



# Incentivising change at municipal level



# Key facts

**18.6%** URBAN HHs HAVE **NO** LATRINE FACILITY

**32.7%** OF URBAN HHs HAVE ACCESS TO **PIPED SEWER** SYSTEM

**38.2%** HHs HAVE **SEPTIC TANKS**

**6%** OF HHs DEPEND ON **PUBLIC TOILETS**

**12.6%** OF HHs RESORT TO **OD**

**79%** OF Wastewater is **UNTREATED**

# No Latrine Facility – emerging questions

**18.6%** URBAN HHs HAVE **NO** LATRINE FACILITY



**12.6%** OF HHs RESORT TO **OD**

## Reasons for not having on-premise toilets

Are there **Financial Issues** ?

Are there **Legal Issues** ?

Are there **Space Constraints** ?



# Onsite sanitation and FSM – emerging questions

38.2% URBAN HHs HAVE SEPTIC TANKS



## Are septic tanks linked to soak pits

Are they built as per Codes / Specifications ?

How often are they cleaned ?

Where does the effluent flow ?

What happens to the SLUDGE?

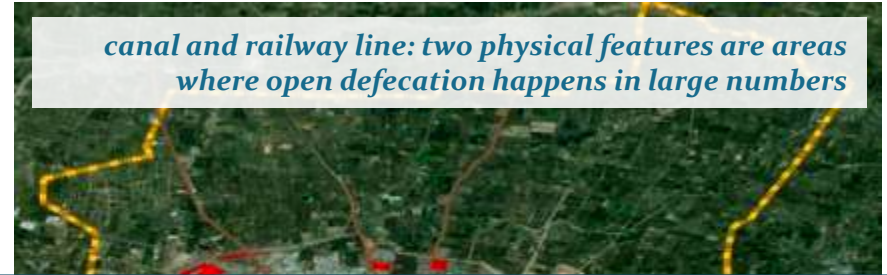
# Sanitation system in urban India

Sanitation system	Gujarat	Maharashtra	Other states
Total urban population (million)	23.0	45.5	148.4
Total no of cities	167	252	1145
<i>Sanitation system in cities</i>			
Fully sewage system (no, %)	1 (0.6%)	0 (0%)	4 (0.4%)
Fully onsite sanitation system (no, %)	105 (62.9%)	220 (87.3%)	865 (75.5%)
Mixed sanitation system (no, %)	61 (36.5%)	32 (12.7%)	276 (24.1%)

**76.1 %** of cities in **India** are dependent on **on-site sanitation systems**

**23.6%** are dependent on **mixed sanitation systems**

# OPEN DEFECATION IN CITIES



## Key Reasons-

- No individual toilets- due to lack of funds and space
- Poor situation of community toilets





# COMMUNITY TOILETS



- Community toilets privately managed by NGOs, CBOs or other firms were observed to be in better condition than ULB managed toilets.
- 4 out of 15 cities have community toilets management contract - Ambarnath, Barshi, Panvel and Latur.
- Various schemes by the Government of Maharashtra are contributing to building physical infrastructure to meet the gap.

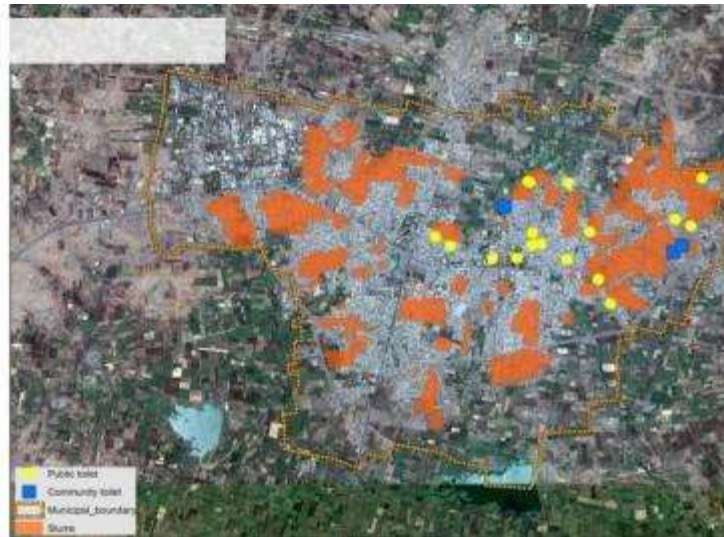


- No water/ electricity in community toilets
- Poor maintenance and cleaning
- Non attendance or shortage of workers to maintain toilets
- Unhygienic conditions around Community toilets
- Inappropriate location of Community toilets
- Affordability issues to use Community toilets
- Lack of awareness
- Absence of child friendly seats

# INAPPROPRIATE DISTRIBUTION OF COMMUNITY TOILETS

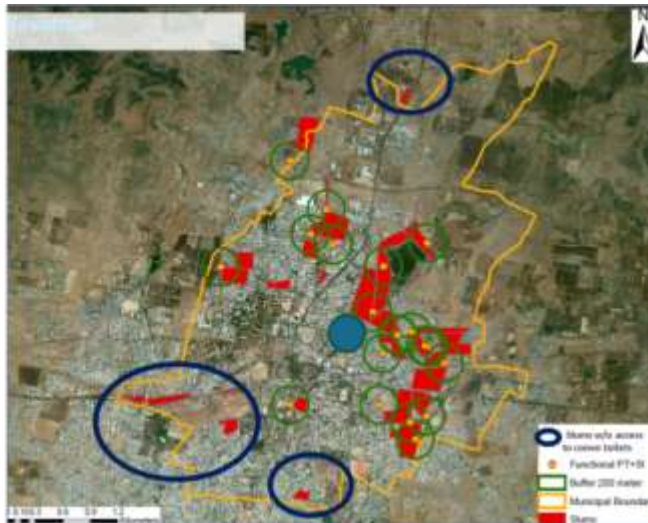
## Latur

Concentration of community toilet location in only one part of the city



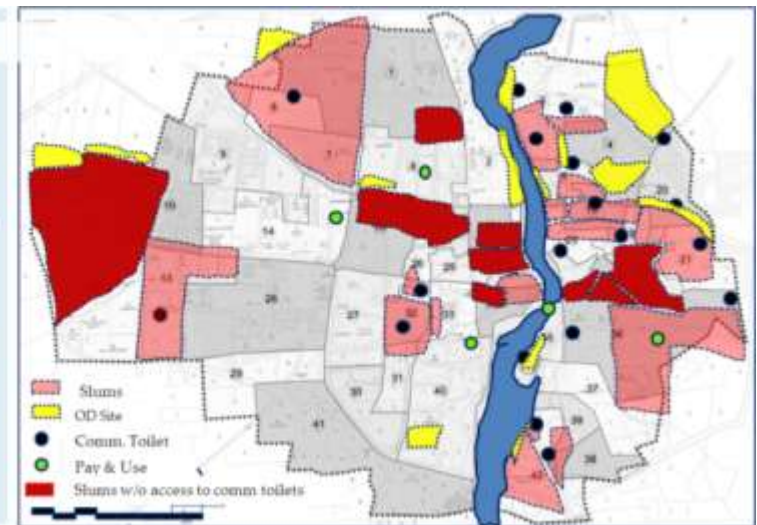
## Yavatmal

Lack of community toilet facility in outskirts areas



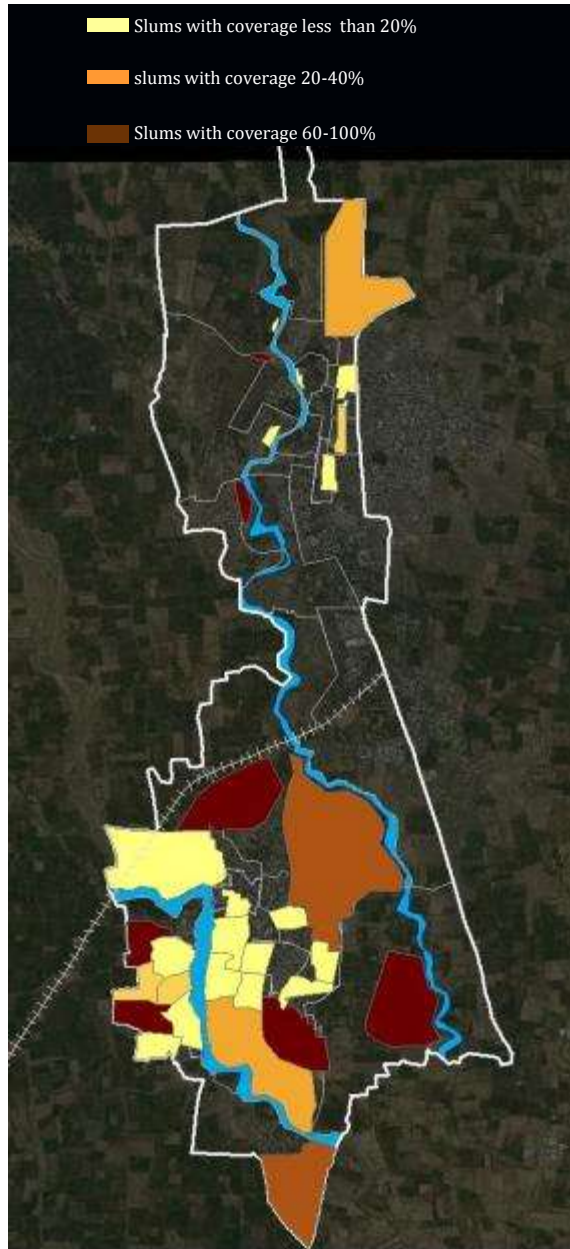
## Beed

OD sites next to slums without access to community toilets

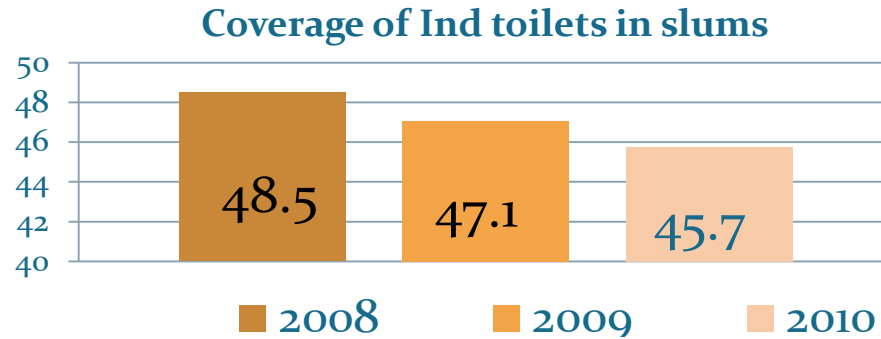




# SANITATION SERVICES IN SLUMS



## Access to toilets in Slums : Achalpur Municipality, Maharashtra



# How do we incentivize change?

## Commitments

Make  
sanitation  
aspirational

Finance

Name and  
Shame – city  
sanitation  
ranking

- National commitment (National Urban Sanitation Policy)
  - ▣ Swachh Bharat (Clean India)
- Commitment matched by finance (toilet subsidy)
- Performance based grants
- Name and Shame (sanitation ranking)
- Aspirational (IEC activities – social media)

# National commitment



# National Urban sanitation Policy (NUSP)

The NUSP 2008 aims to provide universal sanitation services in urban India

Access	<ul style="list-style-type: none"><li>• <b>Providing 100% access to improved sanitation in urban India by 2025 to make cities open defecation free</b></li></ul>
Collection and Conveyance	<ul style="list-style-type: none"><li>• Extending coverage and ensuring proper functioning of sewerage systems</li><li>• <b>Promoting proper disposal and treatment of sludge from on site installations</b></li></ul>
Treatment and reuse	<ul style="list-style-type: none"><li>• Promoting recycle and reuse of waste for non potable applications</li><li>• Ensuring safe collection and disposal of waste</li></ul>
Awareness	<ul style="list-style-type: none"><li>• <b>Generating awareness about sanitation and its linkages to public and environmental health</b></li></ul>
Institutional changes	<ul style="list-style-type: none"><li>• Strengthening ULBs to provide sustainable sanitation services delivery</li><li>• Mainstream planning and implementation related to sanitation</li><li>• Strengthening policy and regulatory framework particularly for onsite sanitation/FSM</li></ul>

# Swachh Bharat Mission

The screenshot displays the official website of the Swachh Bharat Mission (SBM) Urban, Ministry of Urban Development, Government of India. The browser's address bar shows the URL [swachhbharaturban.gov.in/15NAHome.aspx](http://swachhbharaturban.gov.in/15NAHome.aspx). The website features a green header with the SBM logo, the Ministry of Urban Development, and the Government of India emblem. A navigation menu includes links for HOME, ORGANIZATION, ABOUT SBM, STATES/ CITIES, HOUSEHOLDS/ CITIZENS, CIRCULARS & ADVISORIES, GALLERY, and HELP. A red banner below the navigation menu reads: "IMPORTANT NOTICE :- Webcast on Swachh Bharat Mission by JS & Mission Director at 11 AM on 17/04/2015". The main content area features a large blue banner with the text "Prime Minister inaugurates Swachh Bharat Mission" and a photograph of the Prime Minister and other officials participating in a cleanliness drive. Below the banner are four prominent buttons: "Donate" (blue), "Participate" (orange), "What's new" (green), and "Mission Progress" (orange). The bottom of the page shows a Windows taskbar with various application icons and a system clock indicating 3:32 PM on 04-May-15.

# Finance to match commitments

- National government subsidy of Rs 4000 for toilet
- Many state governments have added their own subsidies
  - ▣ Gujarat INR 12,000 per toilet
  - ▣ Maharashtra 12,000 per toilet
- Target driven approach
  - ▣ Each state government decides on a number of toilets to be built in a year



# Performance based grants

- 14th Finance Commission has kept aside 20% of grants as performance grant. Performance grant is meant to instill improved information on local finances and outcomes.
- Maharashtra state all 14 FC grants to be used for sanitation services
- Fourteenth Finance Commission has recommended that “urban local bodies will have to measure and publish service level benchmarks for basic services”

# Performance Measurement

# PAS

Performance Assessment System

Annual service delivery  
profile for **400+**  
cities in **2** States for **6** years

National database for 1800 cities  
For 18 states for 3 years

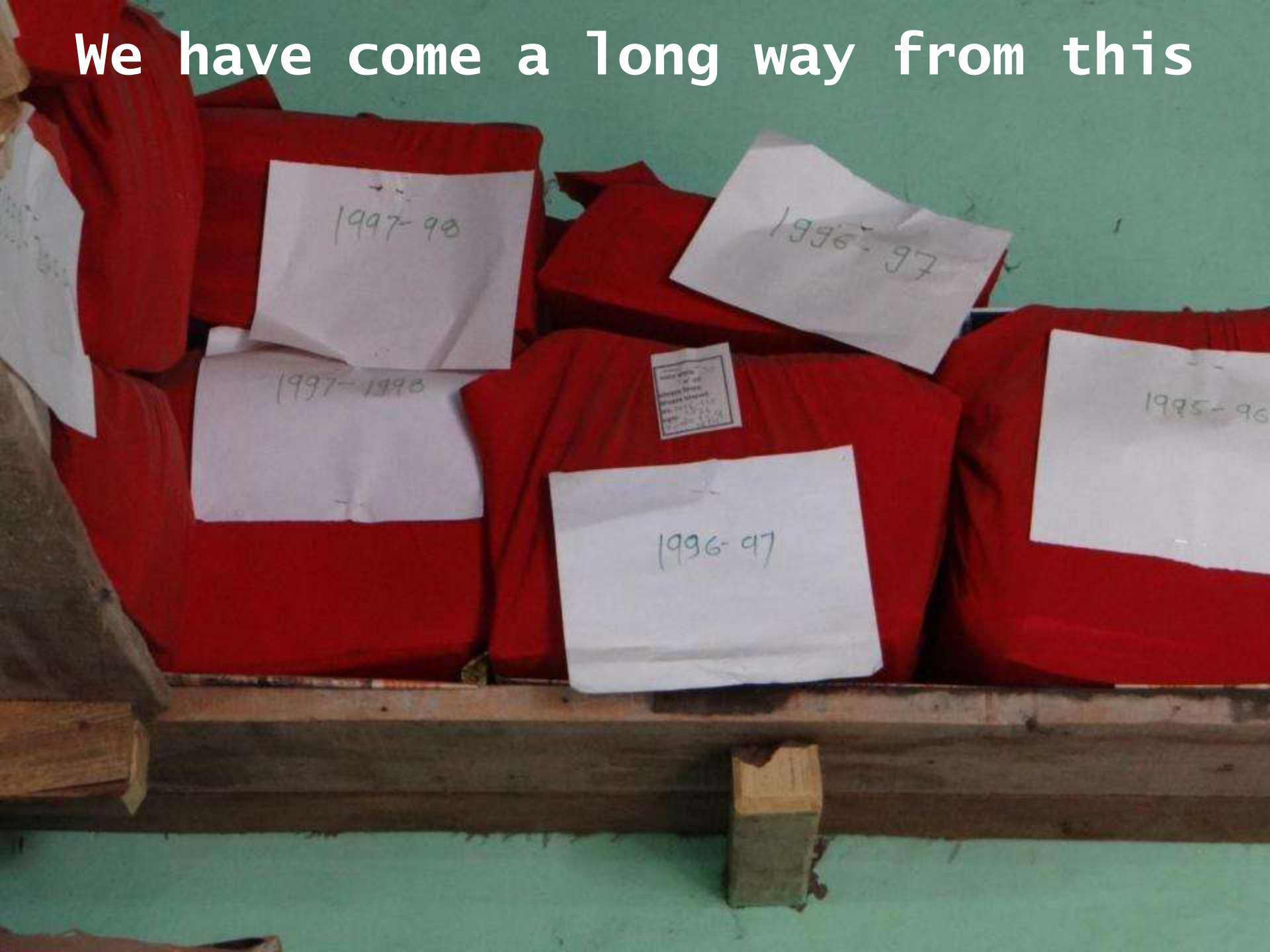
[www.pas.org.in](http://www.pas.org.in)

Water supply, Waste Water, Solid waste Management & Storm Water





We have come a long way from this



# Online data entry

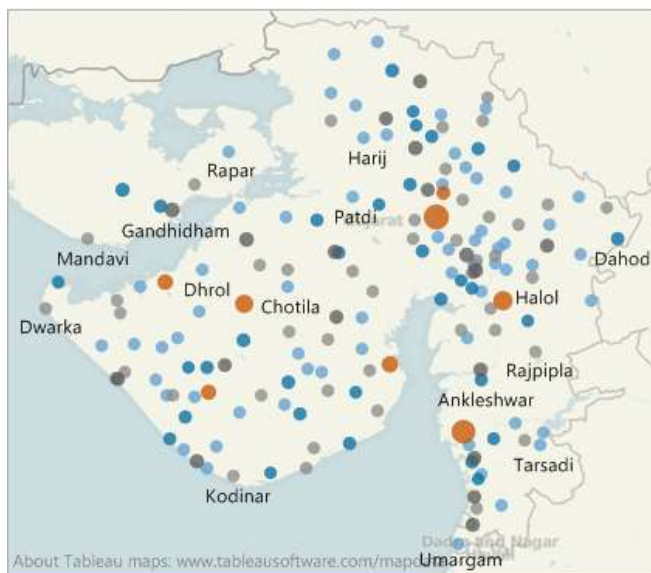




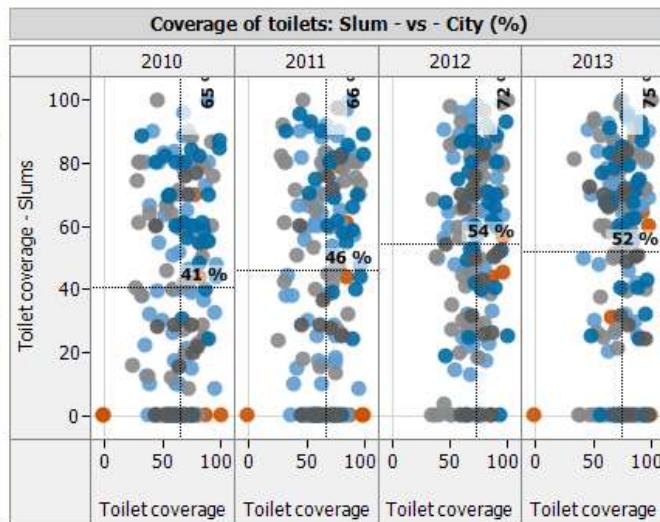


# Analysis of Indicators by Interactive Dashboards

Dashboard Showing Performance Indicators for **Wastewater Services**



*Access and Coverage - Toilets*



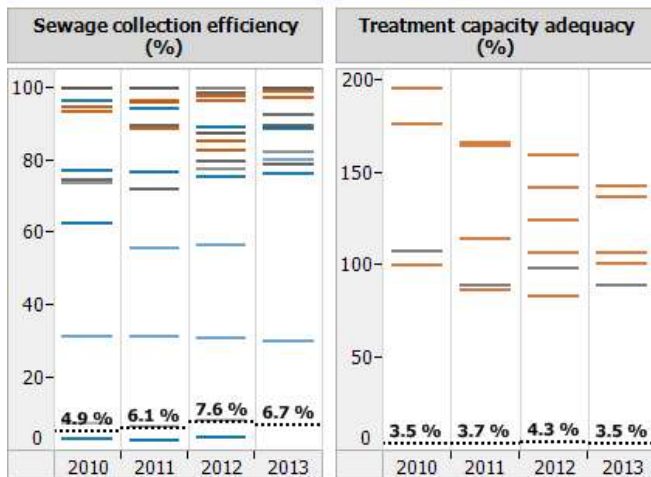
Interactive data visualization that provides valuable insight

4,000,000  
6,581,580

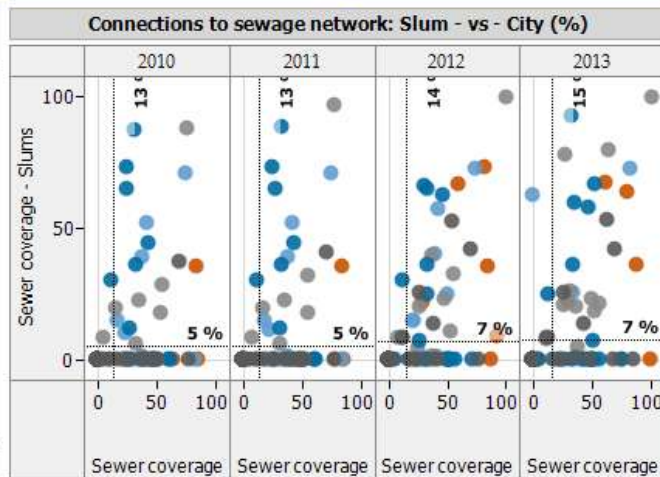
Class

- MC
- A
- B
- C
- D

*Service Levels and Quality*



*Access and Coverage - Sewer network*



Select ULB

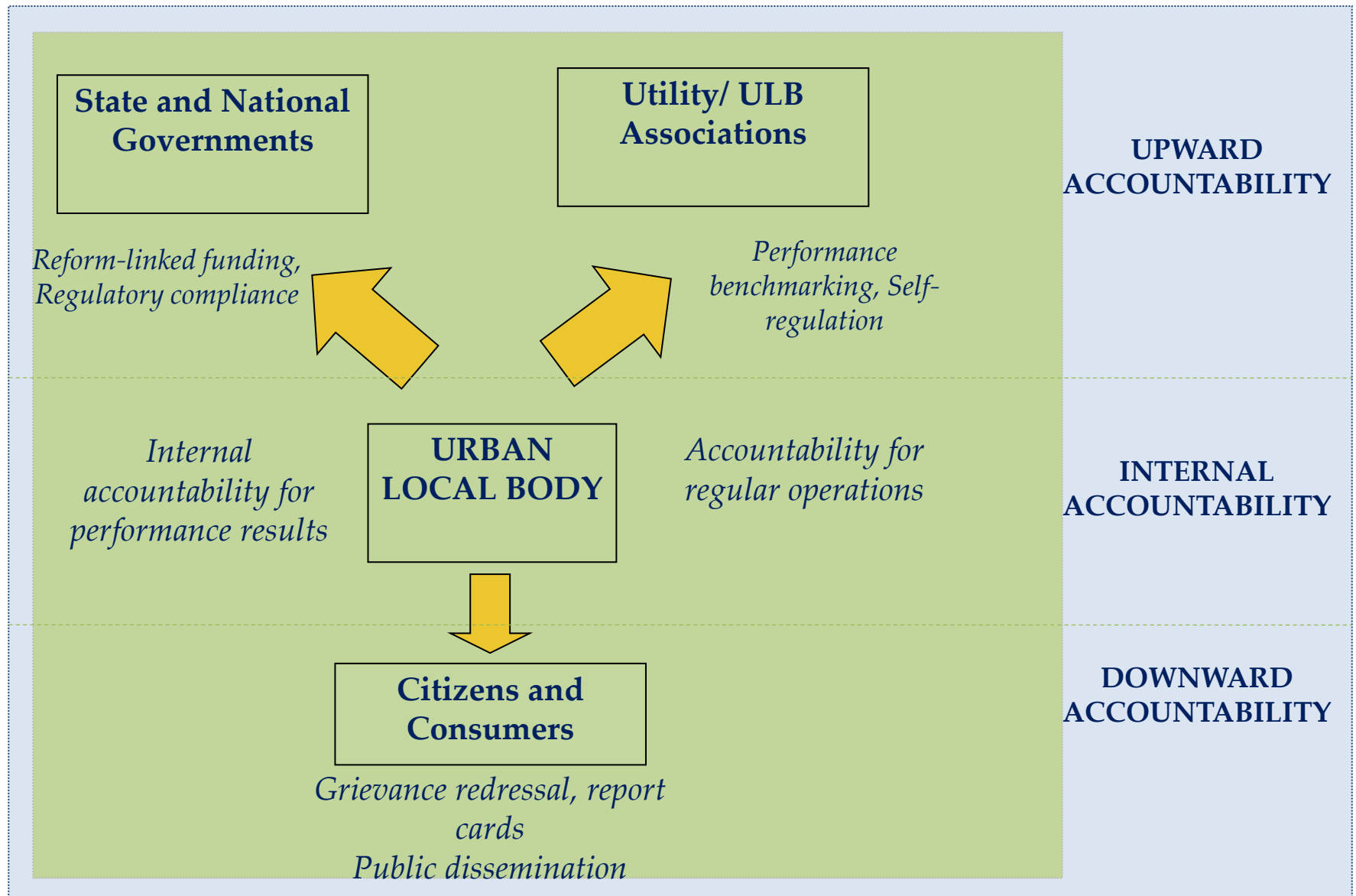
Ahmedabad  
Amod  
Amreli  
Anand  
Anjar  
Anklav  
Ankleshwar  
Babra  
Bagasra  
Balasinor  
Bantawa  
Baravala

Next

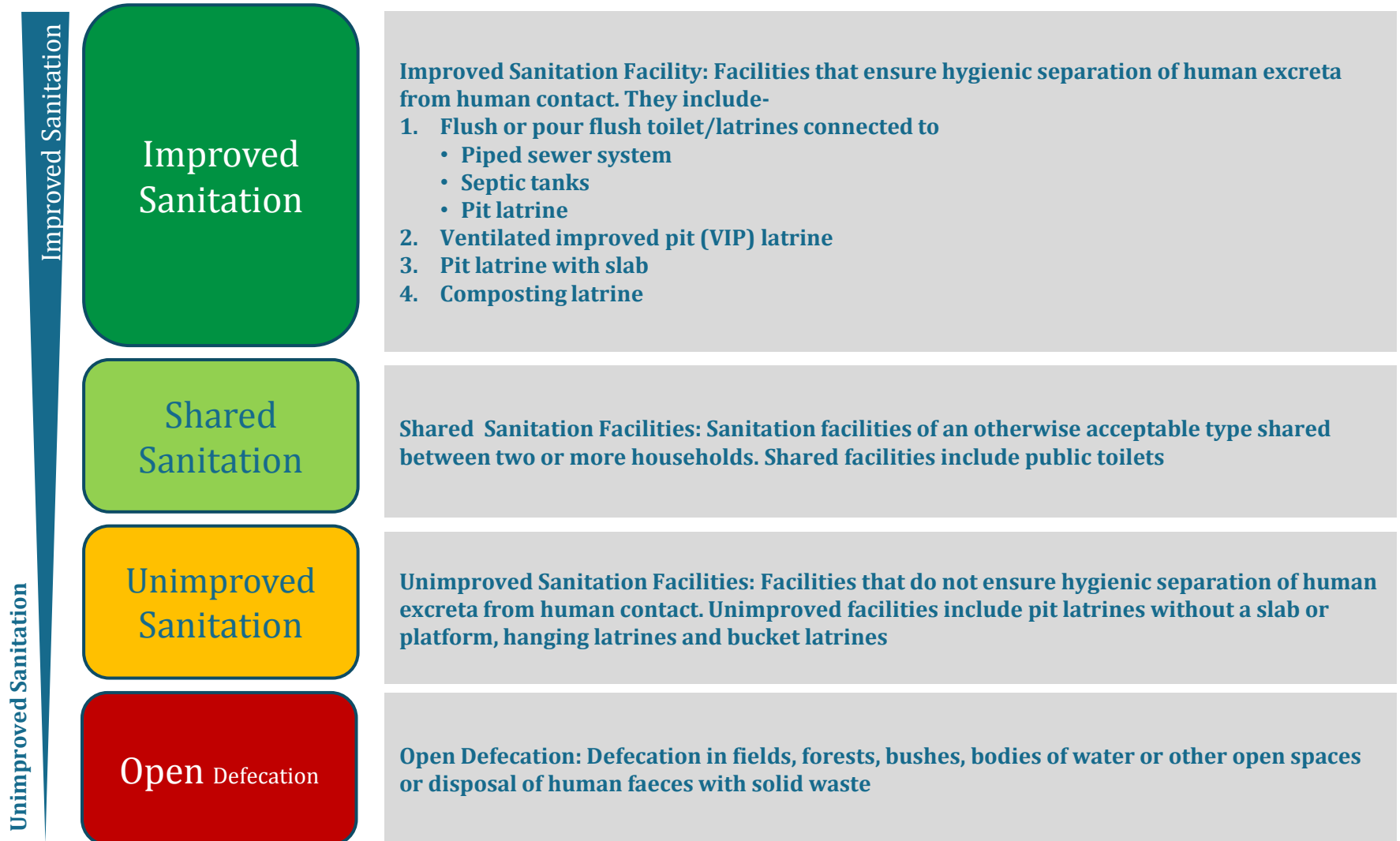




# Use of PAS for Accountability



# Use of indicators: SANITATION LADDER



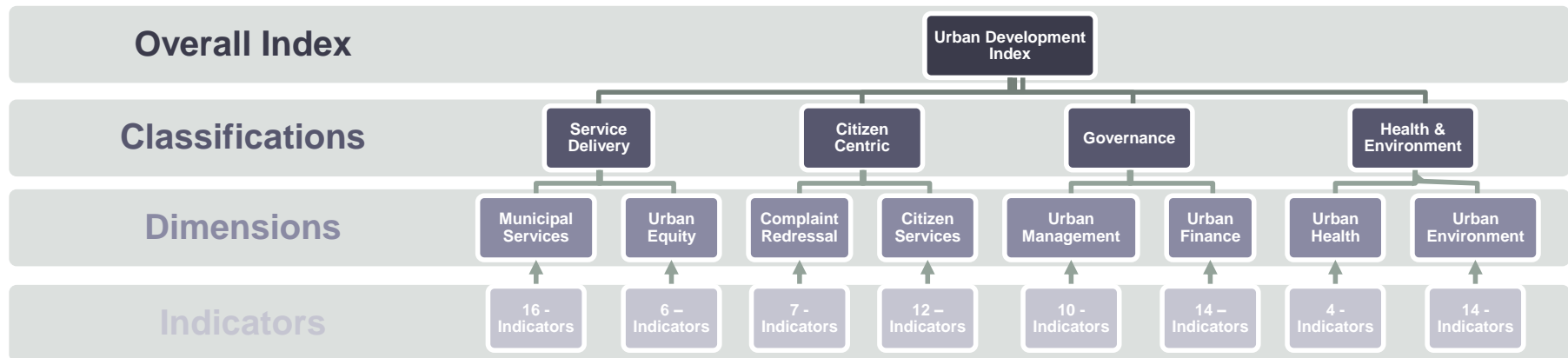
# New framework for sanitation assessment

Type of system	Capture	Collection	Conveyance	Treatment	Recycle and Reuse
Conventional underground Sewerage system	1. Coverage of toilets	1. Coverage of sewerage network service 2. Collection efficiency of sewage network		4. Adequacy of sewage treatment capacity 5. Quality of sewage treatment	6. Extent of reuse and recycling of sewage
Onsite system – Septic tank with settle sewer / drains		7. Percentage of properties connected to septic tank	7. Percentage of septic tanks cleaned annually 8. Percentage of septic tanks connected to settle sewer / drains for effluent	12. Adequacy of septage treatment capacity 13. Quality of septage treatment 14. Adequacy of effluent (from septic tank) treatment capacity 15. Quality of effluent (from septic tank) treatment	12. Extent of reuse and recycling of treated septage 13. Extent of reuse and recycling of treated effluent (from septic tank)
Onsite system – Septic tank with Soak pit			10. Percentage of septic tanks connected to soak pit for effluent disposal 11. Collection efficiency of septage		
Mixed sanitation system (Partial sewerage and onsite sanitation)		12. Weighted average of coverage of each sanitation system	12. Weighted average of collection efficiency of each sanitation system	12. Weighted average of adequacy of each sanitation system 13. Weighted average of quality of treatment of each sanitation system	12. Weighted average of extent of reuse and recycling of each sanitation system

# Ranking of cities for Maharashtra – Online system

Framework and online module for city ranking is developed for Urban development department of Government of Maharashtra

## Structure for dashboards showing ranking of cities



Similar to human development index (HDI), urban development index (UDI) is calculated using 83 indicators identified under 8 categories (dimensions):

- 1\_ *Municipal Services,*
- 2\_ *Urban Equity,*
- 3\_ *Complaint Redressal,*
- 4\_ *Citizen Services,*
- 5\_ *Urban Management,*
- 6\_ *Urban Finance,*
- 7\_ *Urban Health,*
- 8\_ *Urban Environment*

Demographics		2012-2013	2013-2014
1 Population (Present Year)	Person	112840.8	
2 Number of Households (Present Year)	Number	23814.0	
3 Number of Slum Settlements (Present Year)	Number	32.0	
4 Number of Slum Population (Present Year)	Number	112840.8	
5 Number of Slum Households (Present Year)	Number	11175.0	



# National Rating for Sanitation

- In the first round, **all cities with a population of 100,000** (Class-I Cities) were covered which accounted for **72% of the urban population**
- **No city** in the **green category**, **4 cities** were in the **blue category**, **229 cities** in the **black category** and **190 cities** in **red category**
- **None** of the cities is **OD free**
- **380 cities** collect and treat less than 40% of the **human excreta**

- GoI has instituted annual **RATING** award scheme to promote urban sanitation.
- Cities should seek improved **PUBLIC HEALTH** and **ENVIRONMENTAL** standards as two outcomes for its urban citizens
- need to plan and implement holistic **CITY-WIDE** sanitation plans
- Thereby **INSTITUTIONALISE** processes that help reach outputs pertaining to safe collection, confinement and disposal (including conveyance, treatment, and/ or re-use).

National Rating and Award Scheme for  
Sanitation for Indian Cities  
Ministry of Urban Development (GOI)



Table 2: City Color Codes: Categories

No.	Category	Description	Points
1	RED	Cities on the brink of public health and environmental 'emergency' and needing immediate remedial action	<33
2	BLACK	Needing considerable improvements	<34 ≤66
3	BLUE	Recovering but still diseased	<67 ≤90
4	GREEN	Healthy and Clean city	<91 ≤100

The **Top 4 cities** were :

1. Chandigarh
2. Mysore
3. Surat
4. NDMC

Blue  
category

# Support to local governments

# Sanitation assessment framework

## Excreta



<i>User interface</i>	<i>Containment</i>	<i>Conveyance</i>	<i>Treatment</i>	<i>Reuse / disposal</i>

## Grey Water



<i>User interface</i>	<i>Containment</i>	<i>Conveyance</i>	<i>Treatment</i>	<i>Reuse / disposal</i>

## Solid Waste



<i>User interface</i>	<i>Containment</i>	<i>Conveyance</i>	<i>Treatment</i>	<i>Reuse / disposal</i>

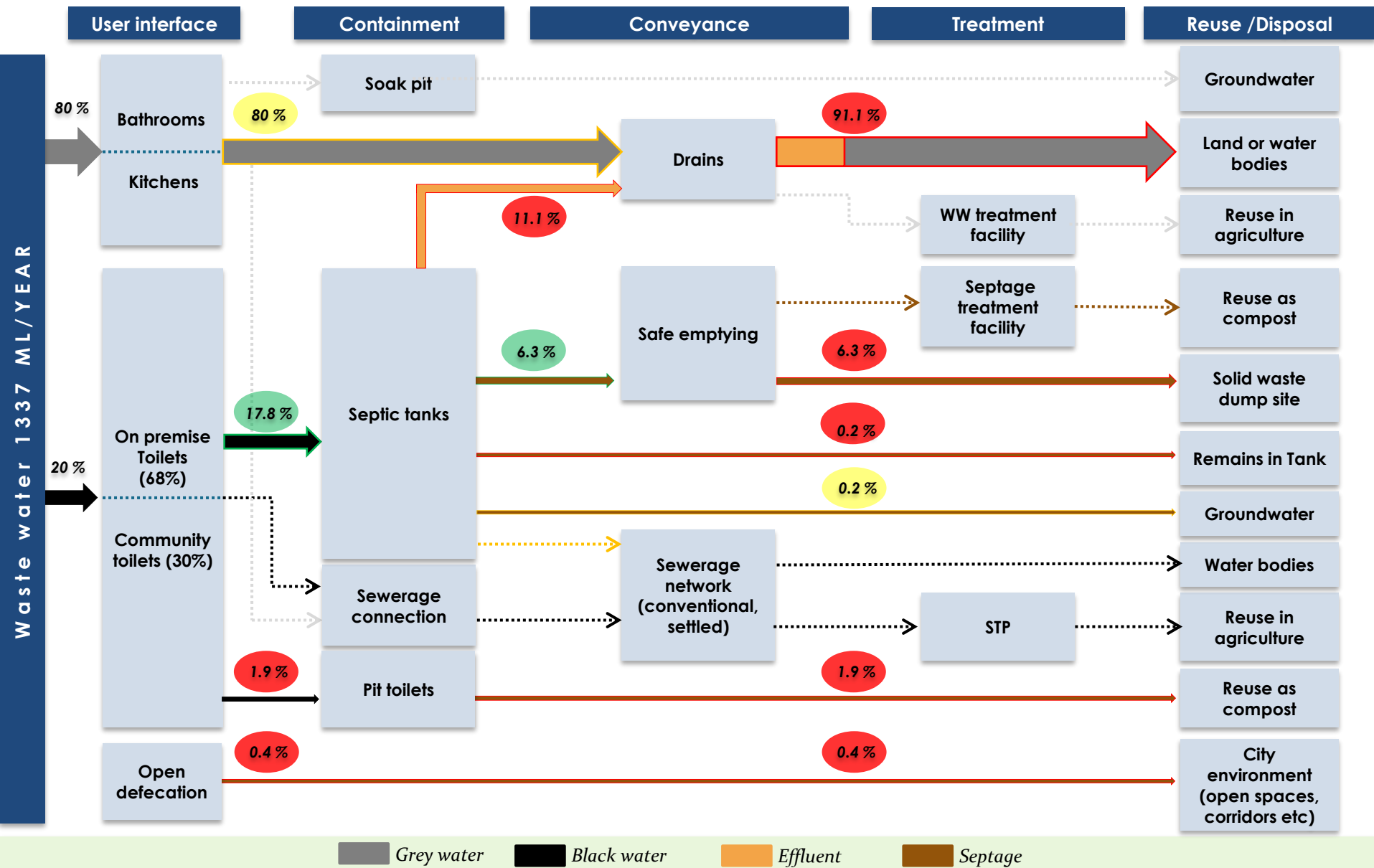
Goes beyond HH level access and incorporates full service chain

# Assessing waste water system options

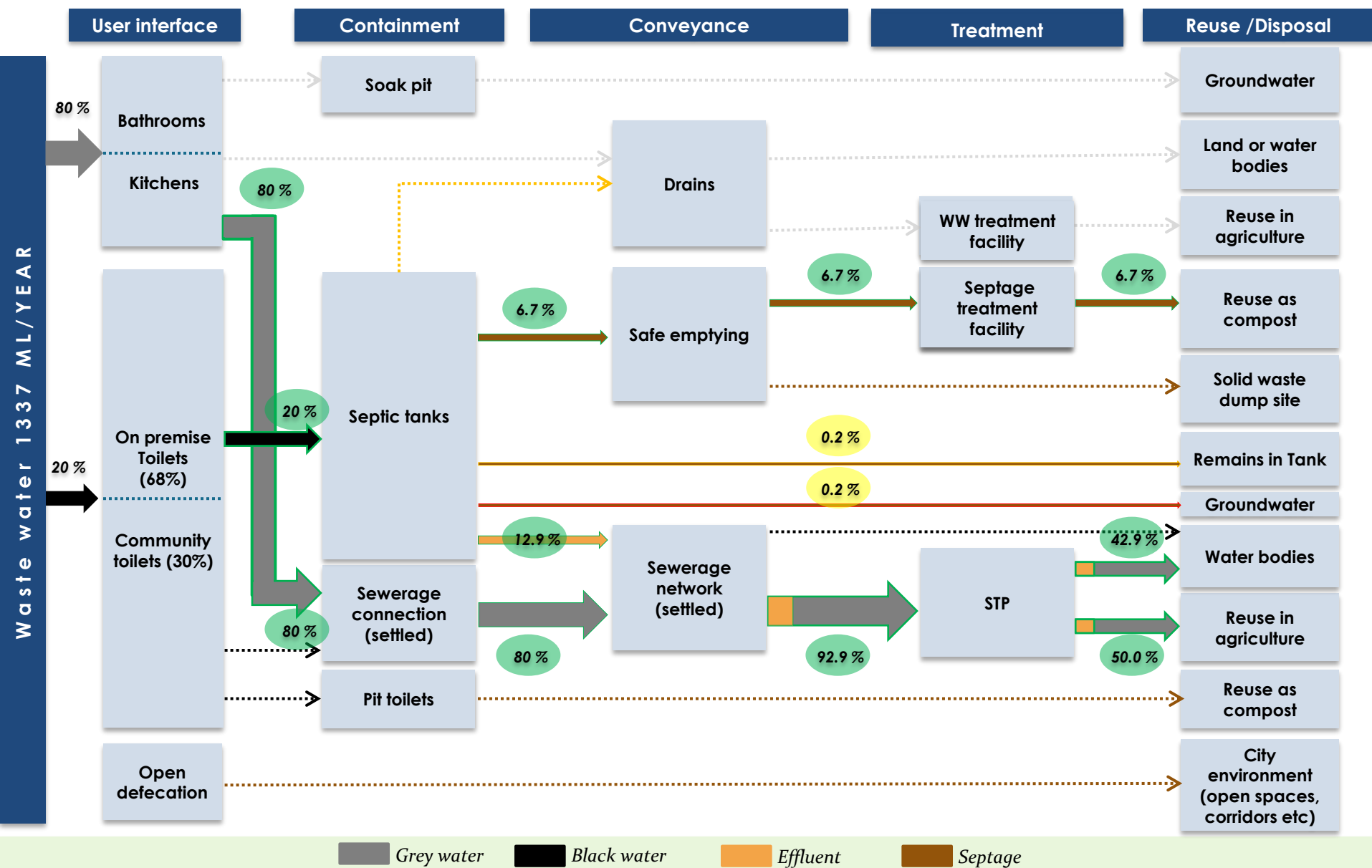
	CONVENTIONAL SEWERAGE	SETTLED SEWERAGE	ONSITE SANITATION	
Water Requirement	High (>135lpcd) ↑	Low ↓	Low ↓	
Capital Costs	High ↑	Medium ↓	Suitable low cost choice for cities with low density and deep ground water table	
O & M Costs	Works well for high density areas with good slopes and adequate water supply. High cost and capacity required		Cost effective option, requires less water but regular periodic maintenance of septic tanks is essential	
Technical Expertise	Conveyance		Medium - Treatment ↓	Low - Conveyance ↓ Low - Treatment ↓
Maintenance requirement	Low - on Service Provider ↑ Low - on House Holds ↓	Medium - on Service Provider ↓ Medium - on House Holds ↓	Low - on Service Provider ↓ High - on House Holds ↑	
Required capacity to operate	High ↑	Medium ↓	Low ↓	
	Works well for high density areas with good slopes to minimize pumping. High cost and capacity required	Cost effective option to conventional system, requires less water but regular periodic maintenance of septic tanks	Suitable intermediate low cost choice for cities with low density and deep ground water table	



# Existing Wastewater flows - Wai



# Wastewater flows after CSP - Wai



# PERFORMANCE ASSESSMENT SYSTEMS PROJECT



## PERFORMANCE IMPROVEMENT PLAN FOR GONDIA CITY, 2011-2020

Component II

### PERFORMANCE ASSESSMENT MODULE

#### SUMMARY OF PIP ACTION PLAN

Print

##### Key Performance Indicators

##### Financial Summary

##### Action Plan Summary

##### Summary details

☐ O&M

☒ O&M

☐ PHASING ONLY

Water supply actions

Waste water actions

Solid waste actions

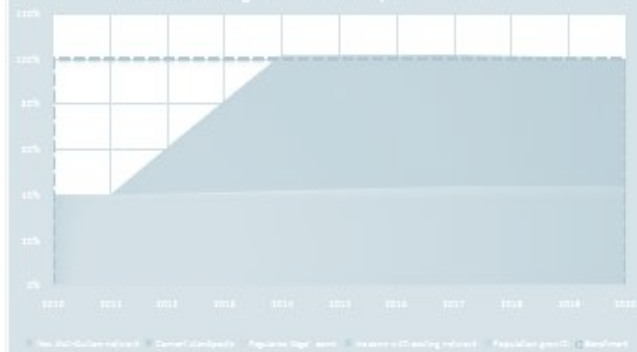
#### Summary of O&M expenditure

Actions	Type	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Regularising unauthorized connections	Existing system											0.0
Laying new distribution network lines	New infrastructure											0.1
Laying internal infrastructure lines in slum settlements	New infrastructure											0.0
Reduction of losses in Trunk main transmission	Existing system											0.0
Reduction of losses in Treated water transmission	Existing system											0.0
ij) Improvement in distribution network	Existing system											0.0
Reduction in free connections	Existing system											0.0
Increasing continuity of water supply services	Existing system											0.0
ij) Water augmentation - Own surface water	New infrastructure											16.2
Augmentation of Water Treatment plant capacity	New infrastructure											0.3
Augmentation of water storage capacity	New infrastructure											1.5
Improvement in collection efficiency of water supply charges & taxes	Existing system											0.0
Other measures to optimise power & energy expenses	Existing system											0.0

# SANIPLAN

# A CITY SANITATION PLANNING

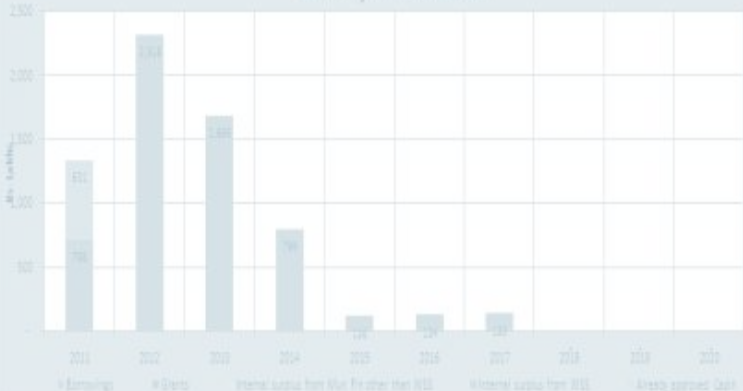
#### Access & coverage Performance improvement - CITY



#### Access & coverage Performance improvement - SLUMS

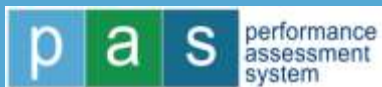


#### Summary of Financial Plan



## MODEL

ATLAS PIP SERVICES	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Coverage of individual water supply connections in slums	38%	38%	60%	80%	100%	100%	100%	100%	99%	99%	99%
Coverage of individual water supply connections in city	50%	50%	68%	86%	100%	100%	100%	100%	100%	100%	100%
Per Capita supply of water at consumer end	53 lpcd	54	57	60	64	67	67	67	66	65	65
Continuity of water supply	4.00 hours	4.00	10.67	17.33	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Extent of Non revenue water	37%	35%	30%	26%	20%	16%	15%	14%	14%	14%	14%
Extent of metering of water connections	99%	99%	99%	99%	100%	100%	100%	100%	100%	100%	100%
Quality of water supplied	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Efficiency in redressal of customer complaints	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Efficiency in collection of W/S charges	85%	85%	88%	90%	93%	95%	98%	100%	100%	100%	100%
Cost recovery in W/S services	90%	88%	90%	90%	82%	82%	78%	89%	84%	78%	89%



# PERFORMANCE ASSESSMENT SYSTEM PROJECT

# Approach to Improvement Planning

## Conventional Approach



**'PROJECT'**  
*based approach*

Focus on achieving **OUTPUTS**

Starting point is an assessment of available grant funding – **SUPPLY DRIVEN**

Focus on developing **INDIVIDUAL PROJECTS** of various sectors

## SANIPLAN Approach



**'SERVICE'**  
*based approach*

Focus on achieving **OUTCOMES**

Starting point is measurement of current performance and local priorities – **NEED DRIVEN**

Focus on developing integrated **SECTORAL SOLUTIONS**



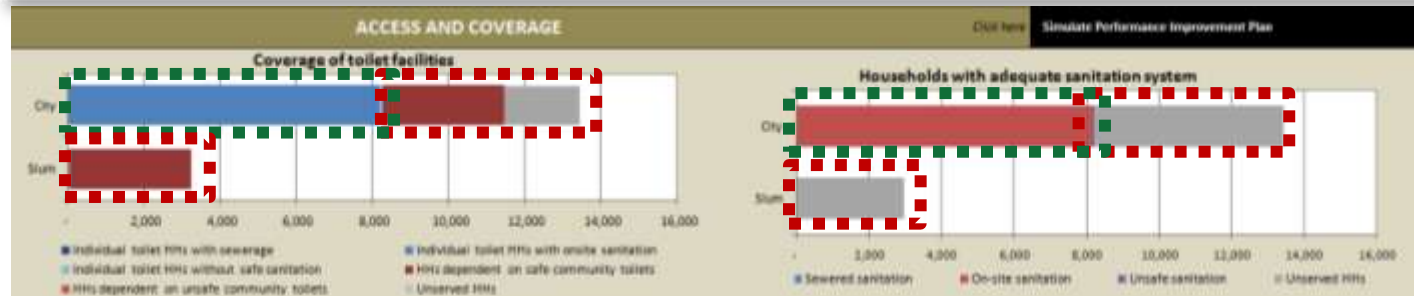
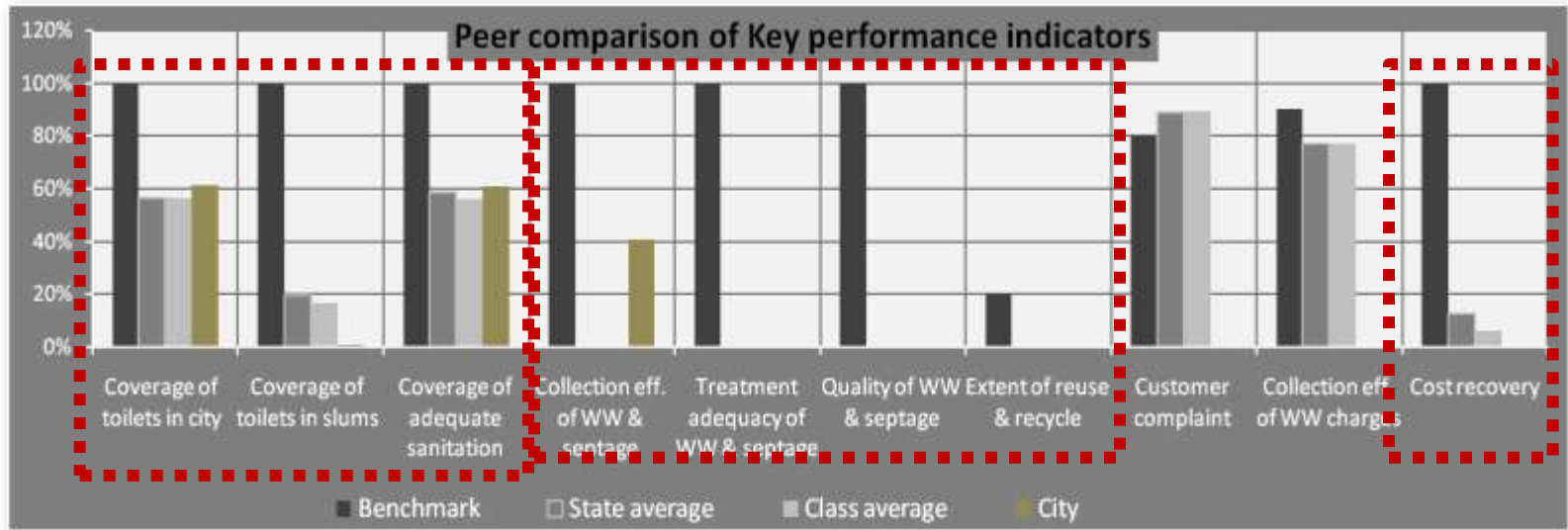
# Sanitation

High dependence on community toilets

Effluent from septic tanks let off in unscientific ways

No waste water or septage treatment facility

No tax to recover costs incurred for the service

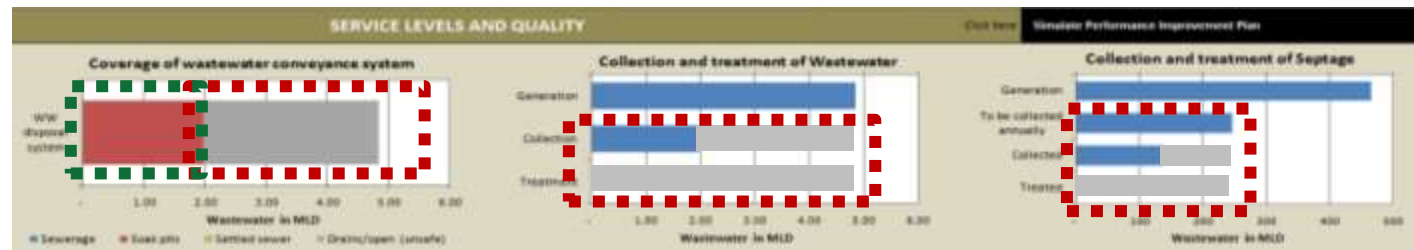


Households having latrines

Households not having latrines

Toilets having sanitary disposal system

Toilets not having sanitary disposal system



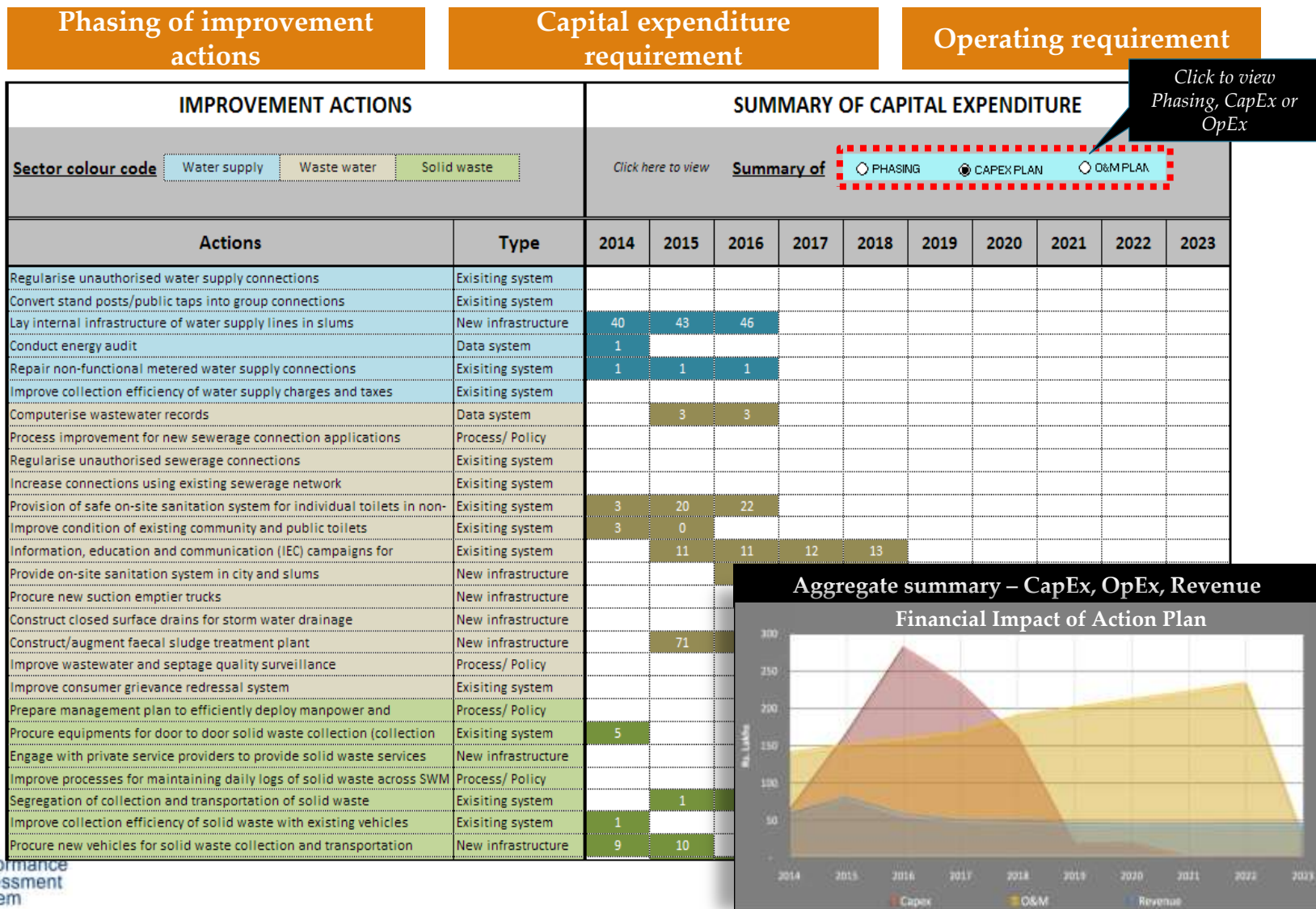
Waste water collected into soak-pits

Waste water conveyed through open/closed drains, no treatment

Only part of septage is collected, and none treated

# Financial implications of Action Plan

The financial implications of each activated action is reported in terms of capital expenditure required to implement the action, its operational and maintenance costs and additional revenue to be generated. Financial summary of all the activated actions together is evaluated year-on-year basis to assess funding requirement across plan period.

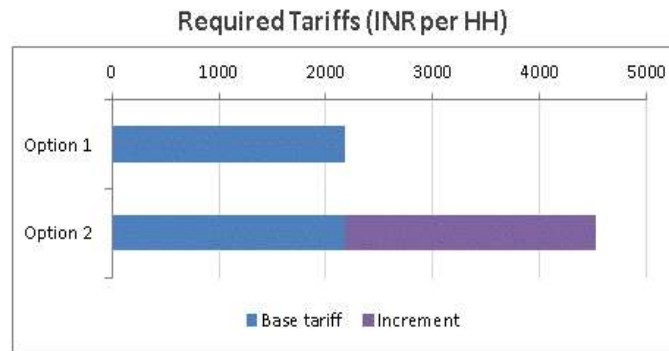
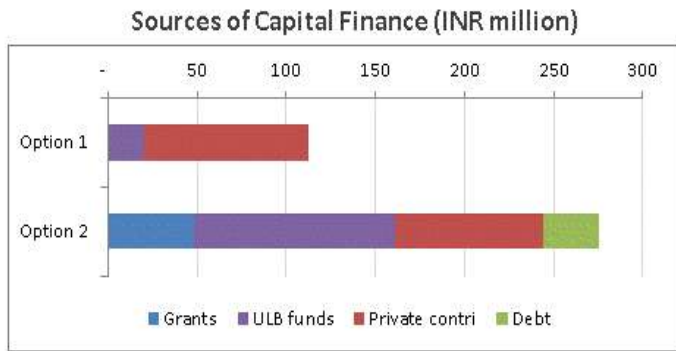


# Comparing SANIPLAN Options

## Expenditure Requirements and Implications

	Option 1	Option 2
Capital Expenditure (INR million)	112.7	275.6
Operating Expenses (INR million/annum)	0.3	4.3
Revenue Generated (INR million/annum)	0.8	3.1

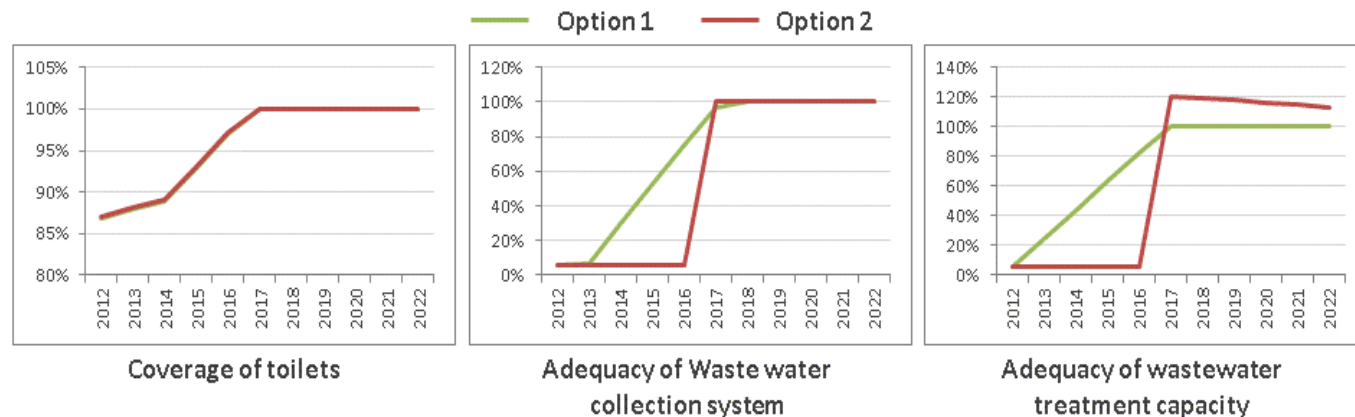
- Compares the capital and operational expenditures in the plan period
- Displays sources for capital funding for each option
- Also compares tariffs required to meet the operational expenses



Compares impact on services over the 10 year period through three SLBs; viz

- Coverage of toilets
- Adequacy of waste water collection system
- Adequacy of wastewater treatment capacity

## Impact on Service Levels



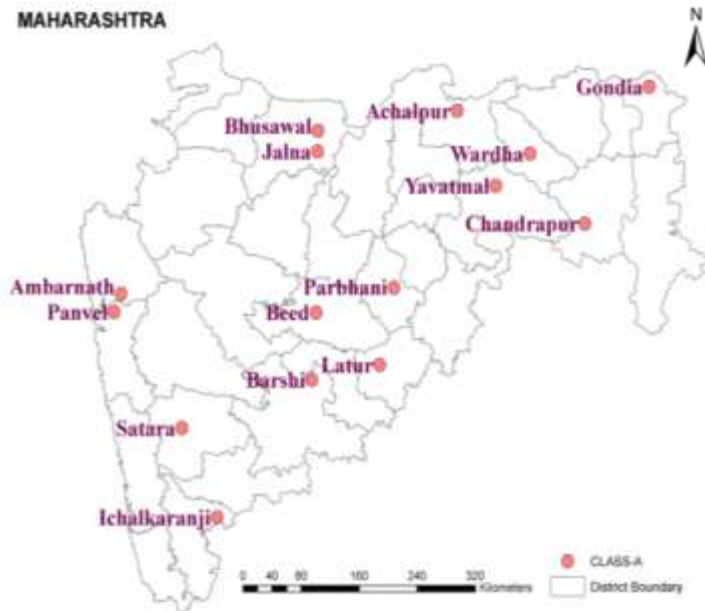




# Open Defecation Free Cities



# Support to small & medium towns for achieving ODF status



Support in development of **PIPs** to **15 Class A** cities in Maharashtra. Focus on making these cities **open defecation free (ODF)** and exploring **24x7 water services**.

Organized a **workshop with 20 cities** to discuss actions needed, challenges, financial requirements and role of elected representatives **for achieving ODF**



# Field Survey and Focus Group Discussions



# Possible Solutions to reduce Open defecation

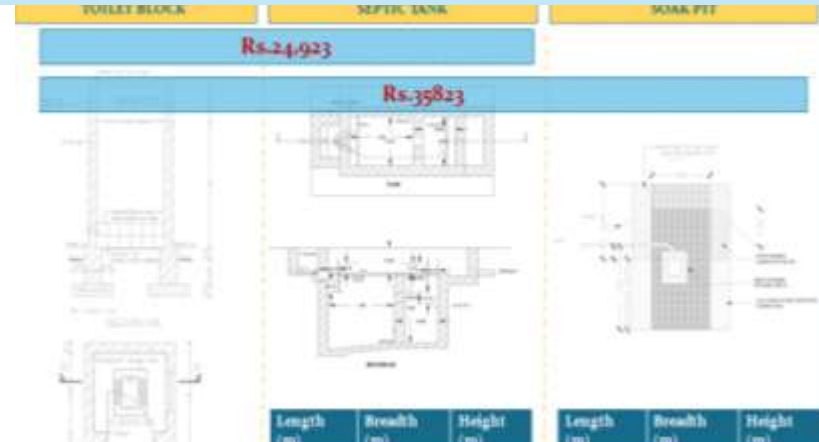
## Community Toilets



Community toilets are common in many cities, but they are rarely well-maintained. The life cycle public

Are they appropriate solution ??

## Individual Toilets



But are they affordable to all ??

## Shared / Group Toilets

**Adequate sanitation at home:** Adequate sanitation facilities at home are those that effectively separate excreta from human contact, and ensure that excreta do not re-enter the immediate environment. Each of the following sanitation facility types is considered as adequate sanitation for monitoring progress toward the household sanitation targets, if the facility is shared among no more than 5 families or 30 persons, whichever is fewer, and if the users know each other:

- A pit latrine with a superstructure, and a platform or squatting slab constructed of durable material. A variety of latrine types can fall under this category, including composting latrines, pour-flush latrines, and VIPs.
- A toilet connected to a septic tank.
- A toilet connected to a sewer (small bore).

Shared facilities are acceptable if:

1. Shared among less than 30 users or 5 families
2. Users know each other



*Addressing the twin issues of space and affordability*

Group Toilet is a toilet **shared by 2 to 4 families** residing in the close proximity. It is collectively owned by the families and use is controlled by them. Repair and maintenance of shared toilets is managed by the families.

Households that **do not have space for construction of a toilet** within their premises can construct a toilet that can be shared by up to 4 households, depending on the availability of common space in the proximity. This will **also save on funds** that each household will have to put in for construction of a toilet.



Improved Sanitation.. !



# Demand led own toilet scheme in cities

## Support to Wai & Sinner for developing Demand Based Own Toilet Schen

- Each household to be provided with a subsidy of INR 5000 per household for individual toilets or toilets shared by up to four households
- In our surveys, households expressed a willingness to contribute between INR 4000 - 6000 upfront for a toilet
- Given this willingness to pay, households will be able to afford a toilet if 3 - 4 of them share a toilet

Scheme details	Number of households sharing a toilet			
	Households (Subsidy - INR 5,000/HH)			
	1	2	3	4
Cost per toilet (in INR)*	~30,000	~30,000	~30,000	~30,000
Subsidy per toilet provided by the ULB	5000	~10,000	~10,000	~10,000
Effective cost per HH	~25,000	~10,000	~5,000	~3,500

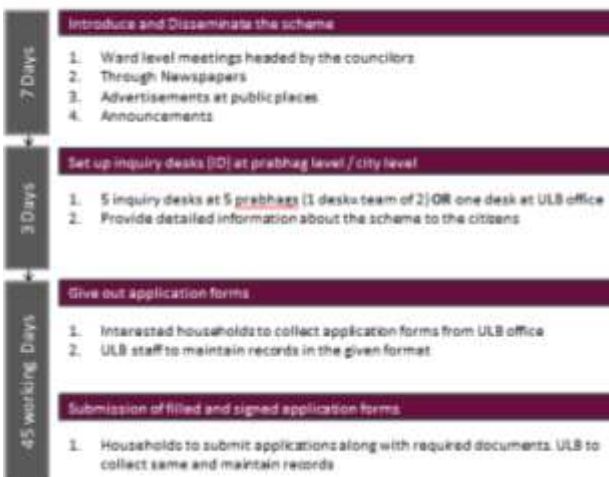
- Estimated willingness to pay upfront per household is ~INR 4000 - 6000\* implying that 3-4 households can come together to afford a toilet directly
- An assessment is being made of potential for consumer financing through micro-finance institutions, commercial banks, credit co-operatives, and self-help groups

Note: \*) Based on standard government schedule of rates and local consumer estimates, estimate includes cost of superstructure and septic tank (c) Based on avg floor group dimensions with ~30 households each in Wai and Sinner

Unlocking the latent demand through ULB subsidy scheme...

Implementation in Phases...

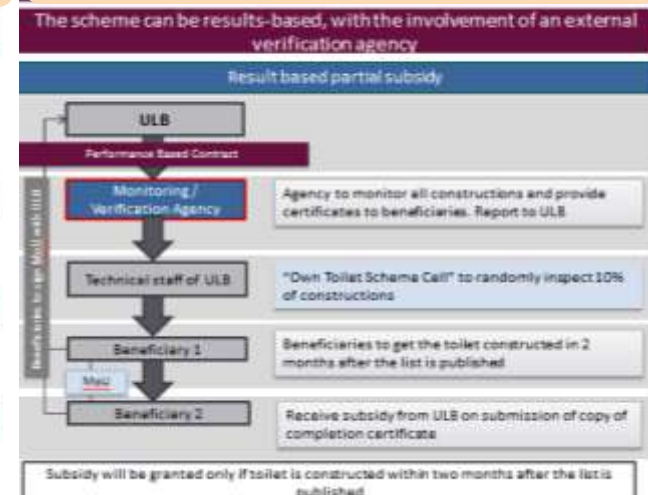
## 1. Dissemination of scheme and receiving applications



## 2. Shortlisting of beneficiary



## 3. On-ground Implementation



# Exploring credit providers for financing

Selfhelp groups (SHGs)	Micro-finance institutions (MFIs)	Credit societies	Commercial banks	Housing finance companies (HFCs)
 <ul style="list-style-type: none"> <li>Groups of 5-10 women of similar socio-economic background, that make loans to members at low interest rates</li> <li>Loans are financed through member contributions supplemented with borrowing from banks</li> </ul>	 <ul style="list-style-type: none"> <li>Provide loans to economically weaker sections who do not have access to traditional banking</li> <li>Loans are usually given for income generating activities but could also be given for consumption. A periodic repayment needs to be made which is usually enforced through a peer liability model</li> </ul>	 <ul style="list-style-type: none"> <li>Autonomous association of people united voluntarily to meet their common economic needs through a jointly-owned and controlled enterprise</li> <li>The members make deposits and in turn loans are given out to those in need at reasonable rates of return</li> </ul>	 <ul style="list-style-type: none"> <li>Commercial banks accept deposits and make loans to individuals and business enterprises</li> <li>The lending is usually secured thorough a collateral but can also be unsecured</li> <li>Repayment follows an EMI model with a defined rate of interest</li> </ul>	 <ul style="list-style-type: none"> <li>Housing finance companies (HFCs) are financial institutions one of whose primary businesses is housing loans</li> <li>HFCs vary in the stringency of collateral requirements, but several players cater to low income populations</li> </ul>

## Credit providers for financing own toilet scheme

## Assessment of credit providers across various dimensions

Reach towards target population	<ul style="list-style-type: none"> <li>Do these institutions cater to our target population of households who lack access to own toilets?</li> <li>Are there significant barriers to membership or loan application that could affect their ability to serve these populations?</li> </ul>
Local presence	<ul style="list-style-type: none"> <li>Do these providers have existing business operations in Wai and Sinnar?</li> <li>If not, are they interested in entering these towns?</li> </ul>
Prior history and future interest in toilet loans	<ul style="list-style-type: none"> <li>Do these institutions have a previous history of providing loans?</li> <li>If not, what is their level of interest in providing such loans?</li> </ul>
Capacity to make toilet loans	<ul style="list-style-type: none"> <li>Do these credit institutions have the financial strength and capacity to make toilet loans of a sufficient size?</li> <li>Are there any regulatory hurdles to making toilet loans?</li> </ul>
Favorability of loan terms	<ul style="list-style-type: none"> <li>What are the interest rates offered by these institutions for toilet or personal loans?</li> </ul>



# innovative financing in sanitation...

## Workshop with MoUD, GoI



Exploring the possibility of attracting **CSR funds, Social Impact Investors** (using SIBs/DIBs) and strengthen the use of government funding through **results-based funding mechanisms**

## Roundtable discussion with NHB



Reviewed the **constraints in scaling up** of **lending for household sanitation** and explored **possibility** of setting up a **Development Impact Fund** for Urban Sanitation

# Looking at financing instruments for investment in outcomes

Key Sanitation Outcomes	Possible Funding instruments	Sources of funding								
		Governments	Bi and Multilateral donors	Foundations	Corporate CSR	Commercial banks/ FIs	Infrastructure finance companies	MFIs/SHGs	Impact investors	Potential beneficiaries
Open Defecation Free City/ communities	Social impact bonds		✓	✓					✓	
	Performance based challenge fund for cities/ communities	✓	✓	✓	✓			✓	✓	✓
Fully sanitized city (all waste safely collected, treated and reused)	PPP for integrated or unblundered contracts (FSM, public toilets, settled sewers, STPs)	✓			✓	✓	✓			✓
	Social impact bonds	✓	✓	✓	✓				✓	
	Performance based (output based) grants to cities	✓	✓	✓						✓

Combination of traditional and innovative financing instruments

# A new version of a development impact fund?

## Possible structures at different levels

- **National /state - Development Impact Fund (DIF)**
  - ▣ to mobilize debt funds for on-lending at affordable costs
  - ▣ to meet the support costs of potential lenders
  
- **State / City sanitation fund (CSF)**
  - ▣ to meet support costs for city governments
  - ▣ to provide partial subsidy to households

# Integrated Fecal Sludge Management (IFSM)



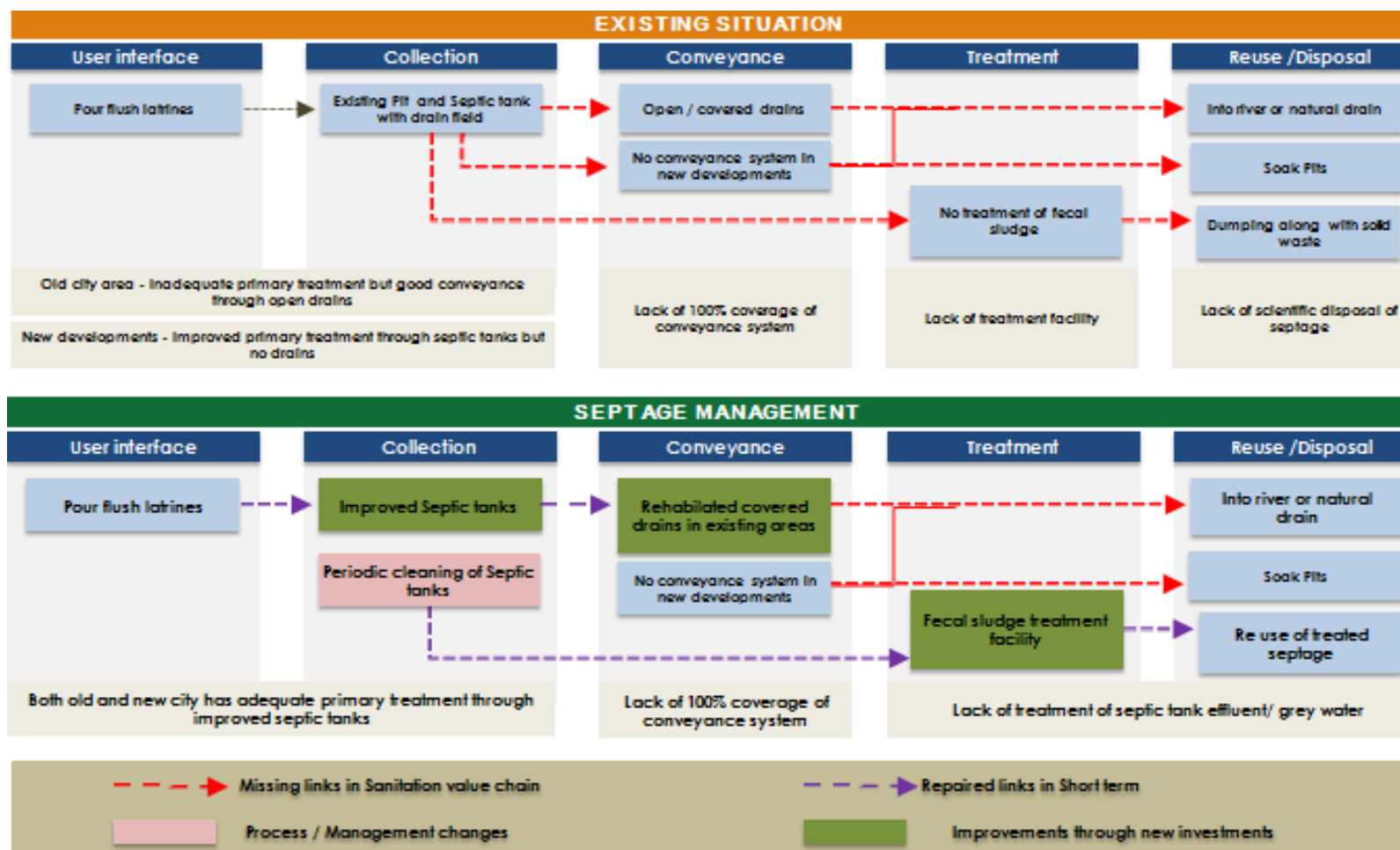
Emerging focus and attention to FSM



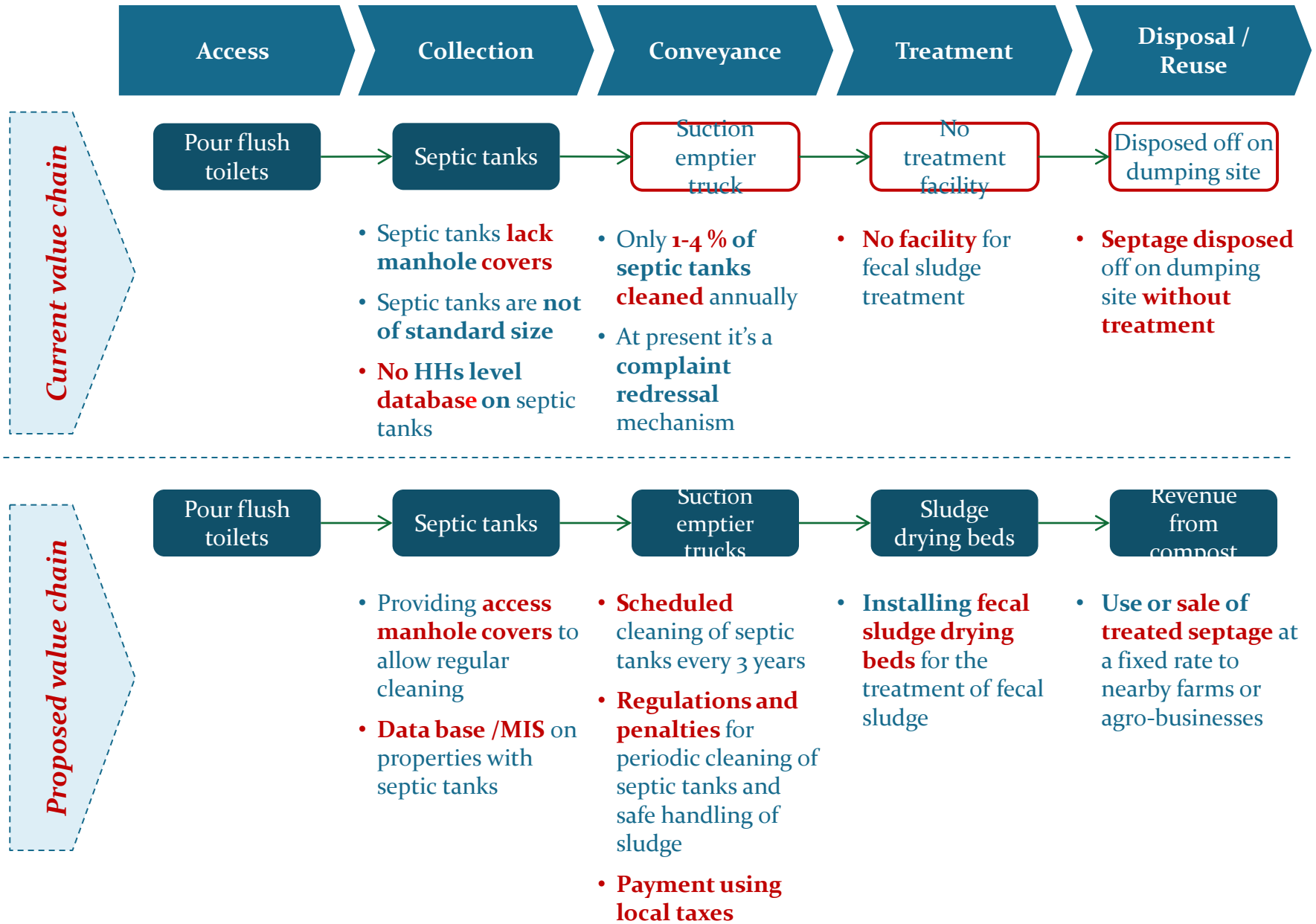
# Key Focus

## Improving onsite waste water management in the cities through low cost improvement actions

Improving the condition.....

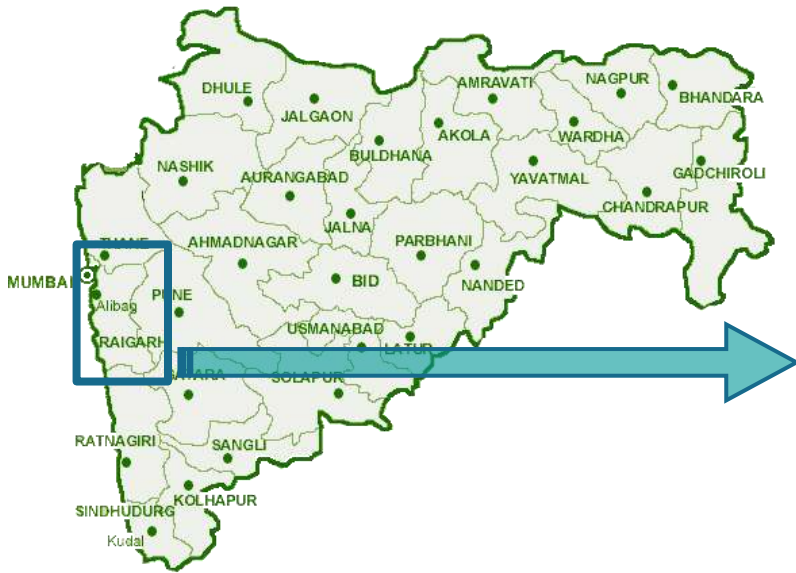


# developing an end-to-end IFSM solution



# Dissemination best practices

# OPEN DEFECATION FREE MAHAD



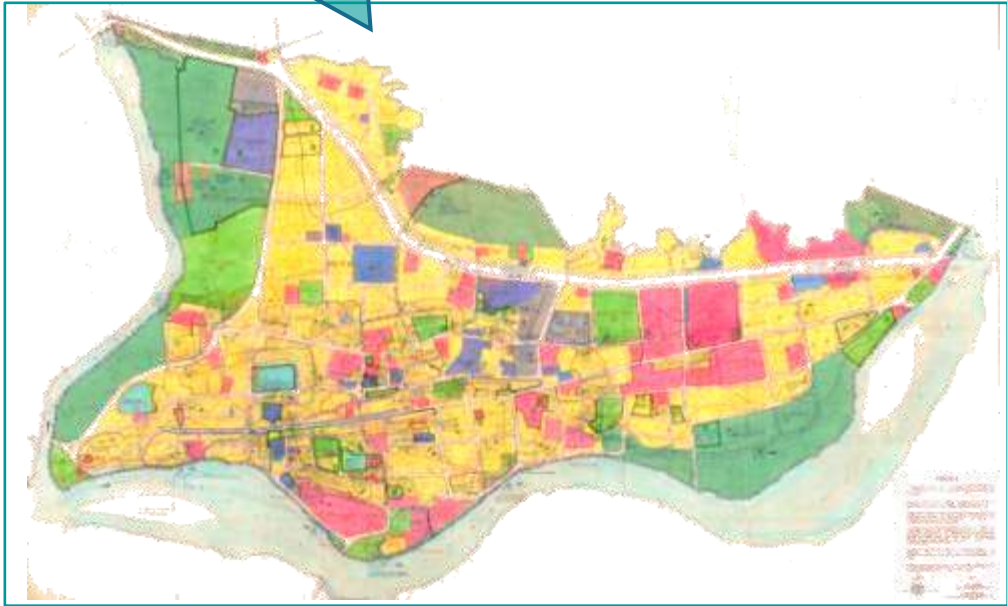
The State of Maharashtra



Raigadh District in Konkan Div.

GENERAL DETAILS	
Area:	4.07 km <sup>2</sup>
Population (2001)	24, 276
Population (2011)	27, 531
No. of HHs (2001)	5,287
No. of HHs (2011)	6,369
No. of Slums(2011)	0
Population in slums	0
% of Slum population to total	0

- City of rains..
- Beautiful surroundings and pleasant climate
- 80% roads concretized
- Famous for the Drinking Water Satyagraha of Dr. Babasaheb Ambedkar for Dalits at Chavdar Tale



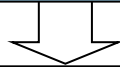


# MAHAD: AN ODF CITY

## Early 1980s

### ODF Initiative undertaken by President of MMC

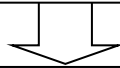
- Social awareness and pressure through a strategy of photographing, publishing names and levying fines on those found defecating in open



## Late 1980s onwards

### Creation of Toilet Infrastructure

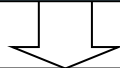
- Private landowners willingly surrender part of land for community toilets
- Creating child friendly toilets, ensuring adequate seats and separate entry for women
- Making individual toilets compulsory for getting new building permissions in private premises



2007

### Exhaustive "Toilet Survey"

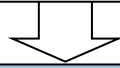
- Detailed information on individual and community toilets – type, location, number, condition, ownership and waste disposal



2008

### "Hagindari Mukta Yojana" (Open Defecation Free) Project initiated

- Zone-wise inventory of ODF sites and identification of people still practicing OD
- Repair, upgradation, reconstruction of community toilets in the city



## 2010 onwards

### MMC Future Plans geared towards

- Support to construction of individual and community toilets
- 'Pay and Use' model for public toilets
- Service contract to private contractors for O&M of community toilet blocks
- Levying sanitation charges under property tax

## Strategies for Sustainability

- Moving towards individual toilets- Funds under Dalit Basti Sudhar Yojana
- Option of shared toilets wherever individual is not feasible.
- Sub-contracting maintenance of community toilets to avoid delay in complaint redressal
- Reconstruction of community toilet blocks that are too old/dilapidated
- Introduction of sanitation/user charges in Municipal Bye-laws
- Additional pay and use toilet for market area and a toilet for girls school are proposed under 'Vaishishtyapurna Yojana'
- Innovative ideas/references for designs of comm. toilets

## Key to Success

- Leadership
- Social pressure
- Initiatives and responses by MMC
- Priority to create physical toilet infrastructure- Expenses through municipal funds
- Attention towards O & M of community toilets
- Periodic surveys to identify additional demands if any. HH level survey in 2007.
- Strong support and response from citizens- mobilization of private lands- a unique arrangement

# Recap

- Incentivizing local governments requires
  - Commitments on sanitation at higher levels (national and state governments – matched with some financial assistance)
  - Build accountability at local level
  - Demand based financial assistance programme at local level to ensure commitment of households
  - Technical Support to local governments is necessary
  - Sanitation ranking – “name and shame” useful to bring issues to the fore, and make sanitation aspirational
  - Dissemination of best practices as role models

# Thank you