjan Mishra joined the Indian Administrative Service in 1987 and held several responsibilities in policy planning and program implementation particularly in water management, river rejuvenation, urbanization & housing. He spearheaded the Namami Gange programme from inception till about a year back changing its discourse & transforming it into an integrated multi sectoral basin wide program. The impact is visible on the ground with the UN recognition last year of the Namami Gange as one of the ten global restoration flagship. This has also inspired rejuvenation efforts for other rivers.

He is credited with bringing a paradigm shift in overall approach completing several key projects and policy interventions including PPP through Hybrid annuity mode and 'One city- One Operator' approach in waste water management for better sustainability and governance, notification of environmental flow, biodiversity conservation, project dolphin etc. He has made a pioneering effort for developing a framework for planning for river cities by main-streaming river & water into the urban master plan and developing the first ever River City Alliance in India. He is a strong advocate for establishing the key role of water and urban systems in climate action.

He continues to be a river champion and sustainability warrior even after his superannuation sharing his experience and advising institutions like National Institute of Urban Affairs as Chief Advisor and spreading the message through his book "**Ganga: Reimagining, Rejuvenating, Reconnecting**", an authentic account of challenges and sustainable solutions. He is also a Professor of Practice at IIT, Roorkee and Chairman of a committee set up by the Ministry of Jal Shakti on Water Heritage Structures in India and Chairman of the Jury Committee on the National Water Awards.



Dr. Pema Gyamtsho
*Director General,
International Centre for
Integrated Mountain
Development (ICIMOD)*

Dr. Pema Gyamtsho is the Director General of ICIMOD, the International Centre for Integrated Mountain Development based in Kathmandu, Nepal. Before joining ICIMOD, he served the Royal Government of Bhutan for over three decades in areas deeply relevant to ICIMOD working at the science-policy-practice interface in natural resources management and planning; rural development; agriculture; forestry; livestock and food production; rangeland management; livestock development; participatory approaches; research and extension institutional building; climate change and environmental protection: biodiversity conservation; and organic farming.

Dr. Gyamtsho served as the Minister of Agriculture and Forests with additional responsibility as Minister-in-Charge of the National Environment Commission in Bhutan's first democratically elected government from 2008-2014. Subsequently, he was Opposition Leader in Bhutan's parliament from 2013 to 2020. In the above positions, Dr. Gyamtsho played an instrumental role in leading the formulation and enactment of many laws related to the natural resources and environmental sectors as well as overseeing the country's successful rural development program. Dr. Gyamtsho holds a PhD in Natural Science from the Swiss Federal Institute of Technology in Zurich.



Shri. Sushil Ramola
*Immediate Past
President, Integrated
Mountain Initiative (IMI)*

Sushil Ramola is the immediate past President of Integrated Mountain Initiative, which has been working for a decade in the Indian Himalayan Region States, as a platform connecting diverse stakeholders around the complex issues of climate change, livelihoods, disasters and sustainable habitats and enabling integrated solutions.

He is also a social entrepreneur and founded an integrated rural tourism initiative DueNorth Ecoventures in his village Saur, Uttarakhand, for village rejuvenation through community involvement in tourism, arts and crafts. In 2009 he founded and is currently chairman of B-ABLE, the first ever partner of the National Skills Development Corporation, which has so far provided skills and meaningful livelihoods to over 5 lakh youth in 26 states of India. He co-founded and was the Founding President and is currently a board member of the Alliance of Skill Training Partners, an apex body of skill providers in India. He is also a member of the governing council of the Blind Relief Association and President of Venu Eye Institute and Research Centre.

Sushil Ramola has over 30 years' previous experience in leading innovation and system driven business organizations in India, the USA and the Middle East in industry and service sectors and is the Former President and CEO of SRF Limited, a Deming Prize winning company. He was a board member of Essilor India, part of the largest global vision care company.

Sushil Ramola is a chemical engineer with PGDM from IIM Ahmedabad.



Smt. Vanthangpuii,
*Deputy Director, Urban
Development & Poverty
Alleviation Department,
Mizoram*

Vanthangpuii began working for the Mizoram government in 1991 as a Tracer and is currently holding the post of the Deputy Director (Plan) for the UD&PA department of Mizoram.

Before assuming her current position in the Aizawl district, she held the position of District Urban Development Officer (DUDO) for seven (7) years in various districts across the state. As part of the UD&PA department's initiative, she has been taking part in handling many missions in the state of Mizoram including SBM(U) , PMAY, HFA, and NULM, among others.

Her department sent her to study Diploma in Civil Engineering at Mizoram Polytechnic, Lunglei in the year 2003 and completed her diploma in the year 2007 after she earned her Bachelor of Arts from Aizawl College in 1996. Ever since , she has actively contributed to the UD&PA department and was assigned to her current post through successive promotions.



**Shri. Tikender Singh
Panwar,**
*Ex-Deputy Mayor,
Shimla Himachal
Pradesh*

Tikender Singh Panwar, who served as the directly elected Deputy Mayor of Shimla city, has led initiatives with active people's participation and developed plans like HVRA, CRI, CMP, CSP, and Smart City. The disaster mitigation and adaptation plan speak about inclusive growth, greater planned social infrastructure, and making both city and citizens resilient. Forest cover was enhanced through people's participation due to his focus on the environment and ecology. Tikender was also a member of the national task force reviewing the 74th constitutional amendment on decentralized governance.

Internationally, Tikender represented the city and the country in various significant events. He was part of delegations to South Africa for an Urban LED strategies event, China for a fellowship on urbanization, and Germany for the World Cities Resilient Congress in Bonn. Additionally, he represented the city at the World Congress of Resilient Cities in Seoul and spoke on climate change at COP 21 in France. Tikender also participated in training programs at Singapore NTU University, contributed as a speaker at the BRICS conference in Moscow, and made his voice heard at the UN Habitat III conference in Quito. He represented the city of Leon in France at the climate change conference and participated in the National Platform for disaster risk reduction under the Sendai conference. He further deepened his knowledge through a fellowship on urban mobility in Leipzig, Germany.

Tikender regularly contributes to renowned publications such as The Hindu, The National Herald, Newslick, and Urban Update. He is an advisor to Samruddh Bharat, a prominent think tank, and holds the position of Convenor at NCU (National Coalition for Inclusive and Sustainable Urbanization). Tikender is the national Convenor of CITIZENS, an advocacy group for alternative urban paradigms based on 'people first'. Additionally, he has received training on urbanization from the CELAP academy in Shanghai, China. He is a senior visiting fellow at the IMPRI (Impact and Policy Research Institute) in New Delhi.





Prof. Gaurav Raheja,
*Professor & Head
(Architecture &
Planning), IIT Roorkee*

Dr. Gaurav Raheja is a Professor, Head of Architecture & Planning, Joint Faculty in the Department of Design and also a Professor in charge of the Inclusion and Accessibility Services (IAS) at the Indian Institute of Technology (IIT), Roorkee with over seventeen years of teaching and research experience.

He is the founder of the Laboratory of Inclusive Design (LID) spearheading research in the domain of urban inclusion, sustainability and human centric approach to design. His research is well networked with extensive collaborations with Germany, the US and other international universities viz. T U Berlin, T U Darmstadt, HafenCity University, Hamburg, State University of New York, Buffalo, the USA, etc.

Dr. Raheja has been a recipient of various awards, recognitions and fellowships including the International Research Stay Fellowship by T U Berlin, DAAD Bilateral Exchange Fellowship, IGSTC Fellowship, DAAD Science Tour Fellowship, NCPEDP Mphasis Universal Design Awards among several others. His doctoral research was cited in World Disability Report 2011, published by WHO & World Bank, offers an insight into creation of Enabling Rural Built Environments using THE Universal Design approach.

He has supervised over 07 doctoral research (PhDs) and Eighteen Masters Dissertations. Dr. Raheja has been actively engaged and associated with 'Anushruti', a social initiative of IIT Roorkee for providing formal and vocational education to children with hearing disabilities, largely for under privileged communities in the region.



**Smt. Sakshi
Gudwani**
*Senior Program Officer,
Bill & Melinda Gates
Foundation (BMGF) -
India*

Sakshi Gudwani works with the Bill and Melinda Gates Foundation as a Senior Program Officer and manages the Foundation's Water, Sanitation & Hygiene (WSH) program in India. She has a diverse set of experiences that spans across private, public, and nonprofit sector work. She has been a development professional for over 8 years and focuses on policy & program design, institutional strengthening, and system capacity and scaling work. At the Gates Foundation, Sakshi also worked with the Avahan program - Foundation's flagship HIV prevention program in India.

Before joining the Foundation, she worked with The Boston Consulting Group (BCG). At BCG, she was a part of multiple teams which counseled CEOs, government ministries and top management across industries on critical business problems. During this time, she worked across the Social, Healthcare, Technology and Financial Services sectors.

Sakshi has an engineering degree from Netaji Subhas Institute of Technology, Delhi, and is a management graduate of the Indian Institute of Management (IIM), Lucknow



Manu Bhatnagar
Principal Director
Natural Heritage,
Division of INTACH

Manu Bhatnagar is an architect and urban and environmental planner with 27 Years of experience in the environmental sector. He currently heads the Natural Heritage Division of INTACH as Principal Director. Alums of Cornell University with qualifications in Regional Planning, he also has qualifications in Policy Analysis, Strategic Management, Strategic Environmental Assessment, Environmental Law, Conservation of Rivers and Lakes, Ecosystem Services, and Sustainable Development from prestigious institutes.

He has been a visiting faculty at SPA and Centre for Heritage Management, Ahmedabad University. Presently, he is a nominated expert member of the Uttar Pradesh government's multi-Stakeholder Platform for Ganga Tributary Management of Wetland Authority of Delhi [GNCTD], of NMCG Committee on Yamuna River E-flows, of Delhi Biodiversity Council.

He has worked in India and South-East Asia on diverse projects ranging from urban-regional-environmental planning to river conservation, water policy, sustainable agriculture, urban biodiversity, lake conservation, and management [with studies, projects, and activism on several significant lakes and wetlands] and cultural documentation. He has worked on Ramsar sites, saltwater lakes, oxbow lakes and marshes, heritage water bodies, water policies, river island policies, and geoheritage.



**Prof. Saswat
Bandyopadhyay,**
Project Director, Centre
of Urban Planning and
Policy (CUPP), CEPT
University

Saswat Bandyopadhyay has over 25 years of experience in the Urban Development sector in South Asia with a focus on Climate Resilient and Sustainable Urban Development, Nature Based Solutions, Inclusive, Green and Affordable Built environment in cities.

He has spearheaded several Climate risks informed spatial planning related research projects such as, Sustainable Urban Development and Smart Cities, Regional Climatic Variability Studies, Risk Informed Urban Development, and Regulation for Strengthening Green and Resilient Urban Forum and Housing in Urban areas.

Saswat is also engaged in rollout of national urban capacity development programs on Local Area Planning and Town Planning Schemes, Green, Inclusive and Affordable Housing Policy Landscape and Sustainable Urban Infrastructure and Nature based Solutions.





Smt. Divya Sharma

Deputy Head of Cooperation, Swiss Agency for Development and Cooperation (SDC)

Divya Sharma is working as the Deputy Head of Cooperation with the Swiss Agency for Development and Cooperation (SDC), in India. SDCs work in India focuses on offering Swiss expertise in Climate Change, Environment and Disaster Risk Management for innovative actions and capacity building in mountain and urban landscapes. As part of her portfolio, Divya is managing the “Strengthening State Strategies for Climate Action” Project that focuses on promoting climate responsive management of disaster risks and water resources in the Indian Himalayan Region.

Divya has more than 25 years of development cooperation experience, working in the field of climate change adaptation, DRR, urban resilience, natural resource and environmental management.

Divya holds a Master’s in Climate Change and Environmental Management from the University of Oxford and Masters in Urban and Regional Planning from the School of Planning and Architecture, New Delhi.



Shri. Rohit Kakkar,

Deputy Advisor (PHE), Central Public Health and Environmental Engineering Organisation (CPHEEO)

Mr. Rohit Kakkar, is the deputy Adviser (PHE), CPHEEO. He played a crucial role in the design and appraisal of mega schemes related to public health engineering, focusing on improving the overall infrastructure and quality of public health facilities. He also served as a Joint Director, Defence Headquarters, where he collaborated with various stakeholders to develop and implement strategies to enhance defence infrastructure and ensure the efficient utilization of resources. He led the design team and played a key role in developing innovative water, sanitation, and hygiene schemes (WASH) to address public health concerns, when he was a joint director, ADG (Design and Consultancy). He is an IIT, Bombay graduate with a Master’s Degree in Environmental Science and Public Health Engineering



Dr. Umamaheshwaran Rajasekar,

Director, Technical Assistance and Capacity Development, Coalition for Disaster Resilient Infrastructure (CDRI)

Dr. Umamaheshwaran Rajasekar is the Director of the Technical Assistance and Capacity Development at the Coalition for Disaster Resilience Infrastructure (CDRI). With over two decades of experience, he has developed country engagement strategies, national policies on climate actions, disaster resilience programs, and knowledge products including digital tools and training programs for urban resilience. He has been the team leader and project manager for some of India’s pioneering resilience efforts, including the establishment of the Climate Centre for Cities, climate alliance, hazard vulnerability and risk assessments, end to end early warning systems, urban disease surveillance systems and city resilience strategies. Dr. Mahesh holds a Ph.D. with a Major in Environmental Modelling with a Minor in Mathematics from Indiana State University, USA, M.Sc. in Geoinformatics from International Institute for Geoinformation and Earth Observation (ITC), The Netherlands and B. Tech in construction technology and management from CEPT.





Dr. Victor R. Shinde,
*Head of the Climate
Centre for Cities at NIUA*

Dr. Victor R. Shinde is the Head of the Climate Centre for Cities at the National Institute of Urban Affairs (NIUA). He is a water management expert and has worked as a scientist and technical expert in nine countries in Asia and Africa: Bhutan, India, Japan, Mauritius, the Philippines, Seychelles, South Korea, Thailand, and Vietnam.

Over the last 17 years, he has worked in diverse domains of urban water management that includes flood risk assessment, urban river management; integrated water resources management; water security assessment; and climate change adaptation in the water sector.

At NIUA, he has led the development of several national level frameworks, tools, advisories, and initiatives for urban water management in Indian cities. One such initiative is a first-of-its kind "River Cities Alliance", which is currently 114 members strong. The Alliance is a dedicated platform for member cities to knowledge exchange and capacity building on diverse aspects of river management.

He has 50+ publications as journal articles, book chapters, conference papers, and knowledge products.

Victor has a PhD in Urban Water Management from Kyoto University Japan, Masters in Water Engineering and Management from the Asian Institute of Technology Thailand, and Bachelors in Civil Engineering from Karnatak University India.



Dr. Mahreen Matto
*Team Lead, Sanitation
Capacity Building
Platform (SCBP), NIUA*

Dr. Mahreen Matto is the Team Lead for the Sanitation Capacity Building Platform (SCBP) at the National Institute of Urban Affairs. Under her current position, she is undertaking technical support, developing innovative training modules, research & advocacy, and knowledge building on Non-Sewered Sanitation (NSS) at the National level. She is also involved in providing handholding support to the state of Uttarakhand on the scaling of FSSM. She has over 12 years of experience in mainstreaming urban water and sanitation management across human settlements in India, South Asian, and African Countries. Some of her previous work includes research, capacity building, advocacy, and project implementation on decentralized wastewater management, citywide inclusive sanitation, water and sanitation safety planning, and preparation of city sanitation plans.





Smt. Yeshika Malik,
*Climate Change
Specialist, World Bank*

Yeshika Malik is a Climate Change Specialist with World Bank's SAR Disaster Risk Management & Climate Change team based in New Delhi. Yeshika has over 10 years of experience in facilitating policy change through policy advocacy and implementation; and the ability to create and manage multi-stakeholder engagements (with policymakers, corporates, development partners, multilateral, and bilateral agencies, etc.). At the World Bank, she works on supporting DRM operations and technical assistance activities related to mainstreaming climate change and resilience at national and sub-national levels. Before joining the Bank, Yeshika worked with the Center for Study of Science Technology and Policy (CSTEP) as a Research Economist in their Climate Change and Sustainable Development practice and NITI Aayog, Government of India. Yeshika holds a Master's degree in Economics from the University of Edinburgh, United Kingdom.



ADVISORY GROUP



Shri. Rajiv Ranjan Mishra,
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Shri. Hitesh Vaidya
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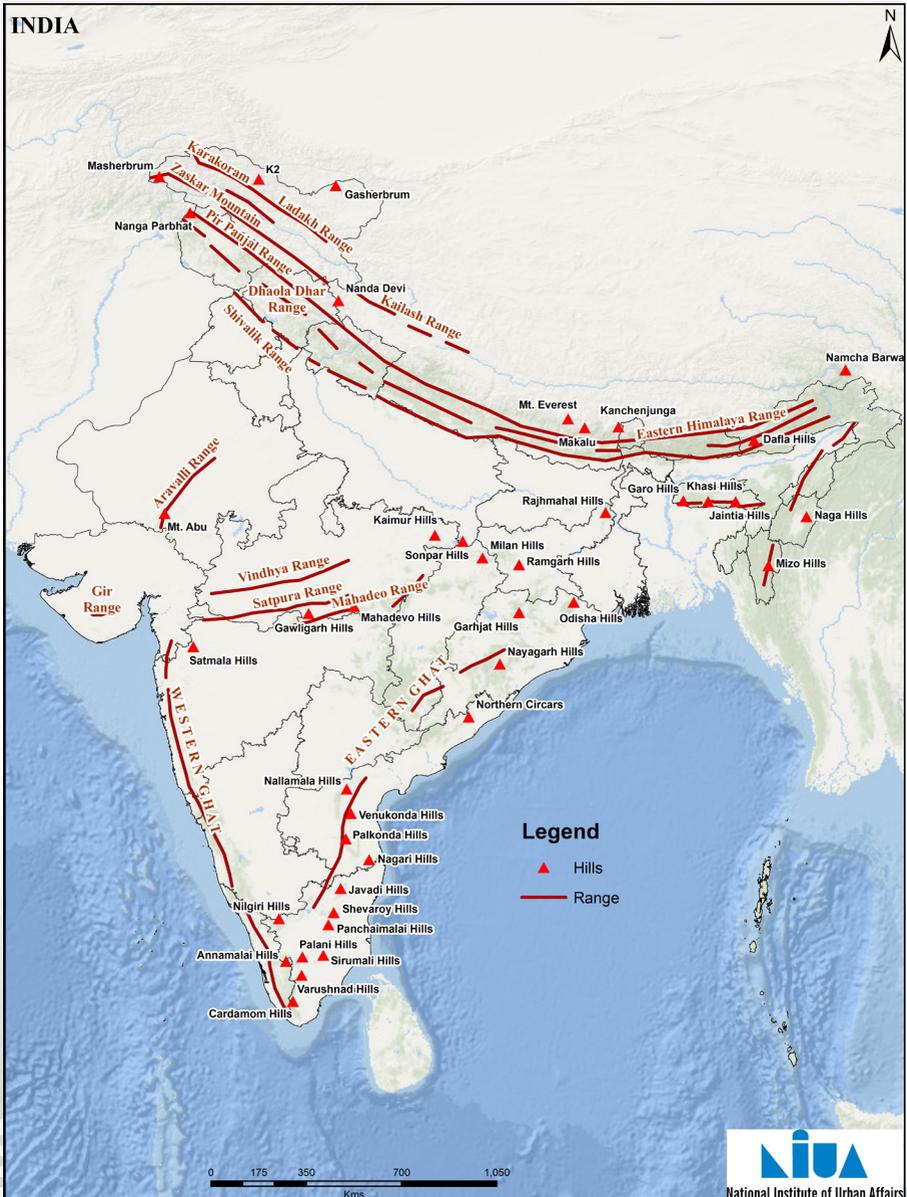
Amita Pathria,
NIUA



Anju Varghese,
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HILLS AND MOUNTAIN RANGES



ABOUT PARTNERS

The Directorate of Urban Local Bodies Department, Ladakh facilitates better co-ordination and control of the working of municipalities in the State. The department is also facilitating administrative, technical, and financial assistance to the Municipalities in UT Ladakh which includes Leh and Kargil. The Department was established to give impetus to the 74th Amendment of the Constitution and to lay a solid foundation for the Urban Development in the UT of Ladakh. Over the past years, Ladakh has experienced rapid economic growth. This has led to a rapid rise in their urban population. The 74th Constitutional Amendment Act of India lays the foundation for a sustainable Urban Governance System in the Country. While the national governments pursue the goals of economic development, it is generally left for the local governments to manage the rapidly growing urban areas, and to provide the basic services to the residents. In India, Urban Local Bodies are constitutionally provided administrative units, that provides basic infrastructure and services in urban areas i.e cities and towns. The DULB along with the Municipal Committee of Leh and the Municipal Committee of Kargil strives to improve the administration of basic civic amenities like water supply, drainage, public health and sanitation for urban areas in Ladakh and also housing, Urban livelihood and Urban development. The functions include planning, policy formulation, tendering and support in implementation across all urban development matters.

Bremen Overseas Research and Development Association (BORDA) founded in 1977, is a civil society expert organization focused on providing essential public services. BORDA South Asia, headquartered in Bangalore, operates in four countries: India, Bangladesh, Bhutan, and Nepal. In India, we are carrying out projects in Ladakh (Leh and Kargil) and Karnataka (Chintamani and Chikballapura). BORDA-SA partners with organizations to help design and implement integrated water and solid/liquid waste management plans focusing on small and medium towns. We aim to improve the living conditions of socially disadvantaged groups by facilitating access to basic needs services such as sanitation, wastewater management, and water provision while maintaining a safe environment.

Ladakh Ecological Development Group (LEDeG) has been in service of the people of Ladakh since 1983. LEDeG is a grassroots organization that has been working in the fields of sustainability, renewable energy, climate change, and rural livelihood development since its inception. Over the last three years, however, the organization's focus has shifted from rural to sustainable urban development. The boom in tourism over the last couple of decades has come at the cost of environmental degradation; this is especially true of Leh town, Ladakh's largest urban settlement. With this specific urban focus, two of our ongoing projects are dedicated to improving water and sanitation services in Leh and Kargil town.



ABOUT NIUA

National Institute of Urban Affairs (NIUA) is India's leading think tank on urban planning and development. NIUA's Sanitation Capacity Building Platform (SCBP) aims to address urban sanitation challenges in India, through capacity development of stakeholders in urban sanitation. This can facilitate improved delivery of sanitation services through implementation of citywide inclusive sanitation approach and adoption of non-sewered sanitation, including Faecal Sludge and Septage Management (FSSM). Through its experience and learnings over the past five years, SCBP has developed a normative framework for states on mainstreaming non-sewered sanitation. To deliver proof of concept of this framework, SCBP is working in Uttarakhand and providing capacity building, technical, and policy & advisory support on Integrated Wastewater and Septage Management (IWSM) at the state and ULB levels.



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