



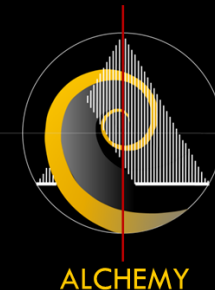
# TOTAL SANITATION IN SHIMLA, VARANASI & RAIPUR

## FOR GTZ ASEM

Consortium for DEWATS  
Dissemination  
(CDD Society) Bangalore

CEPT Research & Development  
Unit (CRDU), Ahmedabad

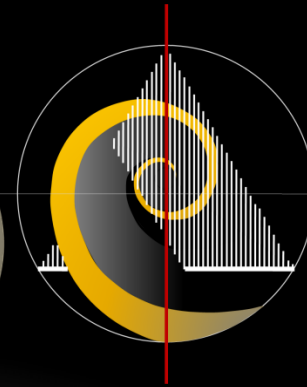
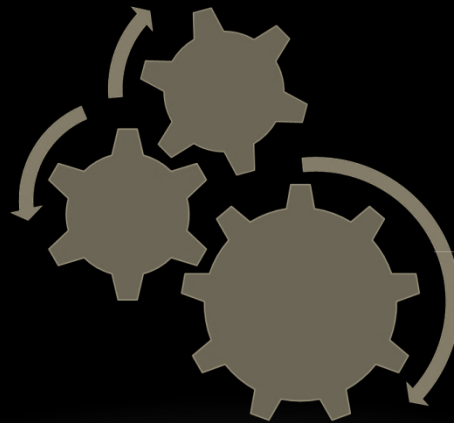
Alchemy Urban Systems (P) Ltd.  
(Alchemy), Bangalore



# CONTENTS

- The Consortium
  - Local Partners
  - Approach and Methodology
    - Key Learning's from Previous Experiences
    - The Approach
    - The Methodology
-

# THE CONSORTIUM



ALCHEMY

# LOCAL PARTNERS FOR THE CSPS

Universal Training & Research Institute  
(UTRI) (SHIMLA)



Centre for Rural Entrepreneurship and  
Technical Education (CREATE) (VARANASI)

Community Advancement And Rural  
Development Society (CARDS) (RAIPUR)



# NETWORK PARTNERS



# **APPROACH AND METHODOLOGY**

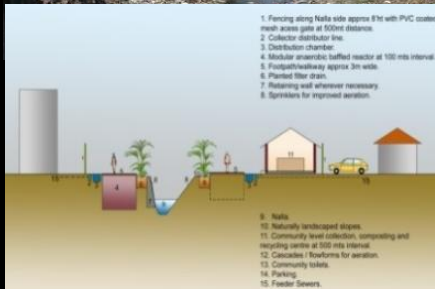
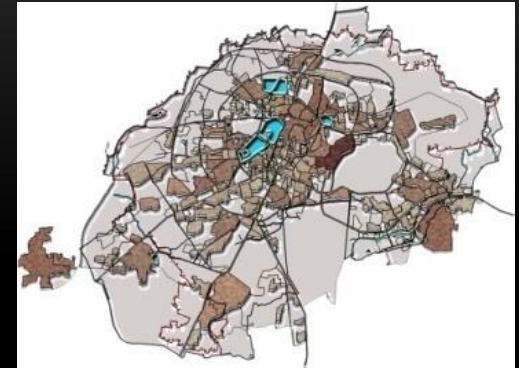
# BACKGROUND

- City Sanitation Plans to be prepared as per the National Urban Sanitation Policy
  - NUSP's objectives
    - Awareness Generation and Behavior Change
    - Open Defecation Free Cities
    - Integrated City-Wide Sanitation
  - The CSP is to be socially inclusive and environment friendly

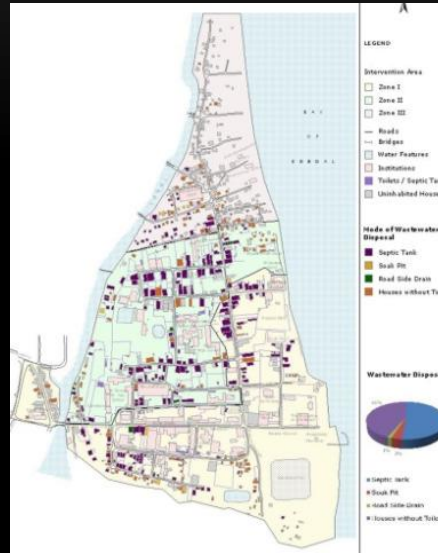


# LEARNING'S FROM PREVIOUS EXPERIENCES

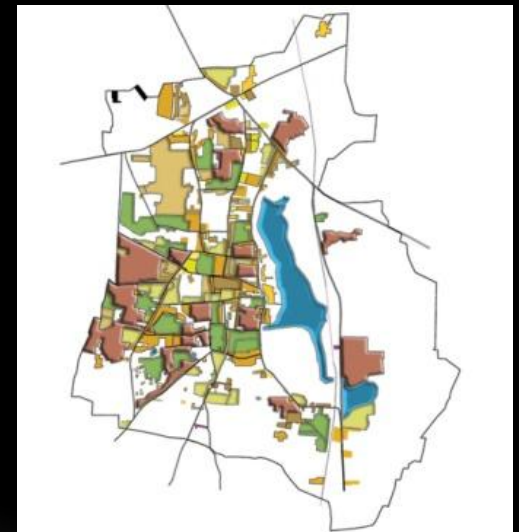
BHUJ



PUNE



TRANQUEBAR



DODABALLAPUR



KOLHAPUR



# THE APPROACH

- **ACHIEVING 100% SANITATION**

- Primary Indicators as mandated by National Urban Sanitation Policy
    - Every citizen has access to a toilet & the city is 'Open Defecation Free'
    - All the sewage generated is collected, treated and disposed off safely
  - Secondary Indicators (additional)
    - All the solid waste generated is collected, treated and disposed off safely
    - All water bodies and drainages are preserved and kept clean
    - All the storm water drains are kept clean.
-

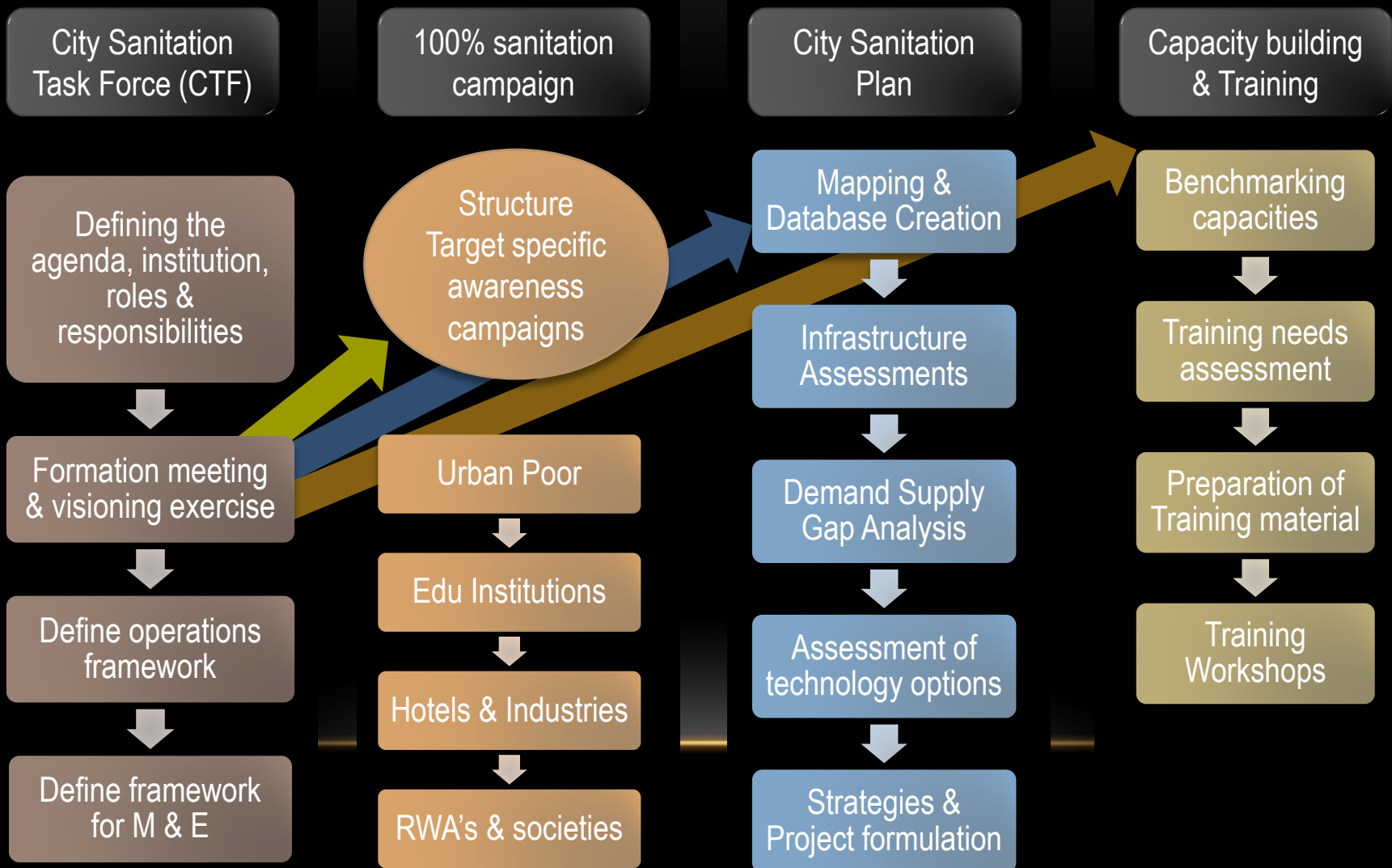
# THE APPROACH

- **BUILDING LOCAL INSTITUTIONS AND COMMUNITY PARTICIPATION**
    - The creation of the city sanitation task force,
    - The 100% sanitation campaign (pilots),
    - An integrated city sanitation plan involving the community
    - Capacity building and training
-

# THE APPROACH

- **CENTRALIZED AND DECENTRALIZED APPROACHES**
  - A combination of approaches is required to ensure 100% sanitation
  - The approach & nature of issues will lead to technology selection
    - Guiding principles must include
      - Technical evaluation
      - Appropriateness to the context
      - Promote energy efficiency, recycling & reuse
      - Socially & culturally acceptable (or build consensus through community involvement)

# THE METHODOLOGY



# CITY SANITATION TASK FORCE

Defining the agenda, institution, roles & responsibilities

Draft 1 - after preliminary discussions with key stakeholders

Final CTF agenda paper

Formation meeting & visioning exercise

Presentation of CTF agenda to city stakeholders

Vision for the city & goal setting for 100% sanitation & Open defecation free city

Define operations framework

Defining working groups, members, roles, responsibilities

Defining SOPs

Define framework for M & E

Evaluating CSPs

Evaluating & monitoring project implementation

Monitoring sustenance of 100% sanitation

# 100% SANITATION CAMPAIGN

## Mapping of Sanitation Issues & Target Groups

Issues to be identified through focus group discussions, informal consultations and field visits

Issues may require specific problem solving interventions or changing mindsets

## Formulating an action plan for Awareness Generation

Action plan on the basis of time frame, target groups, issues and medium to be prepared

## Preparation of target specific IEC material

Brief for preparing IEC material to be made

## Conducting Awareness Generation Programs

Pilot awareness generation to be conducted

## Community Based Information System

Data collection formats to be prepared

Open source GIS software can also be used

# CITY SANITATION PLAN

Mapping & Database  
Creation



Infrastructure  
Assessments



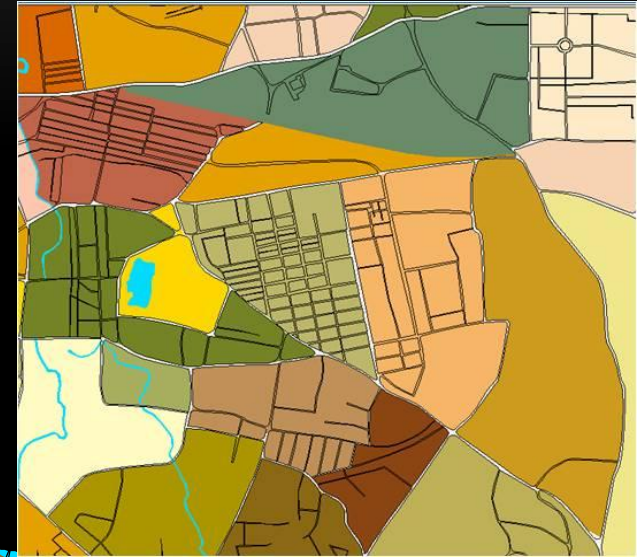
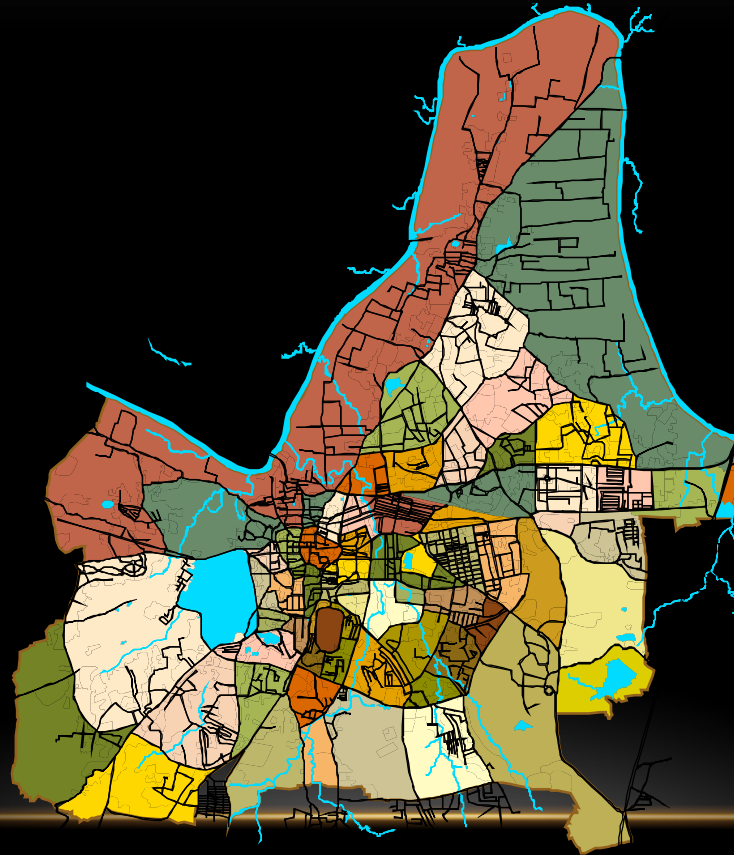
Demand Supply Gap  
Analysis



Assessment of  
technology options



Strategies & Project  
formulation



# CITY SANITATION PLAN

Mapping & Database Creation



Infrastructure Assessments



Demand Supply Gap Analysis



Assessment of technology options



Strategies & Project formulation

The field surveys and consultation shall be to assess

- Primary and secondary sources of water
- Disaggregate Water demand
- Access to sewerage infrastructure and toilets in slums
- Disaggregate sewerage infrastructure demand
- Typology of development

Survey block No.: - \_\_\_\_\_ Building block No.: - \_\_\_\_\_  
 Area Name: - \_\_\_\_\_ Surveyor Name: - \_\_\_\_\_

**A) Landuse Survey**

1. Landuse Subcategory - Tick mark the appropriate land use

NO.	Landuse	Coding	Tick
1	HIG Residential( Posh bungalows)	Ra	
2	Residential Apartment(HIG)	Rb	
3	Residential + Commercial	Rc	
4	Row houses	Rd	
5	MIG Residential(tenements/duplex)	Re	
6	LIG Residential(tenements/apartments)	Rf	
7	Slums	Rg	
8	Commercial(malls/Biq shops)	Ca	

**B) Block level survey**

**1. Water Supply**

1. Household size/No. of members - \_\_\_\_\_

2. Do you have water supply facility: -  Yes  No

3. If yes than what is the source of water supply?

Source	Predominant source	Supplementary source	Quality of water	Regularity of water supply	Time period for which water is supplied (hrs)
Municipal					
Bore well					
Tanker					
Bottled water					
Individual taps					
Common stand post					
Neighboring areas					
Other					

*In case of other source please mention the source and the relevant details*



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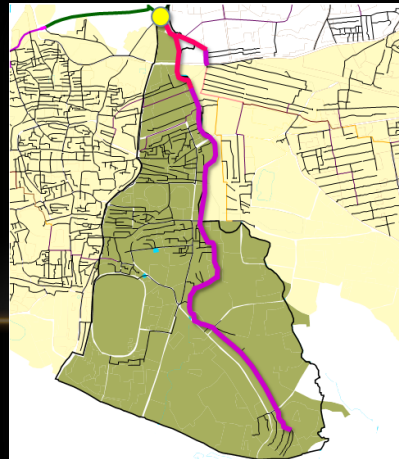
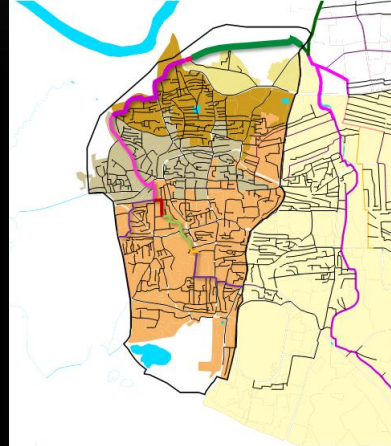
Demand Supply Gap  
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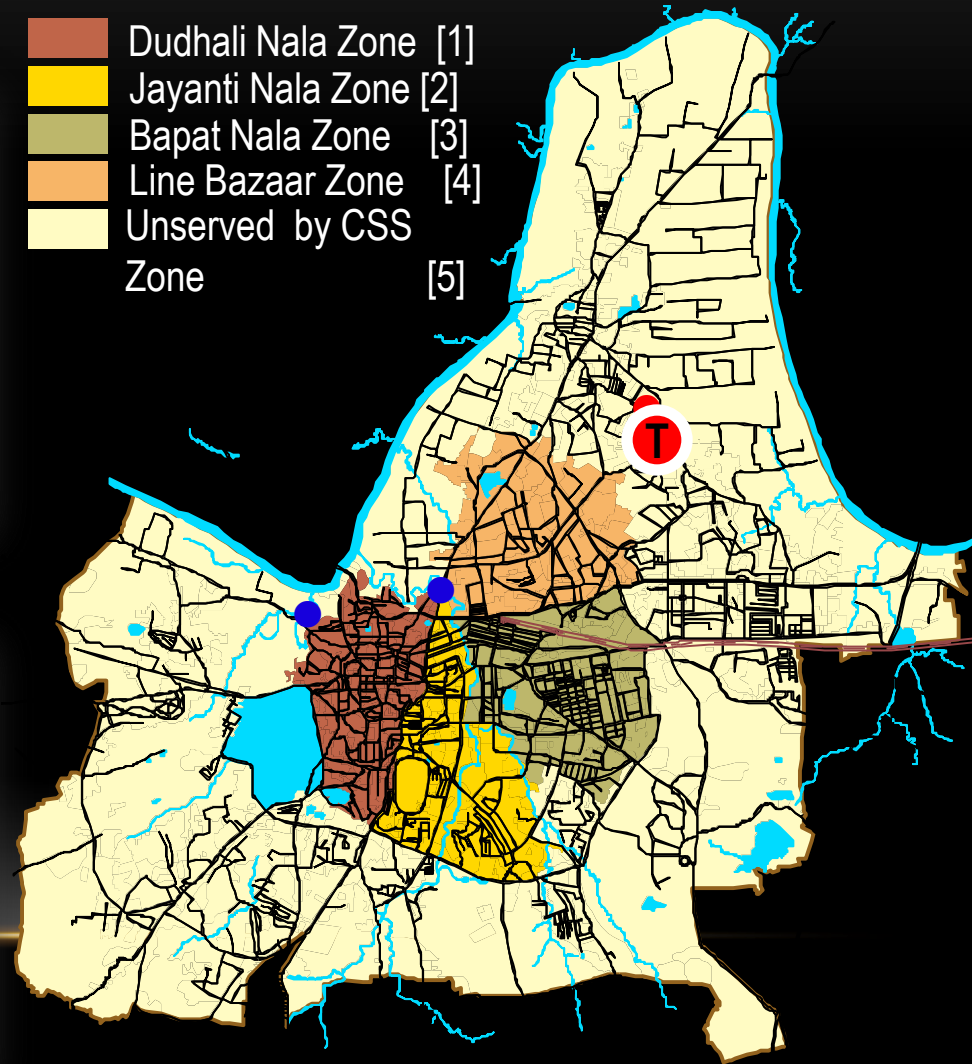
Assessment of  
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Strategies & Project  
formulation



-  Dudhali Nala Zone [1]
-  Jayanti Nala Zone [2]
-  Bapat Nala Zone [3]
-  Line Bazaar Zone [4]
-  Unserved by CSS Zone [5]



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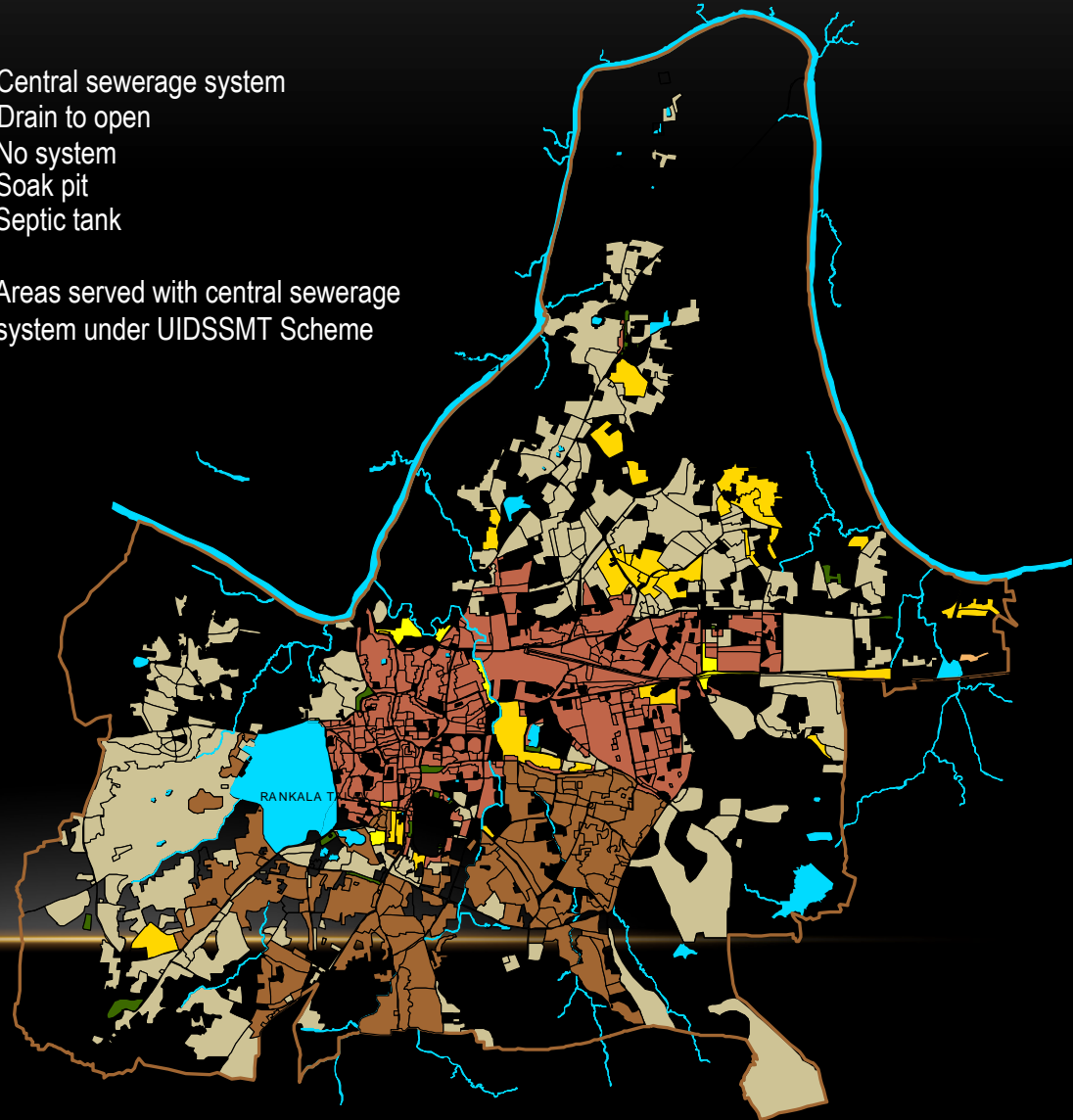


Assessment of  
technology options



Strategies & Project  
formulation

- Central sewerage system
- Drain to open
- No system
- Soak pit
- Septic tank
- Areas served with central sewerage system under UIDSSMT Scheme



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- Infrastructure gaps
  - Capacity issues
  - Coverage issues
    - Network inadequacies
    - Level issues
    - People don't want to connect
- Management issues

# CITY SANITATION PLAN

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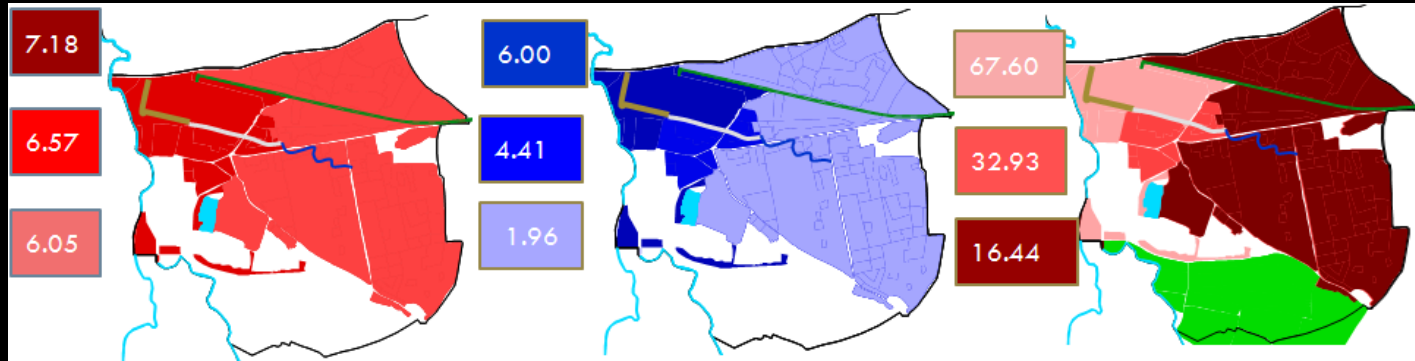
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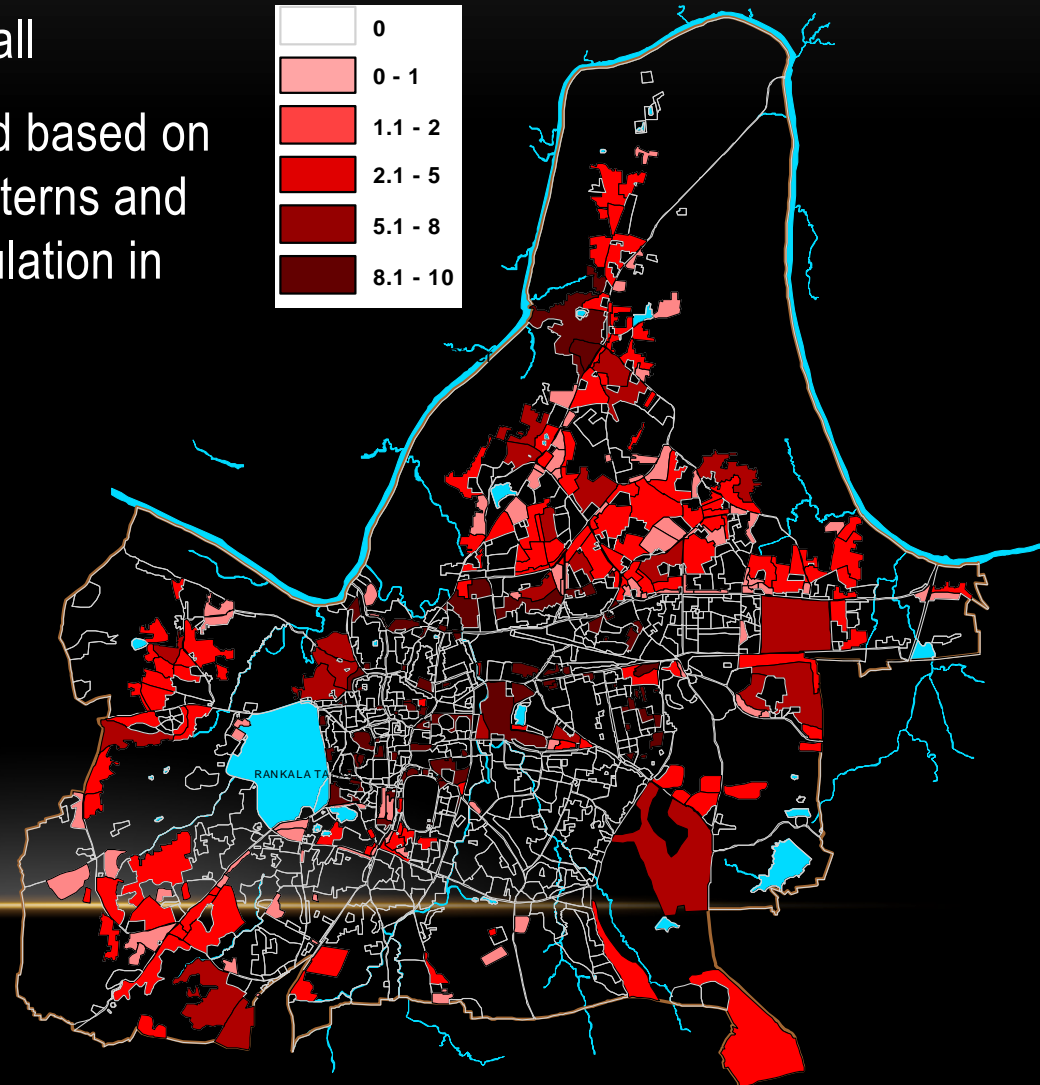
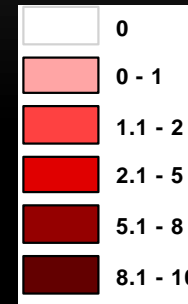


Assessment of  
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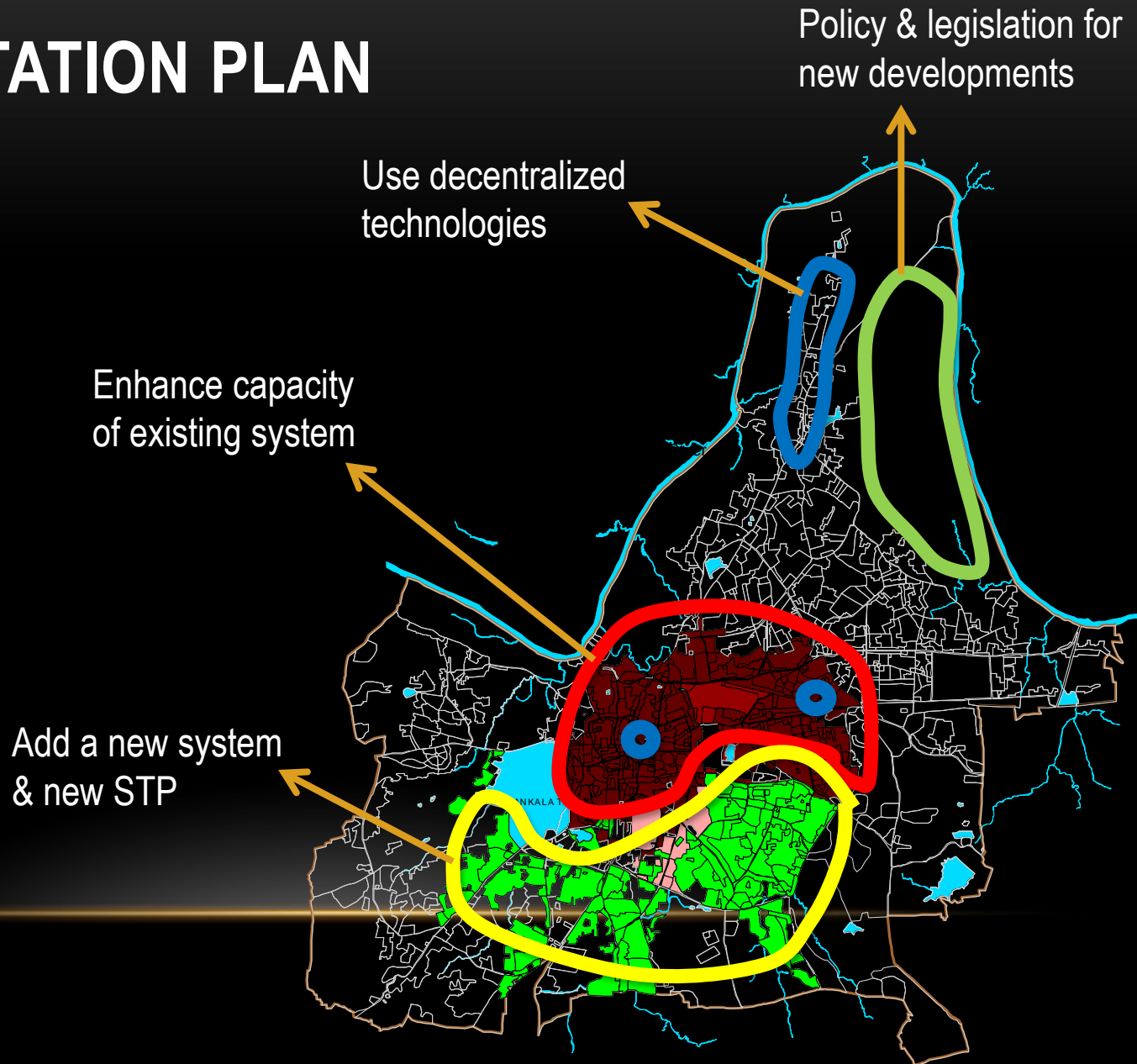
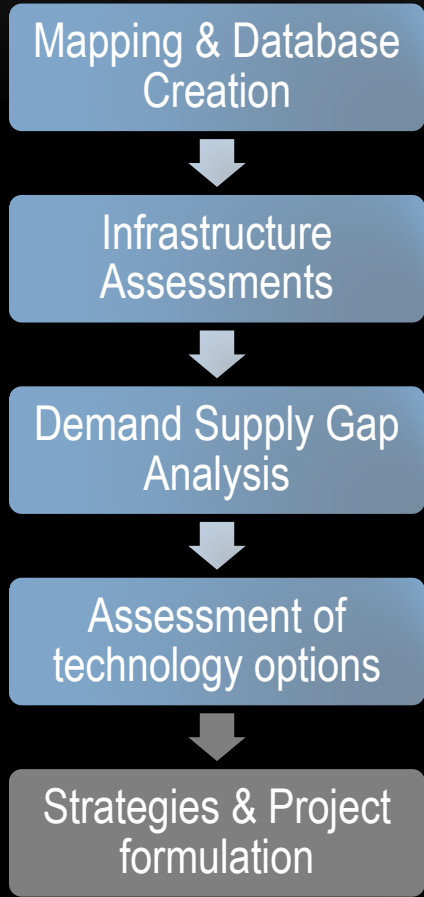


Strategies & Project  
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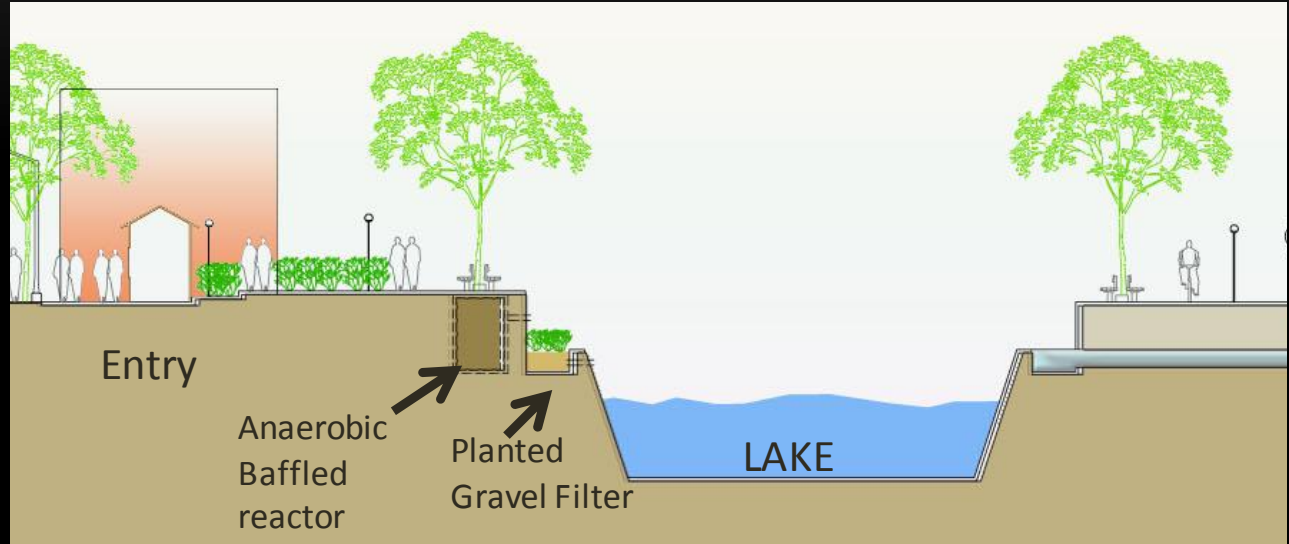
- Present shortfall
- Future demand based on city growth patterns and projected population in the CDP



# CITY SANITATION PLAN



# INTEGRATING WITH WATER FRONT DEVELOPMENT



A part of the sewage in the centralized system, serving areas adjoining the water bodies can be treated by installing modular anaerobic baffled reactors along the lake front . The treated water can be used for lake front development

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- Schematic design of central sewerage systems
- Schematic design of decentralized systems in a manner that integrates with centralized
- City level strategies on project phasing, implementation
- Block cost estimates for the city
- Recommendations to policy and legislation



# CAPACITY BUILDING & TRAINING

Benchmarking of capacities of the municipal corporation

Developing a benchmark based on key stakeholder consultation for 100% sanitation

Assessing capacities of the municipal corporation

Plan for capacity building

Training needs assessment

Knowledge areas/gaps for implementing 100% sanitation shall be identified

Formation of a Technical Core Group

Municipal and private sector professionals shall be identified

Focus areas for pilot training determined

Training Workshop Series

Pilot training workshops on 3 topics shall be conducted

Thank you

