Presentation from the

Workshop on Innovations for Scaling up to Citywide Sanitation

October 16-17, 2012, Ahmedabad

p a s performance assessment system

Organised by PAS Project, CEPT University

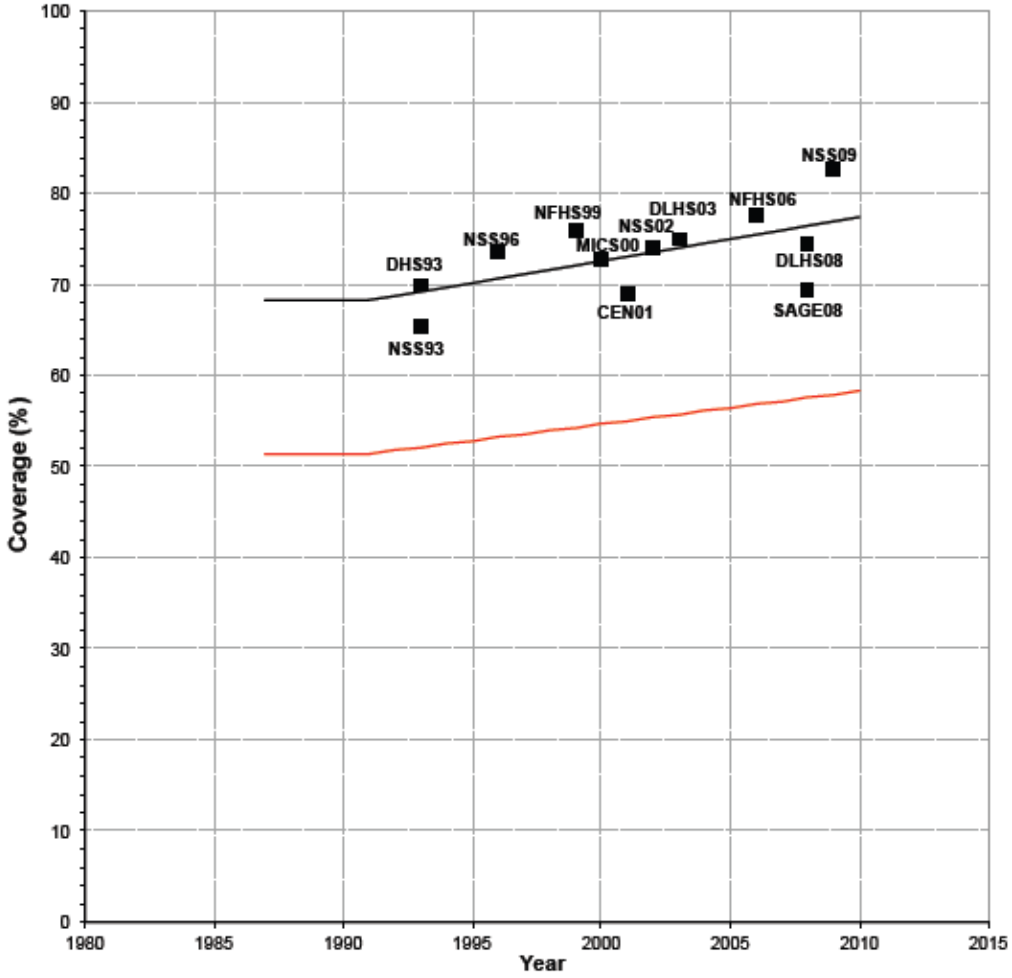
Sanitation Situation in India : Need for innovative solution

pas performance assessment system

PAS Project, CEPT University, INDIA

India - urban -

JMP - estimated proportion of the population using improved sanitation facilities



Legend

JMP-estimated survey findings
- Improved + shared

JMP-estimated coverage
- Improved + shared
- Improved

Estimated coverage 2012 update				
Year	Improved	Shared	Other unimproved	Open defecation
1990	51%	17%	4%	28%
1995	53%	17%	5%	25%
2000	55%	18%	5%	22%
2005	56%	19%	7%	18%
2010	58%	19%	9%	14%

Key facts from CENSUS 2011

18.6% URBAN HHs HAVE REPORTED **NO** TOILETS

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**

PAS

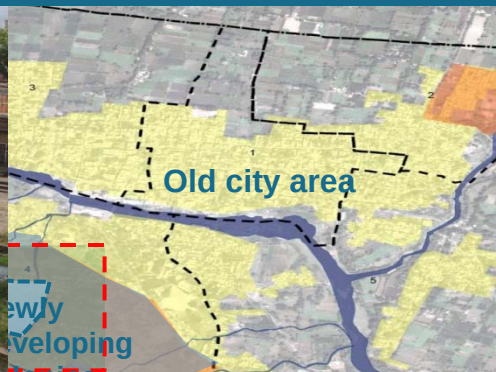
Performance Assessment System

Annual Service delivery profile for **419** Cities in **2** States

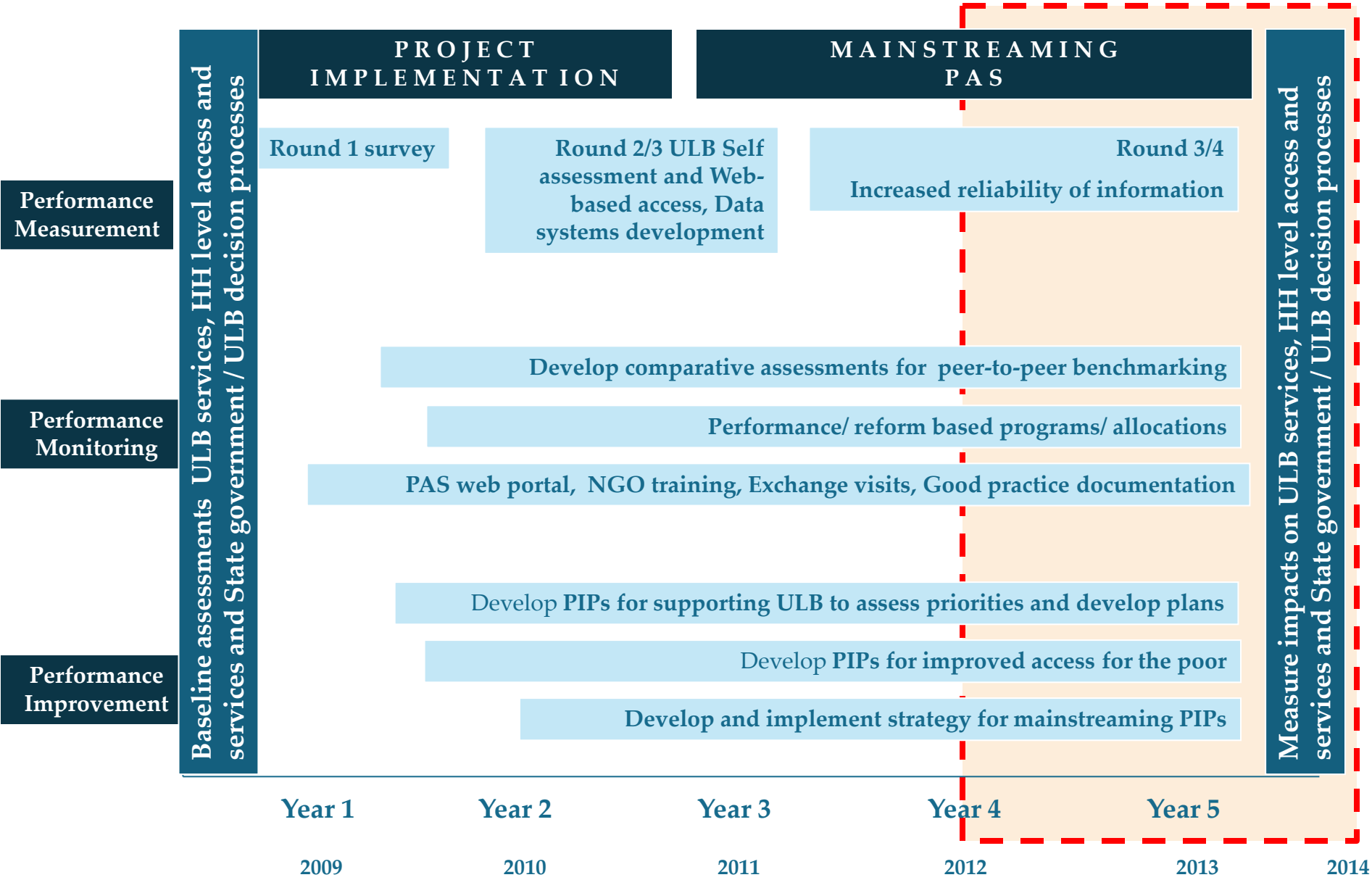
covering **32** Key indicators and **88** local action indicators

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

Focus on **Measurement, Monitoring & Improvement**



Five year Plan for PAS



32.7% OF URBAN HHs HAVE ACCESS TO PIPED SEWER SYSTEM

WHERE DO THESE PIPED SEWERS END?

SEPTIC TANKS are most common means of excreta disposal

Survey results confuse between septic tanks and soak pits

Are Septic Tanks Built as per Codes / Specifications ?

How often are they cleaned ?

Where does the effluent flow ?

What happens to the SLUDGE?

12.6% OF URBAN FAMILIES RESORT TO OPEN DEFECATION

IS IT A BEHAVIORAL ISSUE?

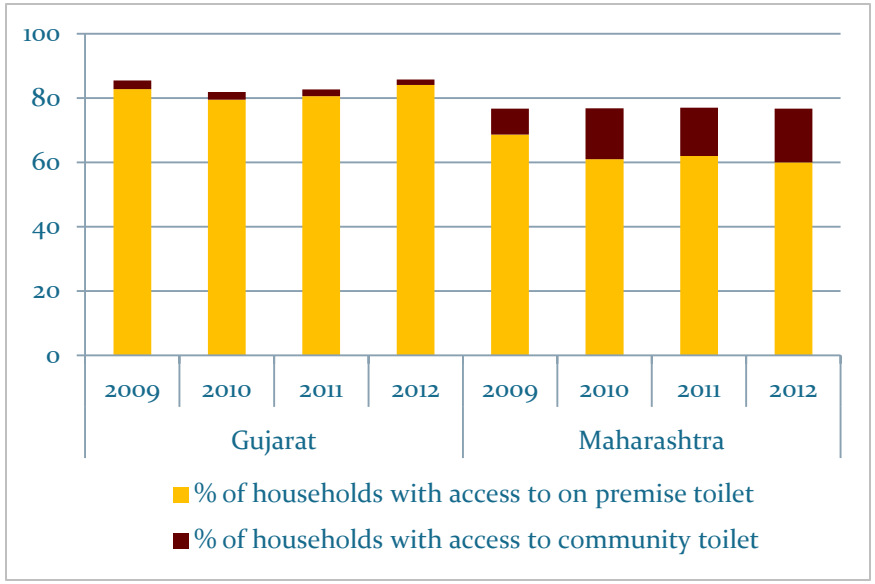
IS TECHNOLOGY THE ANSWER?

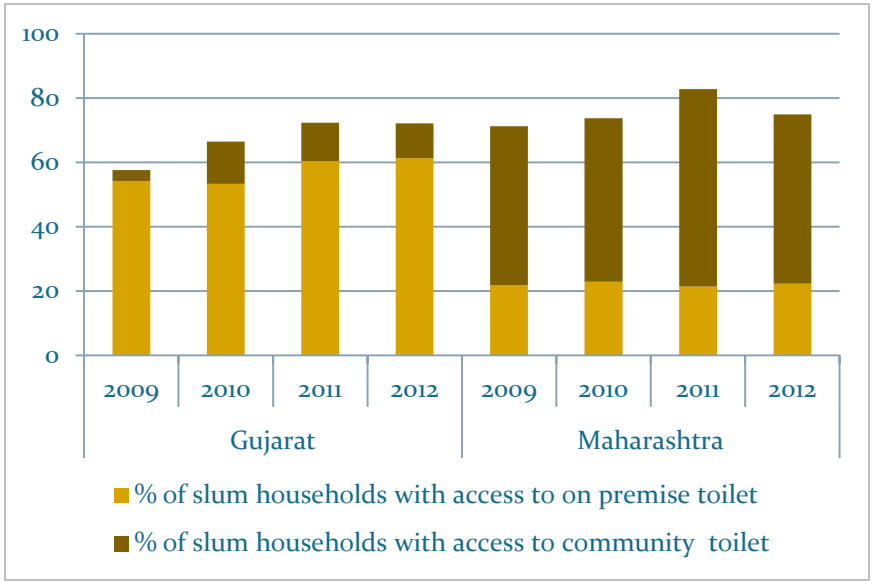
LEADERSHIP ?

DOES COMMUNITY HAVE A ROLE ?

ARE THERE ENOUGH GOOD PRACTICES OF OD FREE CITIES IN INDIA ?

Access to toilets in Gujarat and Maharashtra-PAS

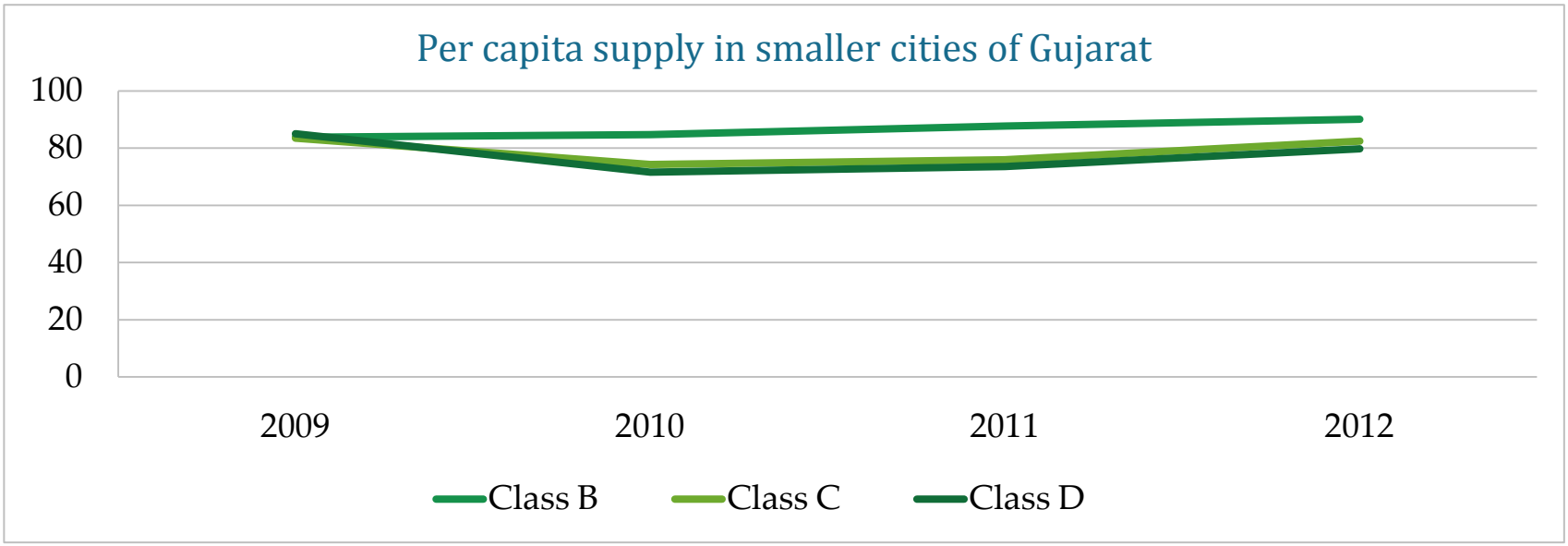


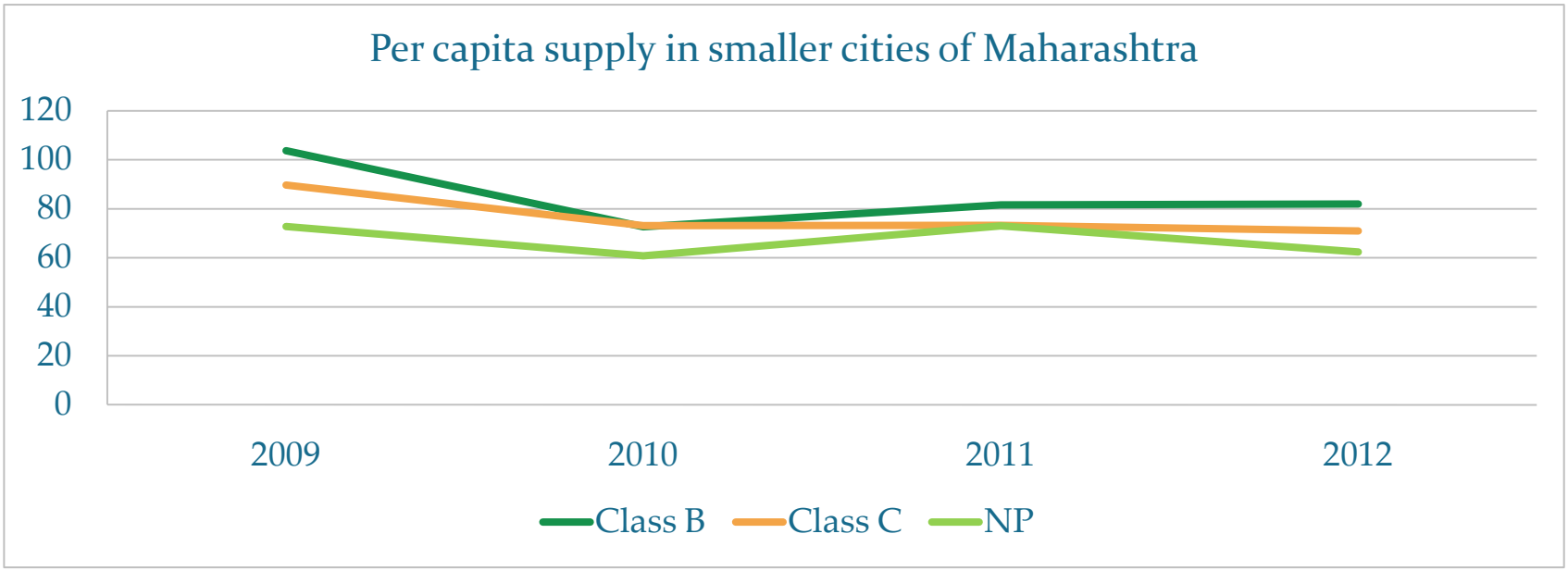


Source: PAS Database

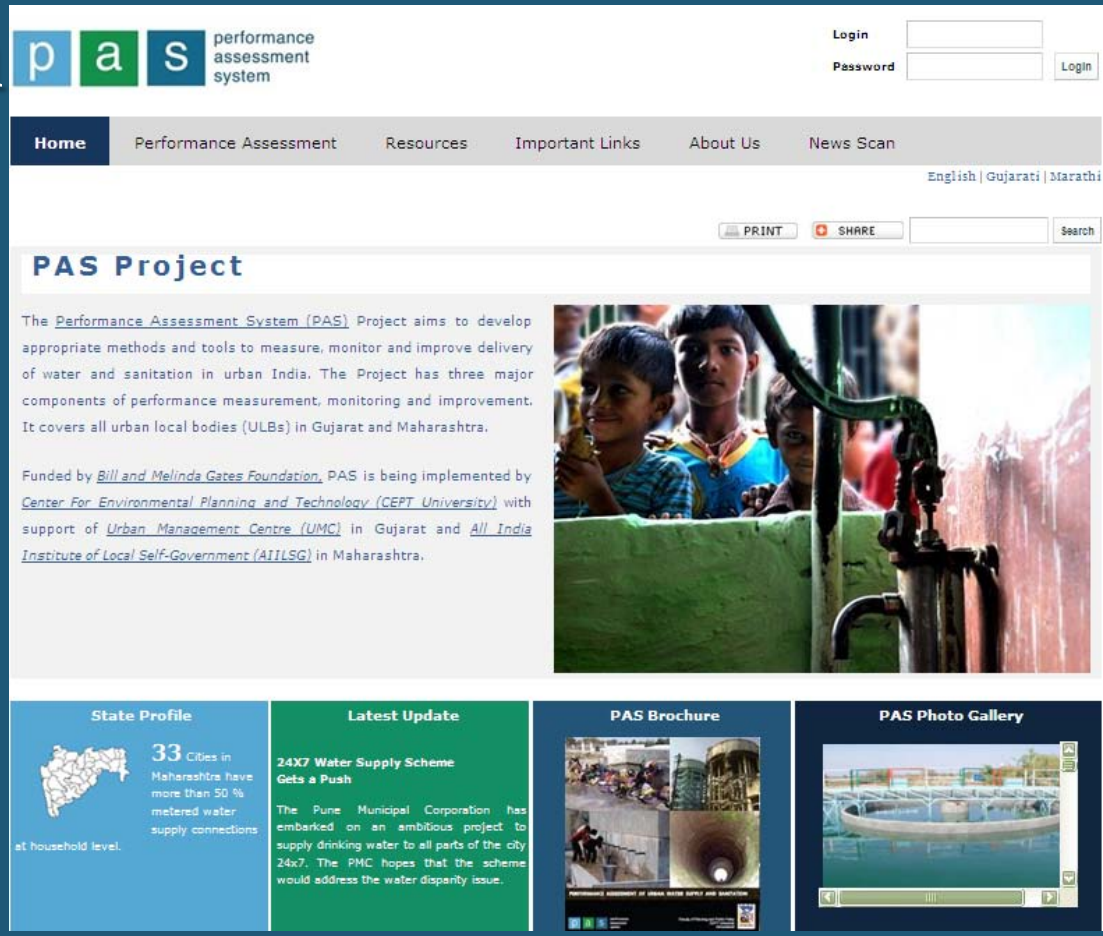
- **Concentrated efforts for provision of toilets**
- **Gradual increase in sanitation in slum settlements in both states**
- **However, increased dependency of community toilets in Maharashtra, especially in slum settlements**

Insufficient water supply for sewerage projects





www.pas.org.in



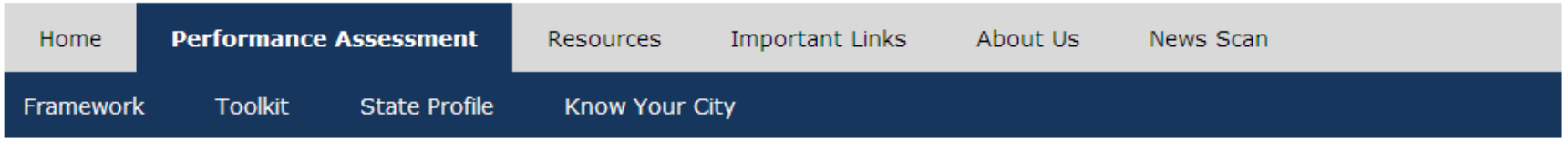
WEB BASED MEASUREMENT AND MONITORING

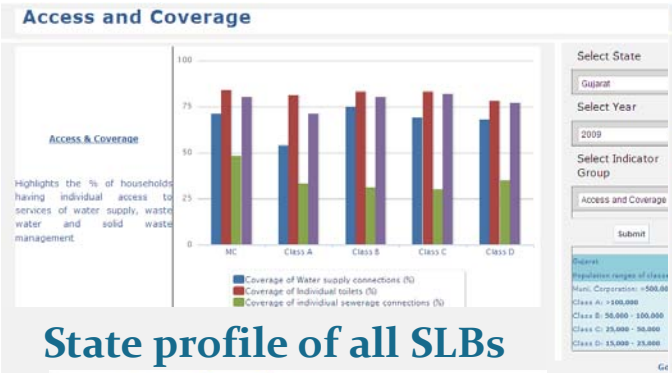
performance assessment system

PAS information

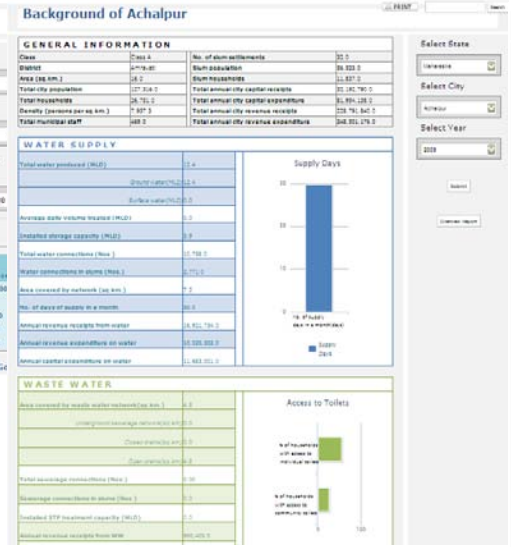
- One of the largest data base for urban water and sanitation – 419 cities, 4 years, over 100 indicators
- Web based measurement and monitoring through PAS portal, www.pas.org.in
- One click access to WSS performance for all ULBs across Gujarat
- Data is captured online at source, i.e. at ULB level
- Graphical and tabular analysis at both state and local levels
- On hand information available through customized reports in Excel and PDF: informed decision making

Online Monitoring

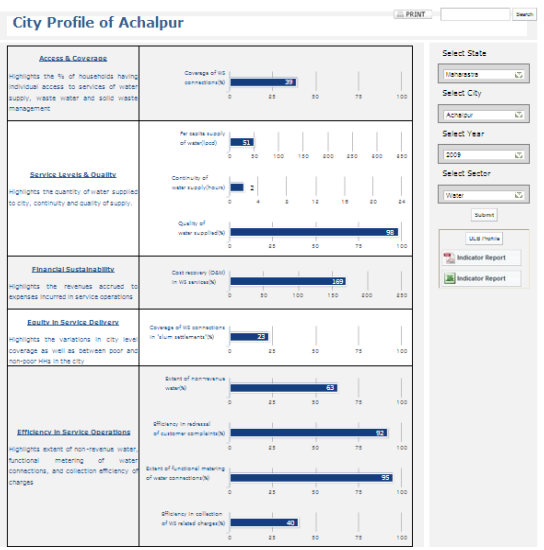




State profile of all SLBs



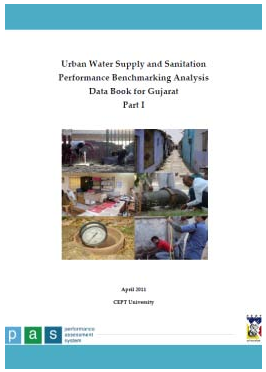
Overview of all cities



City profile of all SLBs

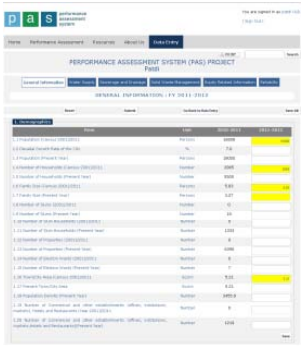
Documentation of good practices

Stages in Performance Measurement and Monitoring



Performance measurement reports

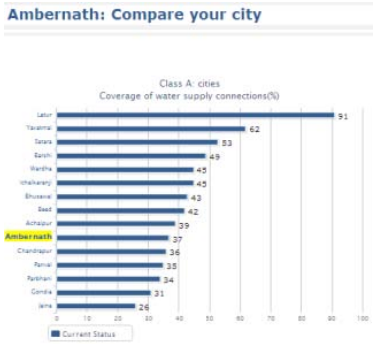
Online data entry



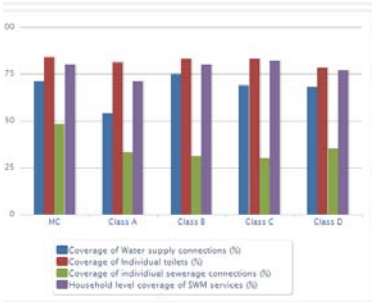
Access controlled (password for each user)

Validation based on comparative analysis

Updating data



City and state profiles



Review by city and state

Final approval of data

STATE Dashboard showing performance indicators of Sanitation in Gujarat

Gujarat
Class: MC

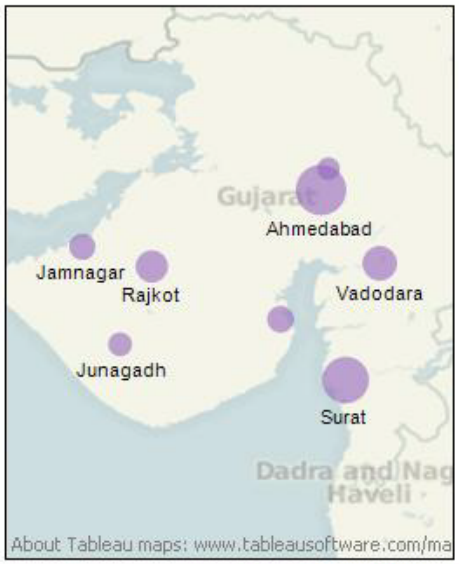
All

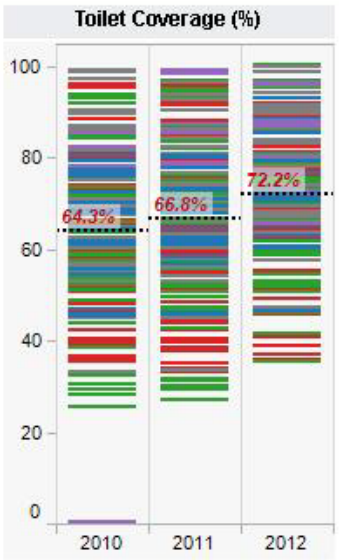
Waste Water
KPI: **Toilet Coverage**

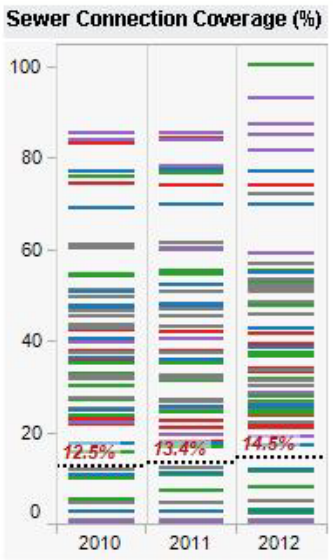
The indicator captures the number of households with access to individual toilets. It is an important indicator that assesses the level of sanitation services in the city

KPI: **Sewer Coverage**

This indicator captures the extent of coverage in terms of individual sewerage connections for each household. This indicator is significant in estimating the level of sanitation services in the city.







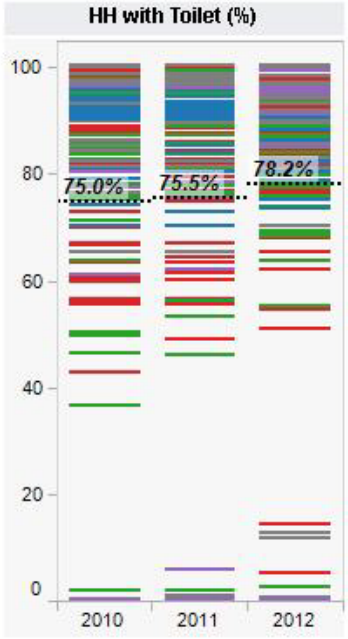
Select ULB

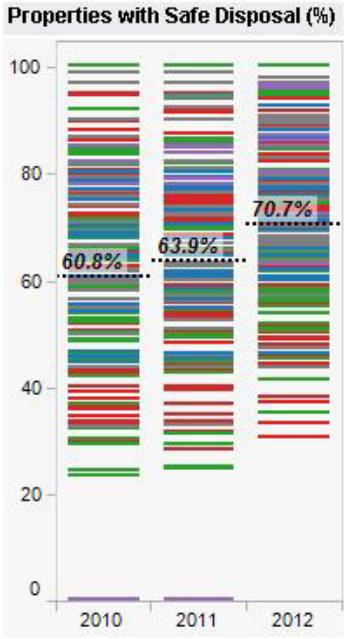
- Ahmedabad
- Bhavnagar
- Gandhinagar
- Jamnagar
- Junagadh
- Rajkot
- Surat
- Vadodara

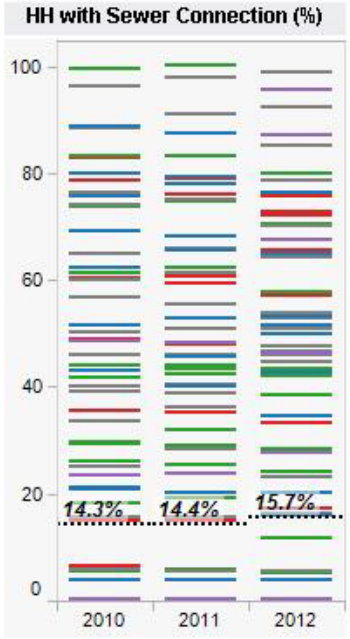
Local Action indicators (LAI)

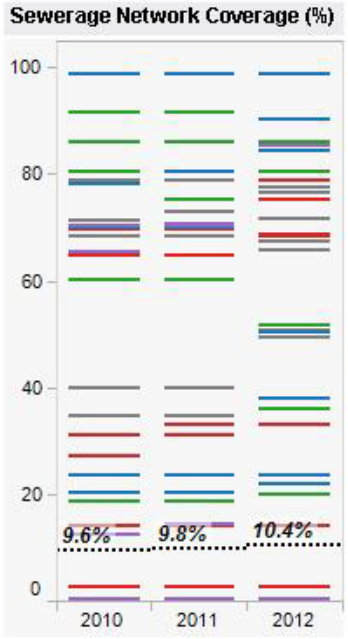
Local Action Indicators described below give insights into the aspects impacting ***Coverage.***

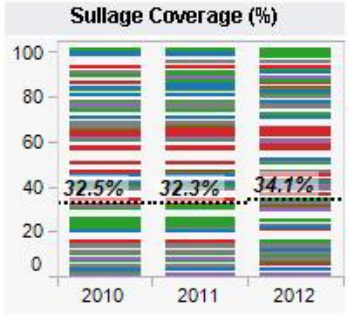
Each circle/line represents the LAI values for the cities in the selected Class.

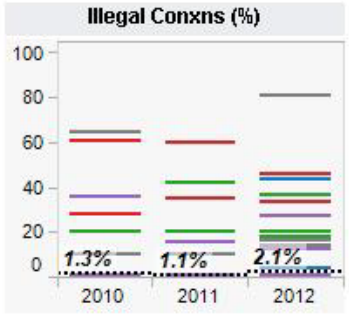




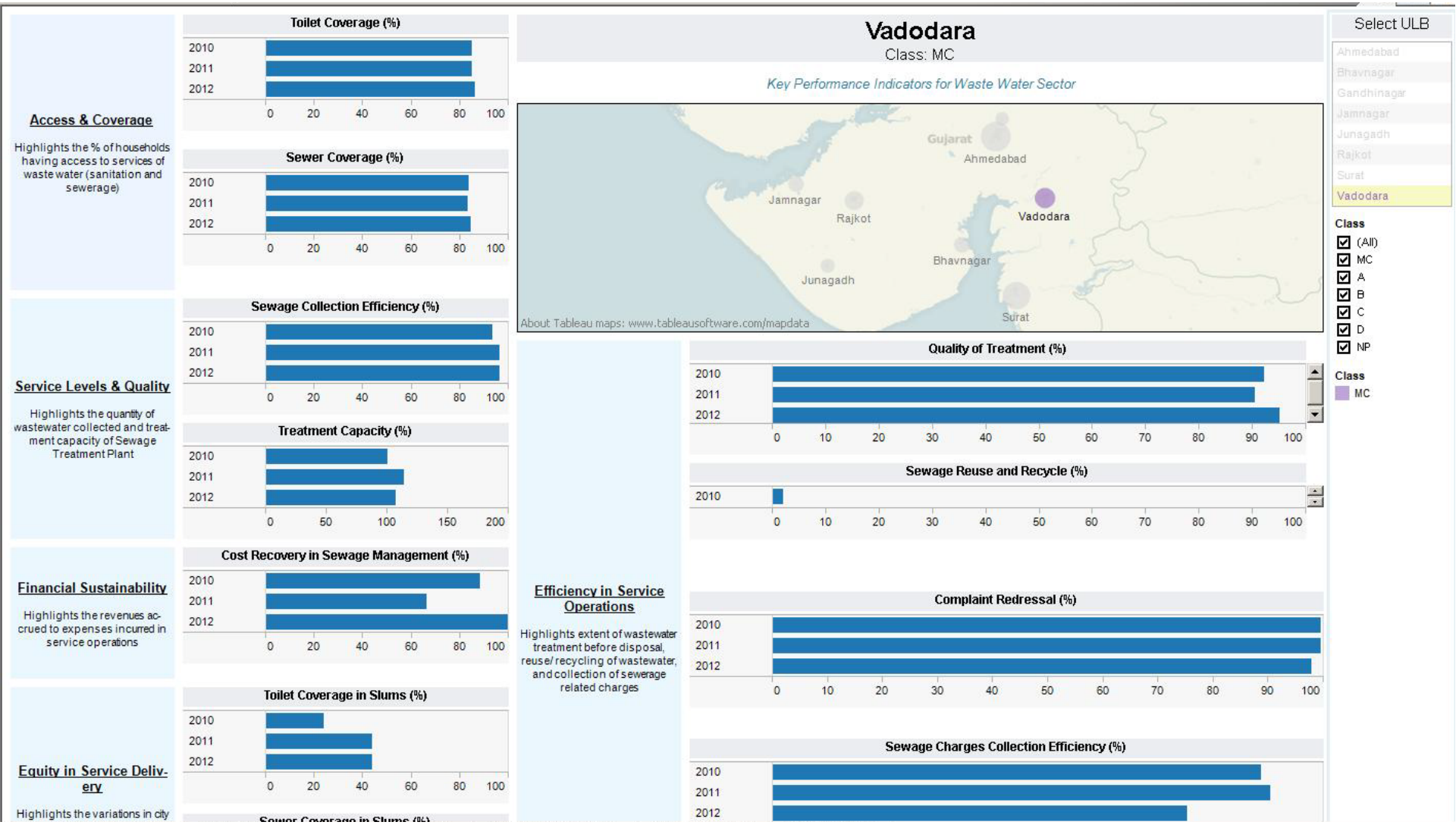








CITY Dashboard showing performance indicators of Sanitation in Gujarat



Support for Improvement Planning

Tools for Performance Improvement

Approach to Performance Improvement Planning

MODULE I: PERFORMANCE ASSESSMENT		
Background studies and diagnosis to arrive at Sectoral information	Step 1	*Performance Data*
Sector performance assessment through peer comparison and identifying several components across the value chain of WSS services	Step 2	*Performance Assessment*
MODULE II: INTER SECTORAL PLANNING		
A comprehensive Action matrix is prepared to guide the user to select physical actions, policy and process actions	Step 3	*Action Planning*
Action impact includes cost and benefit. For each activated action, project associated Capex & O&M are projected. Benefits are captured in improved Indicator values	Step 4	*Impact of Actions*
MODULE III: FINANCIAL ASSESSMENT		
Municipal finances are assessed by projecting the finances based on Business as Usual scenario and projected impact due to PIP Actions Activations	Step 5	*Municipal Finance*
The PIP Action Plan is critically evaluated with respect to availability of Municipal finances to arrive at feasible Implementation Plan that can be sustained by ULB in long term	Step 6	*Financial Plan*

ODF Model

Goal : The model will assist ULBs to determine toilet requirements and cost of making the city open defecation free. It is a simple tool for gauging resource requirements for City, class of cities or overall State level

INPUTS
- Demographic details: Population, HHs, HH size
- Infrastructure details: Presence or absence of sewer network, type of drains
- Sanitation details: HH using individual/shared/community toilet, HH and Population resorting to OD

POLICY ASSUMPTIONS
- Percentage coverage through individual toilets
- Persons per seat of community toilets
- Subsidy by the State government

COST ASSUMPTIONS
- Cost of construction of individual toilet
- Cost of construction per seat of community toilet
- Cost of surveys and creating awareness

OUTPUTS
- No of individual toilets to be constructed
- No of seats in community toilets to be constructed
- Cost of making the city OD Free

Tariff Setting Model

Goal : This model is to assist ULBs to determine water tariff to recover 100% cost of operations and maintenance.

Based on guidelines issued by GoM via a GR dated 2nd August, 2012 for fixing charges of water supply & sewerage services.

OTHER LOGIC TO BE PROVIDED
- Cross subsidization amongst user categories
- Life line supply if required
- Type of costs to be recovered (O&M or Capital)
- Increase in connections by expanding the network or adding more consumers to existing network

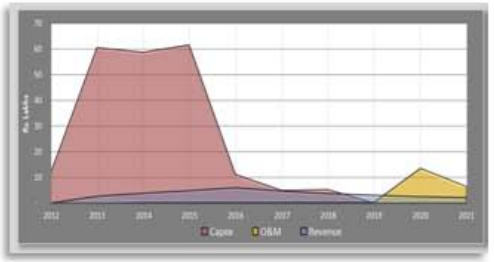
Target Setting Model

Goal : To assist ULBs to set realistic targets for service levels to fulfil one of the conditions stipulated by the 13th Finance commission.

The model provides assessment of past trends of indicators and related context information, which gives a realistic direction for setting optimum targets for Improvements

MODEL LOGIC : Captures multiple dimensions of Target Setting

CEPT-CRISIL PIP tool



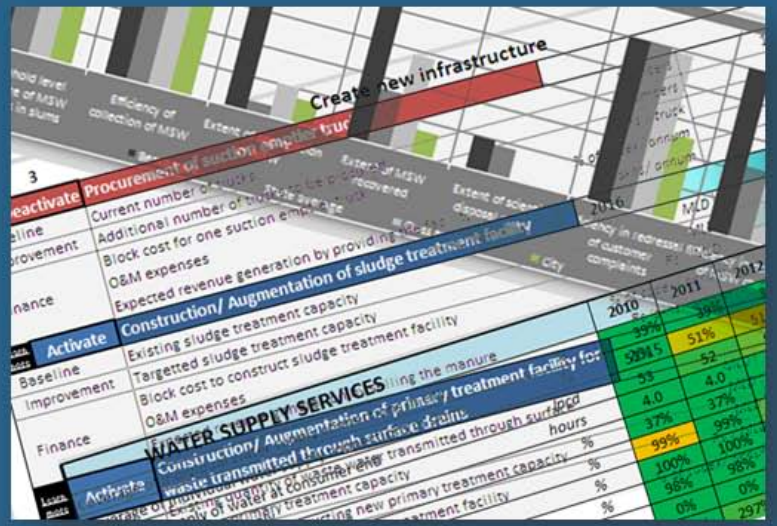
For more information on PIP tool,
Visit us at performance improvement section of PAS web portal
www.pas.org.in

The Performance Assessment System (PAS) Project at CEPT University is a five-year Action Research Project. It supports development of appropriate tools and methods to measure, monitor and improve delivery of water and sanitation services in urban India. Funded by the Bill and Melinda Gates Foundation, the PAS Project covers all 400 plus urban local governments in the two Indian states of Gujarat and Maharashtra. CEPT is implementing the Project with Urban Management Centre (UMC) in Gujarat and All India Institute of Local Self-Government (AIILSG) in Maharashtra.

To know more about the PIP Tool, please

pas performance assessment system

Performance Assessment System Project



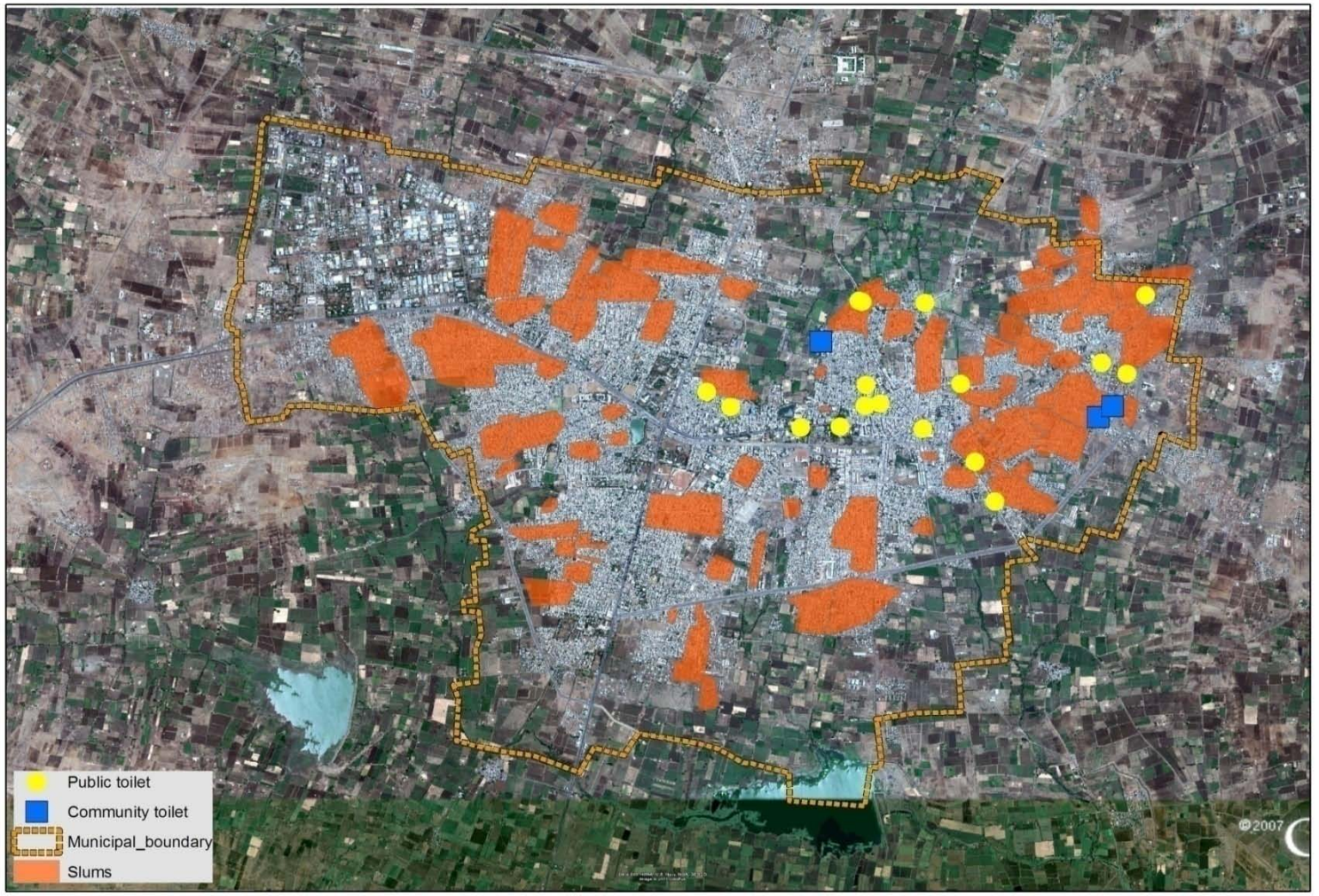
A Tool
to support development of UWSS

PERFORMANCE IMPROVEMENT PLAN

CEPT University, Ahmedabad
INDIA
www.cept.ac.in, www.pas.org.in

GIS for Planning: Slum mapping and analysis

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



DEMO OF PAS PORTAL

Workshop Structure

- Appropriate framework for city wide sanitation assessment
- City Sanitation Plans – lessons on approach, methodology, and implementation experience
- Experiences form India and other countries on managing the sanitation challenge
- Appropriate solutions for small and medium towns
  - Discussion with city officials based on preliminary work done by CEPT/PAS team
  - Focus on technology, finance and governance aspects

Thank You