



AGENDA

Organised by:



Supported by:



Peer-to-peer learning cum exposure visit on the inclusive and climate sensitive water and sanitation practices in Leh, Ladakh
Dates: 20th to 24th August 2024





Background

Over the last decade, the sanitation landscape of India has been rapidly evolving, with progressive laws, programs, and policies paving the way for significant improvements. The Government of India has built upon the success of the Swachh Bharat Mission (SBM) 1.0 by introducing aspirational missions such as SBM 2.0 and the Jal Jeevan Mission (JJM-U). These initiatives aim to go beyond eliminating open defecation by focusing on ODF+ (Open Defecation Free), ODF++ (maintaining ODF status while managing faecal sludge), and Water+ (ensuring safe water supply) protocols as laid down by the Ministry of Housing and Urban Affairs. Despite these efforts, the shift from the initial City Sanitation Plan (National Urban Sanitation Policy, 2008) to detailed project reports of sanitation infrastructure has exposed the limitations of a one-size-fits-all, top-down approach. Local planners, consultants, and decision-makers often lack the capacity to meet the emerging standards of Citywide Inclusive Sanitation (CWIS), which aims to achieve the urban sanitation targets envisioned in Sustainable Development Goal (SDG) 6 in an equitable manner.

Citywide Inclusive Sanitation (CWIS) represents a paradigm shift in urban sanitation, emphasizing equitable access to safely managed sanitation for all.

CWIS SERVICE FRAMEWORK			
CORE CWIS OUTCOMES	EQUITY   	SAFETY  	SUSTAINABILITY  
	Services reflect fairness in distribution and prioritization of service quality, prices, and deployment of public finance/subsidies.	Services safeguard customers, workers, and communities from safety and health risks—reaching <i>everyone</i> with safe sanitation.	Services are reliably and continually delivered based on effective management of human, financial and natural resources.
CORE CWIS FUNCTIONS	RESPONSIBILITY	ACCOUNTABILITY	RESOURCE PLANNING AND MANAGEMENT
	An authority(ies) executes a clear public mandate to ensure safe, equitable, and sustainable sanitation for all.	Authorities' performance against their mandate is monitored and managed with data, transparency and incentives.	Resources—human, financial, natural, assets—are effectively managed to support execution of mandate across time/space.

Source: World Bank Group Citywide Inclusive Sanitation

CWIS seeks to transform the urban sanitation paradigm by promoting a range of solutions tailored to diverse urban contexts, recognizing that a holistic perspective is essential, especially given the exacerbating effects of climate change.



Hill cities in India, with their distinctive geographical and climatic conditions, face unique sanitation challenges. The infrastructure in these areas is often inadequate to cope with the increasing population and tourist influx, leading to significant stress on local resources. The existing sanitation infrastructure struggles to keep pace with the growing demands, resulting in environmental degradation and a decline in the quality of life for residents and visitors alike. Furthermore, climate change issues such as water scarcity and impacts on local agriculture and livelihoods add to the complexity of these challenges.

Leh, a mountainous city situated at an altitude of 11,000 feet in Northern India, exemplifies the sanitation challenges faced by hill cities. The exponential increase in tourist footfall has led to a significant rise in local incomes, but this has not been matched by a commensurate increase in municipal infrastructure. Consequently, the quality of everyday life for residents and tourists has been adversely affected. Long-term impacts such as water scarcity and the decline of local agriculture and livelihoods further complicate the situation. The government of the Union Territory of Ladakh has taken multiple steps in recent years to address these issues, guided by the long-term vision of a "Happy Livable Leh." These efforts, carried out collaboratively with residents, highlight potential solutions for water and sanitation challenges in other hill cities.

National Institute of Urban Affairs (NIUA) is a premier institute of the Ministry of Housing and Urban Affairs (MoHUA), Government of India, for research and capacity building for the urban sector in India. Established in 1976, NIUA's broad objective is to bridge the gap between research and practice on issues related to urbanisation. NIUA through Parvat Manthan - *Forum for manifestation of clean and sustainable hill states* is supporting the Indian Himalayan Region (IHR) in addressing the septage management, used water and solid waste management challenges through the lens of inclusivity and climate resilience.

To further these efforts, the **Sanitation Capacity Building Platform (SCBP)** of NIUA is organising a peer-to-peer learning and exposure visit from **August 20th to 24th, 2024**. This visit aims to showcase the inclusive sanitation efforts undertaken in Leh to senior government officials from the IHR, Nepal and Bhutan, as well as participants from organisations working in the Himalayas.

The specific **objectives** of the exposure visit are as follows:

1. Familiarize senior officials with the principles of Citywide Inclusive Sanitation (CWIS)
2. Share best practices and case studies from Leh's inclusive urban sanitation initiatives.
3. Explore innovative and contextual approaches to septage and waste management in mountainous terrain through the work done in Leh.

Under the ambit of Parvat Manthan, the exposure visit brings together stakeholders from various sectors, to create a holistic approach to WASH that can be replicated in other hill cities, promoting sustainable and inclusive development in the region.



Partner organisations:

The Parvat Manthan conceptualised by NIUA is supported in this endeavour by the following partners:

The **NFSSM Alliance**, supported by the Bill and Melinda Gates Foundation, brings together over 30 expert organizations and individuals to drive discourse, shape policy, and support governments at all levels in advancing inclusive and safe sanitation practices. With a clear vision for 2030, the Alliance aims for all 7,900 Indian cities to effectively manage their human waste. This ambitious goal is pursued through robust government engagement, knowledge codification, and cross-learning initiatives, focusing on institutionalizing inclusive sanitation, scaling circularity initiatives, and facilitating innovation and technology adoption. By converging these efforts, the Alliance ensures the accessibility, efficiency, and effectiveness of sanitation services down to the last mile.

The **International Centre for Integrated Mountain Development (ICIMOD)** – a regional intergovernmental knowledge organization established in 1983, is working across the eight member countries in Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan. ICIMOD focuses on sustainable collective action and knowledge sharing to make the Hindu Kush Himalaya region greener, more inclusive and climate resilient.



Bremen Overseas Research and Development Association South Asia (BORDA-SA) is a technical NGO dedicated to co-creating livable and resilient small towns in collaboration with Urban Local Bodies and citizens. BORDA South Asia operates in India, specifically in Ladakh and Karnataka, as well as in Nepal and Bangladesh. The organization is actively expanding its support to additional hilly cities in India. BORDA's initiatives are funded by the **Federal Ministry for Economic Cooperation and Development (BMZ)** of Germany, enabling the implementation of sustainable development projects in the region.

On-field expertise would be provided by the **Ladakh Ecological Development Group (LEDeG)**, which is one of the most prominent organizations in Leh and has been active in the space of building ground-up resilient solutions for the past 40 years. LEDeG focuses on promoting sustainable development through community involvement, environmental conservation, and the implementation of innovative practices tailored to the unique challenges of the Ladakhi region.

Target Participants:

1. **India:** Directors/Add. Directors from the State Urban Development Departments of IHR, specifically from Uttarakhand, Sikkim, West Bengal, Nagaland, Mizoram, Meghalaya, Assam, Manipur, Ladakh, Arunachal Pradesh, and Tripura.
2. **Nepal:** Chief of National Research Center for Building Technology from the Ministry of Urban Development. Chairpersons, Chief executive officer and technical environmental officer from Gosaikunda and Khumbu Pasang Lhamu Rural Municipalities.
3. **Bhutan:** Chief/Senior Environment Officer from the Waste Management Division, Department of Environment, and Gup from Naro Gewog, Thimphu Dzongkhag.



ITINERARY

DAY 1, (August 21, 2024)

ACCLIMATIZATION AND BRIEFING

Arrival in Leh and Acclimatization: Participants arrive in Leh and check into their accommodation. Rest and acclimatisation to the high altitude.

Activity	Time	Speaker	Location
Lunch	13:00- 14:00		The Abduz
Introduction to the exposure visit and context setting	17:00- 17:20	NIUA, LEDeG and NFSSM Alliance	The Abduz
Welcome address	17:20- 17:40	NIUA - Director	The Abduz
Round of Introduction	17:40- 18:10		The Abduz

DAY 2, (August 22, 2024)

Activity	Time		Facilitator	Location
	Group 1	Group 2		
Briefing of day's visit	09:45- 10:00	09:45- 10:00	LEDeG	The Abduz
Faecal Sludge Treatment Plant	10:00 – 10:45	10:45 – 11:30	BORDA- Snehit Prakash	Bombgarh, Leh

Explore the Bombgarh Faecal Sludge Treatment Plant in Leh, serving 30,000 people with a capacity of 12 m³/day since August 2017, featuring minimal odour, low O&M costs, and utilizing treated water for local greening within a compact 60 m²/m³ area.

Composting unit	10:45 – 11:30	10:00 – 10:45	LEDeG- Stanzin Odsal	Housing Colony, Bomb Guard, Leh
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Visit the decentralized smart wet waste management unit, which composts 500 kg/day using greenhouses and aerated tanks, optimizing the process with automated sensors and ensuring self-sustainability through compost sales.

Legacy waste site	11:30 – 12:15	12:15 – 13:00	LEDeG- Arif Ahmed	Bomb Guard, Leh
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Gain insight into LEDeG's successful remediation of a legacy waste site in Leh, reclaiming approximately 5 hectares through bioremediation techniques to address historical waste challenges.

Greenhouse Project	12:15 – 13:00	11:30 – 12:15	LEDeG- Asma Yousuf	Bomb Guard, Leh
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Explore the greenhouse in Leh, designed for circularity by utilizing treated wastewater for sustainable agriculture, while promoting eco-friendly cultivation practices in the region's challenging climate.

Lunch	13:00 - 14:00			TBD
Gangles 24*7 Water Supply	14:00- 15:30		LEDeG- Arif Ahmed	Gangles, Leh

Explore the all-weather Gangles 24x7 Water Supply Initiative, ensuring a continuous and reliable supply of clean water to all residents, enhancing community access and quality of life.

DAY 3, (August 23, 2024)

Activity	Time		Facilitator	Location
	Group 1	Group 2		
Briefing of day's visit	09:45- 10:00	09:45- 10:00	LEDeG	The Abduz
3R's unit Leh	10:00 – 10:45	10:45 – 11:30	LEDeG- Stanzin Odsal	Main Market, Leh

Discover the 3R unit, where residents deliver segregated waste for incentives, generating revenue for sustainable operation while easing pressure on Leh's MRF facility.

WASH facility Skampari	10:45 – 11:30	11:30- 12:15	BORDA- Sapna Manjunath	Skampari, Leh
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Visit the Leh wash facility, which provides eco-friendly sanitation solutions for workers, ensuring cleanliness and sustainability while tackling the unique challenges of the region's harsh climate.

Public toilet Zangsti	11:30 – 12:15	10:00 – 10:45	LEDeG- Stanzin Tundup	Zangsti, Leh
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Explore the eco-friendly café and all-weather toilet at Zangsti, featuring insulated walls, solar heating, and accessible design for all, constructed using local architectural knowledge.

Ecopark	12:15- 13:00		LEDeG- Asma Yousuf	Main Market, Leh
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Explore the Eco Park in Leh, showcasing sustainable landscaping, eco-friendly structures, and solar energy solutions, designed to promote environmental awareness while providing recreational spaces for the community.

Lunch	13:00 - 14:00			TBD
Group Discussion with Leh Officials and Way Forward	14:00- 15:30		LEDeG, NFSSM Alliance, NIUA	TBD

DAY 4, (August 24, 2024) | Check Out and Travel Back to Hometown

