

GIZ India

16-17 November 2023



Implemented by



Sustainable Urban Development - Smart Cities II SUDSC II

National, state and city level institutions will apply approaches of resilient, inclusive and sustainable urban development to ensure access to public services that consider disaster risk reduction and leave no one behind.

We aim to achieve this through:

- Policy Support: Supporting the implementation of regulatory planning frameworks
- Capacity Development: Strengthening of capacities of relevant stakeholders and institutions
- Innovative, Data-Based Projects: Open innovation and data-driven decision making
- Knowledge Exchange: Fostering peer-to-peer expert network platforms and communities of practice



Principles of risk-informed, integrated, resilient, inclusive and sustainable urban development



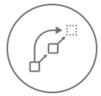
Design with the user and foster citizen-centric governance



Implement for sustainable, climate-friendly and gender-responsive urban development that considers disaster risk reduction



Contribute to **urban governance** and existing **urban planning processes**



Design for scale and facilitate **transferability and scaling-up** of digital solutions and processes



Address local **urban challenges** and **improve municipal services**



Be data driven, use disaggregated data for women and make a responsible use of data



Strengthen the local economy and digital ecosystem in order to enable prosperity for all



Prioritize open source

Urban Labs - SUDSC II Process

Multi-stakeholder format for innovative, data-based solutions for cities that follow principles of risk-informed, integrated, resilient, inclusive and sustainable urban development.

Data Sprint

Investigate data required to develop relevant digital/hybrid solutions and where to procure it from.

2

Prototype and Beta Testing

Solution is made available to internal team for testing, feedback and improvement

4



1

Challenge Lab

Stakeholder
consultation, site visit
and formulating a use
case statement in
discussion with city
authorities and citizen
representatives



First iterations of digital/hybrid solutions presented to partners for feedback

3



Launch

5

Innovative digital/hybrid solution is launched after improvements and incorporating feedback received in previous steps

Urban Labs SUDSC II – Cities and Topics

Current phase: public services

Manikonda (Telangana)

Solid Waste Management linked to Open Public Spaces

Mangaluru (Karnataka)

Solid Waste Management with Gender Lens linked to Urban Water Management

Kochi (Kerala)

Urban Observatory

Guwahati (Assam)

Drainage Master Plan.

Climate-Proofing City Expansion.

Bhubaneswar (Odisha)

Climate-Proofing Urban Planning

Coimbatore (Tamil Nadu)

Solid Waste Management and Wastewater Management with Circular Economy Approach

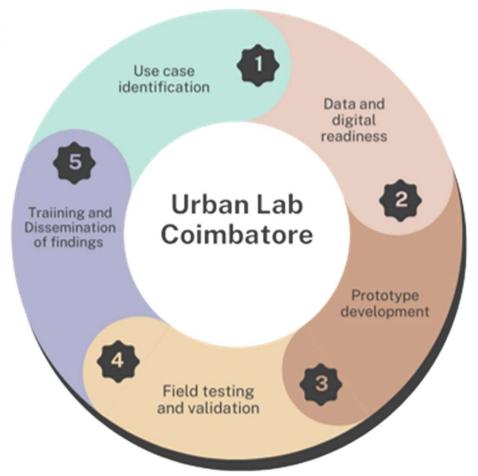


Urban Lab Coimbatore

Objective: To create an inter-operable and scalable digital solutions through an integrated and participatory approach for promoting circular economy with focus on solid waste management and wastewater management

Outcomes:

- Digitization of the monitoring process of the entire waste value chain from collection, transport and disposal.
- Data-based tools for quantification of waste generated and promoting source segregation at the household level.
- Effective usage and optimization of municipal resources for improved service delivery
- Comprehensive network of key municipal assets and infrastructure for integrated planning



Urban Lab Manikonda

Objective: Develop scalable digital solutions for inclusive planning and management of public green spaces and effective solid waste operations

- Digital tools for informed data driven decision making
- Real time data for monitoring and reporting municipal services
- Participatory approach creates a dialogue between various stakeholders to discuss problems / challenges / use cases and identify solutions
- strengthens local capacity enhancement in using the digital tools for sustainable and inclusive urban development

Functionality of the Mobile application

Public green spaces

- GPS Location of parks
- Amenities
- Status of Maintenance activities
- Reporting time
- User feed backs on park amenities
- Foot fall
- Citizen interface

Solid Waste Management

- Vehicle Reporting time
- Points of collection
- · GPS location and coverage routes
- · Real time information on coverage
- Quantity of waste reaching processing plant

Visualization on Dashboard

Urban Lab Mangaluru

The **Mangaluru Urban Lab is** envisaged to create inter-operable and scalable digital solutions for improving urban service delivery.

It aims to support innovative, data-based approaches that follow the principles of risk-informed, integrated, resilient and sustainable urban development for transformative action at the local level

Objective: To design and implement data-based and resilient approaches to effectively address the challenges of Urban water and Solid waste management (with gender lens) in the city.

Key activities:

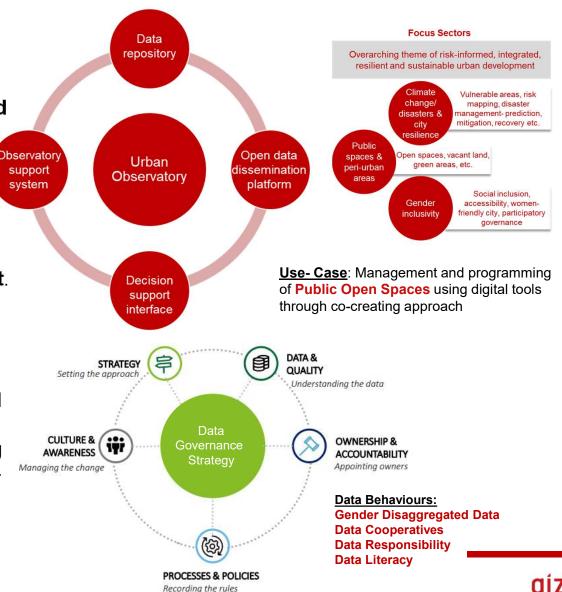
- Stakeholder consultation to identify challenges and use cases in urban water management (Incl waste water) & solid waste management with gender lens – completed
- Review and identify national / international approaches in effective management of urban water and solid waste management - completed
- Develop algorithms and simulations for agreed digital solutions for monitoring urban water consumption and Smart Waste Collection and Truck Monitoring System improving operational efficiency, reducing operational cost and carbon footprint for a pilot area (for example: up to two wards) - in progress
- Develop feasible business models with focus on effective management of urban water & solid waste management with gender lens in Mangaluru based on observed outputs from model project – in progress

Urban Lab Kochi

Guiding Principle: Enable access to data and information about the city in an easily retrievable and user-friendly manner conforming to information security and data privacy standards.

Objective: Support the city in setting up an urban observatory that would serve as a data repository and data governance strategy becoming a basis for future planning and inform research and policy development.

- The project envisages to strengthen the partnerships towards the common goal of digital transformation of Kochi city- by facilitating knowledge/data sharing including dissemination, and integration of digital infrastructure/devices.
- Data Governance Strategy for Kochi- materialising required standards and regulations, focusing on usecase outcomes and governing the least amount of data with the highest impact.
- Building of local capacity in urban data management is envisaged.



Glimpses of the journey so far..

Output 3 – Innovative, data-based projects

Challenge Lab – Defining Problems



Data Sprint (Manikonda)



Data Sprint (Coimbatore)











