



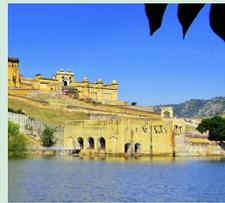
Ministry of Housing and Urban Affairs  
Government of India

# SUSTAINABLE CITIES INTEGRATED APPROACH PILOT IN INDIA

Training and Assistance Need Analysis Report

2020-21

BHOPAL | GUNTUR | JAIPUR | MYSURU | VIJAYAWADA



## EXECUTIVE SUMMARY







सत्यमेव जयते

Ministry of Housing and Urban Affairs  
Government of India

# SUSTAINABLE CITIES INTEGRATED APPROACH PILOT IN INDIA

## Training and Assistance Need Analysis Report

For the provision of services and activities related to the delivery of tailored training and relevant capacity building activities to cities' managing authorities of: Bhopal, Guntur, Jaipur, Mysuru and Vijayawada

### Component 3:

Partnerships, Knowledge Management  
and Capacity Building

2020-21

BHOPAL | GUNTUR | JAIPUR | MYSURU | VIJAYAWADA

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## TITLE

SUSTAINABLE CITIES INTEGRATED APPROACH PILOT IN INDIA  
Executive Summary of Training and Assistance Need Analysis Report

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\*Note- In this report Used Water is referred to as Wastewater

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We would like to make a special mention of the commissioners of the pilot cities who have spared their time for interaction from their very busy schedule and long working hours. Their valuable insights are very useful to design the strategy for capacity building.

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Paramita Datta Dey  
Team Lead

# EXECUTIVE SUMMARY



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“Sustainable Cities Integrated Approach Pilot in India” is one of the projects funded under GEF’s Sustainable Cities Programme in the GEF 6 cycle. The aim of the project is to integrate sustainability strategies into urban planning and management to create a favourable environment for investment in infrastructure and service delivery, thus building resilience of pilot cities. The three main project components of the project comprise- Sustainable Urban Planning and Management, Investment Projects and Technology Demonstration and Partnerships and Knowledge Management Platform.

National Institute of Urban Affairs (NIUA) has been engaged to undertake the implementation of Component 3 – Partnerships, Knowledge Management and Capacity Building. As a part of this component of the Project, a Training and Assistance Needs Assessment (TANA) was conducted from February 2020 to August 2020 for the ULBs of five cities - Bhopal, Jaipur, Mysuru, Vijayawada and Guntur.

## Objectives

The objectives of the TANA were:

- I. To assess the organisational functions and human resource competencies with respect to water, wastewater and solid waste management.
- II. To assess the training needs of Government officials at different levels – top management or decision-makers, middle and frontline staff of Urban Local Bodies.
- III. To formulate customized capacity building and training programmes for the officials and staff as per the assessed needs.

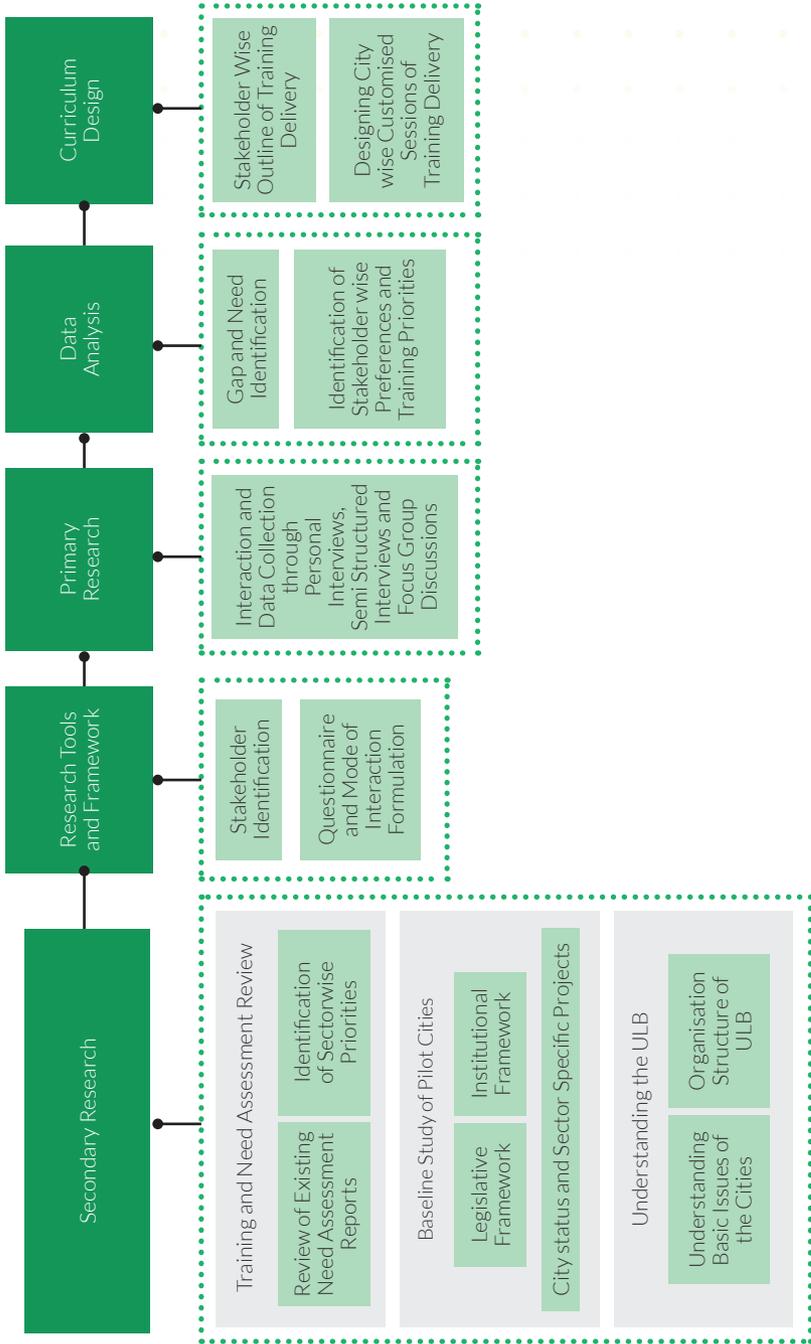
## Scope and limitations

The TANA is limited to the officials of the Municipal Corporations of Bhopal, Jaipur, Mysuru, and Vijayawada and Guntur. This report is a detailed analysis of the training needs and expectations voiced by the senior, mid and front-line staff of the city in the five pilot cities in three sectors - water, wastewater and solid waste management. Considering the situation due to the COVID-19 pandemic, all the interaction with the staff of ULBs was on-line, depending on the availability of the officials owing to their hectic schedule.

## Methodology

As a first step, based on the organisation structure of all the cities, the stakeholders (i.e. all officials of the five cities) were mapped and grouped into three categories – senior/decision-makers, mid and ground level staff. This was followed by a thorough collation and analysis of relevant secondary information on the cities and primary data collected through personal interviews and focus group discussions with all stakeholders. During the interactions with the ULB officials, it was indicated that in many cases, the Public Health and Engineering Department (PHED), which is a department of the State Government, is involved in planning for the water and sanitation sectors. At times, some officials are deputed from these departments into the ULB. The insights of such personnel were taken into consideration to understand planning and financing aspects, in addition to operation and maintenance. This helped in an assessment of the capacity gap across the value chain (that includes planning, financing, execution, operation and maintenance with regard to the three sectors). Capacity gap here means the gap of the current state of knowledge and skills in relation to that required for effective performance with respect to assigned tasks and job responsibilities. Finally, to bridge the gap, an outline of the customised training curricula has been prepared for each city with respect to water management, wastewater management and solid waste management for three stakeholder groups, based on their job responsibilities and future aspirations.

Figure 1 Methodology of the TANA Study



# SUMMARY OF FINDINGS

## City Priorities

In most of the cities, out of the three sectors, the decision makers accorded more priority to solid waste management followed by wastewater and water management. This is primarily because they feel that the system is able to provide regular supply to all residents to fulfil their daily needs. When asked about areas of concern, they stressed on the need to build capacity to operate and maintain existing systems. However, on deeper probing, they agreed that training on better management and conservation focusing on integrated urban water management will be of value. In Bhopal and Vijayawada, Faecal Sludge and Septage Management (FSSM) were also highlighted as an important area for capacity building.

Table 1: City Priorities in WASH

CITY	FIRST	SECOND	THIRD
GUNTUR	Solid Waste Management	Waste Water Management	Water Management
VIJAYAWADA	Waste Water Management	Solid Waste Management	Water Management
MYSURU	Water Management	Solid Waste Management	Waste Water Management
BHOPAL	Solid Waste Management	Waste Water Management	Water Management
JAIPUR	Solid Waste Management	Waste Water Management	Water Management

## Solid Waste Management

In case of solid waste management, most senior officials expressed the desire to learn more about new and innovative technologies across the value chain of waste management, with a keen interest in decentralised and affordable models that need less intervention from the ULB can be managed by the community at large. They added that knowledge on financially viable models would be very useful. The recent pandemic has also taught them that capacity building in emergency preparedness and response is definitely very important. The mid-level functionaries said that they need training on project monitoring and community interaction, in addition to the above. The frontline workers elucidated on several anecdotal experiences and felt that they need training on how to be better motivated and assertive in dealing with the public, particularly during situations of conflict. This is especially relevant when they have to be the fore runners in community engagement. The situations during the pandemic has further accentuated their concerns.

Table 2: Summary of gap analysis for Solid Waste Management of the five pilot cities

SUBJECTS / TOPICS	STAKEHOLDER GROUP		
	DECISION MAKERS	MID-LEVEL OFFICIALS	GROUND STAFF
Legislative framework (Current policies and legislations)		Bhopal, Guntur, Mysuru, Vijayawada, Jaipur	
Institutional framework			
Technologies and models	Bhopal, Mysuru, Jaipur	Bhopal, Guntur, Mysuru	Bhopal, Guntur, Mysuru, Vijayawada, Jaipur
Operation and Maintenance			Bhopal, Guntur, Mysuru, Vijayawada, Jaipur
Community engagement		Bhopal, Guntur, Mysuru, Vijayawada, Jaipur	Bhopal, Guntur, Mysuru, Vijayawada, Jaipur
Financial management (sustainable projects)	Bhopal, Mysuru, Jaipur	Jaipur	
Project evaluation and monitoring	Jaipur	Guntur, Mysuru, Jaipur	
Disaster and emergencies preparedness	Jaipur	Bhopal, Mysuru, Jaipur	Bhopal, Jaipur

## Wastewater Management

In case of wastewater management, most senior officials wanted to gain knowledge on financially viable ways to manage wastewater better, wherein, they felt, improved technology played a crucial role. In fast expanding cities like Bhopal that are struggling to lay networks as the city is expanding. They also felt the need for training on FSSM. The mid-level officials expressed the need for knowledge and skill enhancement in new and innovative approaches and technologies. Many officials also suggested the need for training in project management, community engagement and public interaction. Considering the current pandemic situation of COVID 19, the frontline staff were also interested in understanding the standard operating procedures (SOPs) during times of emergencies and disasters.

Table 3: Summary of gap analysis for Wastewater Management of the five pilot cities

SUBJECTS / TOPICS	STAKEHOLDER GROUP		
	DECISION MAKERS	MID-LEVEL OFFICIALS	GROUND STAFF
Legislative framework (Current policies and legislations)		Bhopal, Guntur, Jaipur	
Institutional framework			
FSSM (Options for co treatment in STP's)	Bhopal	Bhopal, Guntur, Vijayawada, Jaipur	
Technologies and models	Mysuru, Jaipur	Bhopal, Guntur, Mysuru, Vijayawada, Jaipur	Bhopal, Mysuru, Jaipur
Operation and Maintenance		Vijayawada, Mysuru, Jaipur	Bhopal, Mysuru, Jaipur
Community engagement		Bhopal, Guntur, Jaipur	Bhopal, Vijayawada, Jaipur
Financial management (Sustainable projects)	Mysuru, Jaipur	Bhopal, Mysuru, Jaipur	
Project evaluation and monitoring	Jaipur	Bhopal, Guntur, Vijayawada, Jaipur	
Disaster and emergencies preparedness	Jaipur	Jaipur	Jaipur

## Water Management

The officials expressed the desire to learn about new approaches and technologies pertaining to water management. They indicated that knowledge on financially viable models would be very useful. The recent pandemic has also taught them that capacity building in emergency preparedness and response is very important. Anticipating the future needs, on enquiring about integrated Urban Water Management (IUWM), the officials indicated that a brief orientation would be useful. The mid-level functionaries said that they need training on legislation and relevant aspects of project management, in addition to the above. The frontline workers elucidated on several anecdotal experiences and felt that they need training on public interaction, and making citizens aware for water conservation. This is especially relevant when they have to be the fore runners in community engagement.

Table 4: Summary of gap analysis for Water Management of the five pilot cities

SUBJECTS / TOPICS	STAKEHOLDER GROUP		
	DECISION MAKERS	MID-LEVEL OFFICIALS	GROUND STAFF
Legislative framework (Current policies and legislations)		Vijayawada, Guntur	
Institutional framework			
IUWM	Bhopal, Mysuru, Jaipur	Vijayawada	
Technologies and models	Mysuru	Bhopal, Guntur, Mysuru, Jaipur	Bhopal, Mysuru, Jaipur
Operation and Maintenance		Bhopal, Mysuru, Jaipur	Bhopal, Mysuru, Jaipur
Community engagement		Bhopal, Guntur	Bhopal, Vijayawada
Financial management (sustainable projects)	Bhopal	Mysuru	
Project evaluation and monitoring		Bhopal, Guntur, Mysuru, Jaipur	
Disaster and emergencies preparedness			

Based on the summary of the training needs identified across each stakeholder group, a broad curriculum outline has been prepared, as mentioned below.

TRAINING CURRICULUM OUTLINE FOR DECISION MAKERS		
SECTORS	TOPIC / SESSIONS	DELIVERY CITY
 <p>Solid Waste Management</p>	Overview : Solid Waste Management (Policies and frameworks), issues and challenges in the value chain: focus on 3R principle and IEC	All cities
	New and innovative technologies : city case studies focusing on waste to wealth	
	Planning for Disaster Preparedness & Emergency Response	
	Project management : Strategies for sustainable projects	Mysuru, Bhopal, Jaipur
 <p>Waste Water Management</p>	Overview: Wastewater Management & FSSM	All cities
	New Available Technologies & Approaches	
	Disaster Preparedness & Emergency Response: Management Strategies	
	Project management : Strategies for sustainable projects	Mysuru, Bhopal, Jaipur
 <p>Water Management</p>	Urban Water Management Landscape in India (IUWM, Policies and Programmes)	All cities
	Contemporary Approaches for Water Management (Side Augmentation and Demand Side management)	
	Technological Interventions for Water Management	
	Project management : Strategies for sustainable projects	Bhopal, Jaipur

## TRAINING CURRICULUM OUTLINE FOR MID-LEVEL FUNCTIONARIES

SECTORS	TOPIC / SESSIONS	DELIVERY CITY
 <b>Solid Waste Management</b>	Overview: Solid Waste Management (Policies and frameworks)	All cities
	SWM Value Chain	
	New Available Technologies & Approaches	
	Role of IEC in SWM: Case based examples	
	Disaster Preparedness and Emergency Response	
	Project management	Guntur, Jaipur
	Home Composting Technologies	Jaipur
 <b>Waste Water Management</b>	Overview: Wastewater Management & FSSM	All cities
	New Available Technologies & Approaches	
	Disaster Preparedness & Emergency Response: Management Strategies	
	Project management: Strategies for sustainable projects	Guntur, Bhopal, Jaipur
	Community Engagement	Guntur
 <b>Water Management</b>	Urban Water Management Landscape in India ( <i>IUWM, Policies and Programmes</i> )	All cities
	Contemporary Approaches for Water Management ( <i>Side Augmentation and Demand Side management</i> )	
	Disaster Preparedness & Emergency Response	
	Legislative Framework & Policies	Guntur, Bhopal
	Project Management	
	Overview of O&M	Jaipur

## TRAINING CURRICULUM OUTLINE FOR GROUND-LEVEL FUNCTIONARIES

SECTORS	TOPIC / SESSIONS	DELIVERY CITY
 <b>Solid Waste Management</b>	Overview : Solid Waste Management	All cities
	Home composting: Available models	
	Community Engagement Models	
	Health and Safety (SOPs)	
 <b>Waste Water Management</b>	Overview: Wastewater Management & FSSM	All cities
	Beneficiary Schemes	
	New and Innovative technologies	
	O&M Guidelines and Health and Safety (SOPs)	Guntur, Vijayawada, Jaipur
	Community Engagement	
 <b>Water Management</b>	Approaches and technologies (Side Augmentation and Demand Side management)	All cities
	Disaster Preparedness & Emergency Response	
	New available technologies	Bhopal, Jaipur
	Beneficiary Schemes and Programme	Bhopal
	O&M Guidelines and Health and Safety (SOPs)	Jaipur
	O&M Guidelines and Health and Safety (SOPs)	

# WAY FORWARD

Based on the broad contours of the curriculum mentioned above, the next step is to formulate customized city specific modules for the three sectors and identified stakeholder groups. These modules will help in implementation of the low carbon and sustainable projects related to water, sanitation and solid waste management in the five pilot cities. Taking cue from the training outcomes in the pilot cities, the capacity building initiative will be further scaled up to 25 ULBs, which share similar scale and complexity of issues in implementing sustainable strategies.





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