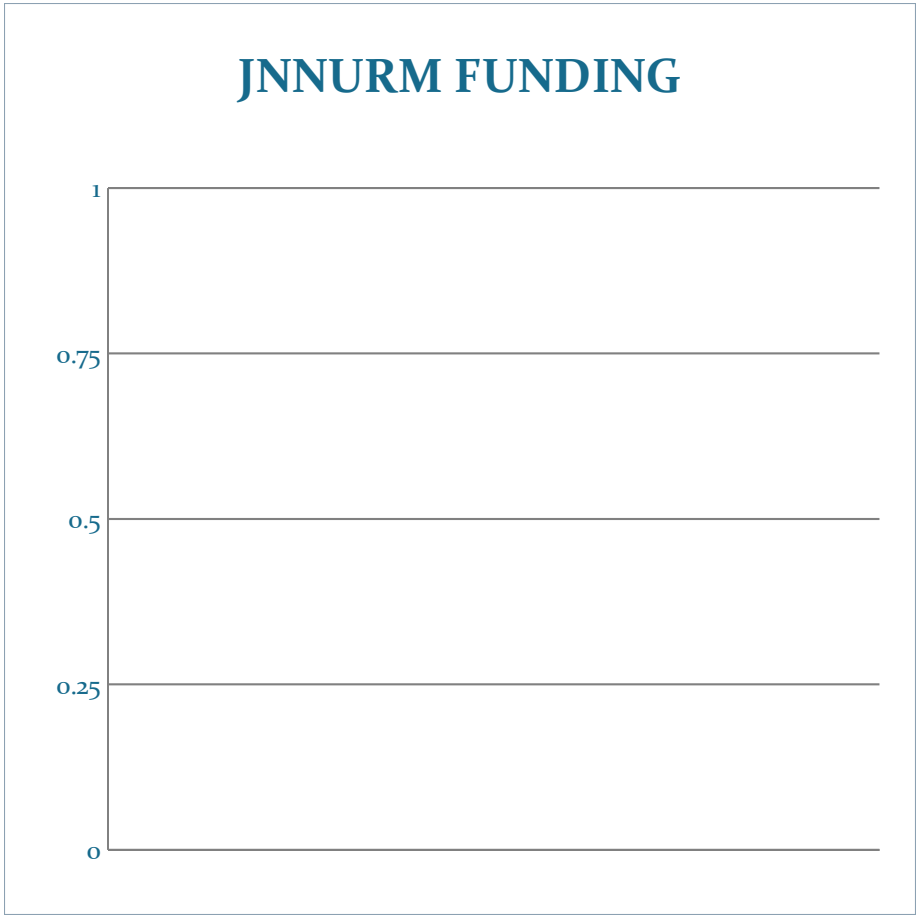

The Project

UWSS under JNNURM



- **UWSS = water supply, sewerage, solid waste, storm water drainage**
- **367** projects worth **Rs. 44129 crore** sanctioned for UWSS
- Nearly **75% of total** investment sin UWSS

Source: http://jnnurm.nic.in/wp-content/uploads/2011/01/sectowise-approved-projects.pdf

Need for Performance Information in urban water and sanitation

- Aggregate statistics suggest good coverage of water and sanitation in urban areas in India
- BUT little is known about the **quality, level and financial sustainability of service**
- Only limited information on **access of urban poor** households to water and sanitation is available
- Lack of WSS information leads to misallocation of resources
- Difficult to assess **impact of past investments**

Need to move from reform linked to **outcome liked funding in JNNURM-2 and state programs**

WHAT IS PAS?

A sustainable statewide performance assessment system for improving access to the poor and un-served, and achieve financial sustainability

Performance Measurement through Key Indicators on Water, Sanitation, Solid waste

Performance Monitoring/ Benchmarking at state and local level

Focus on ULBs of all sizes

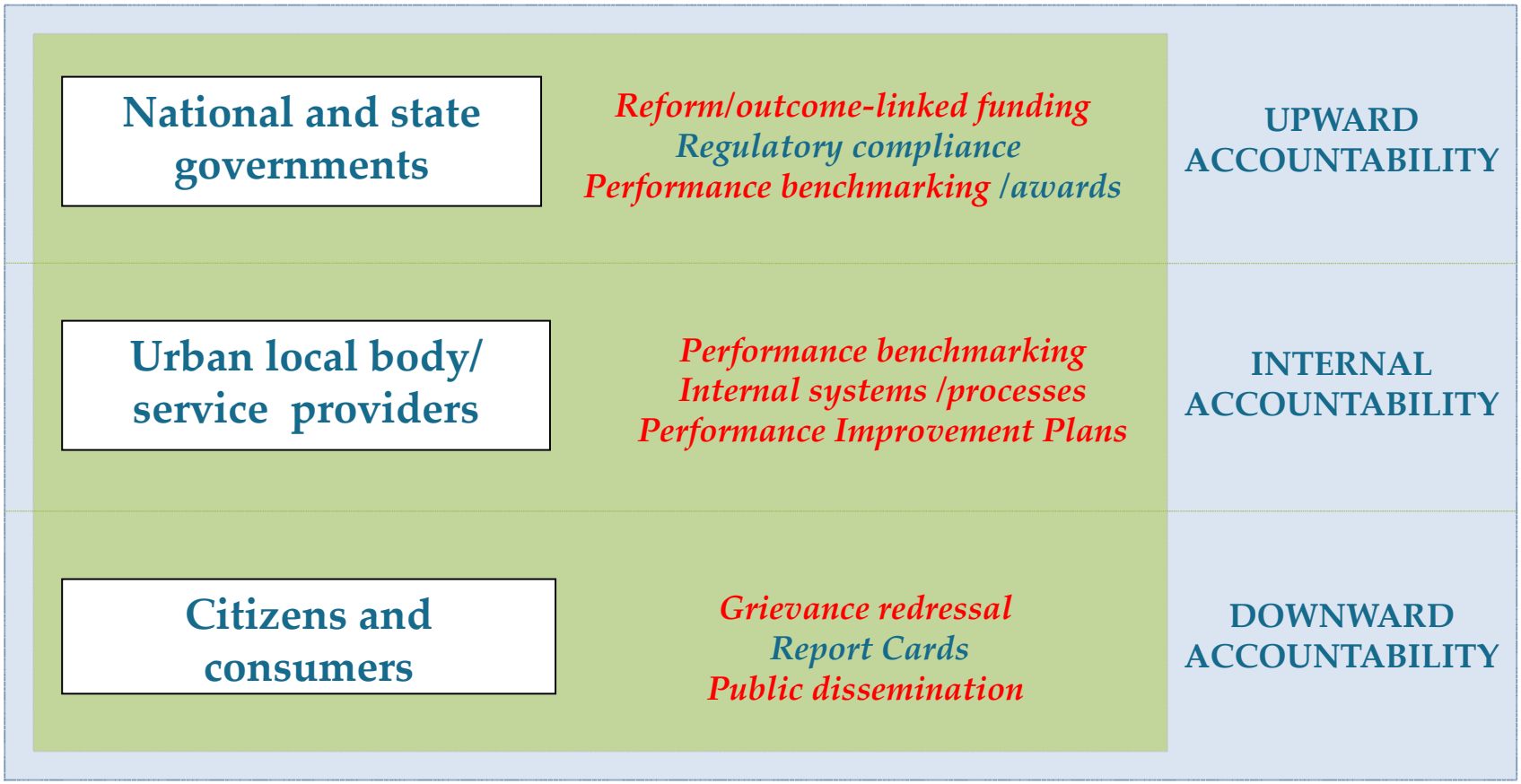
Focus on the Poor

Improved UWSS Service Delivery (Equity and financial viability)

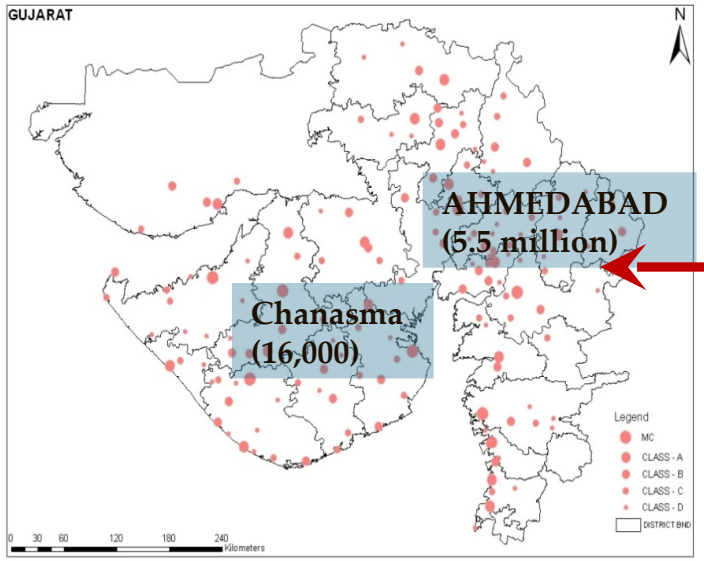
Performance Improvement Plans

Improving Accountability

Need for robust information on service delivery performance



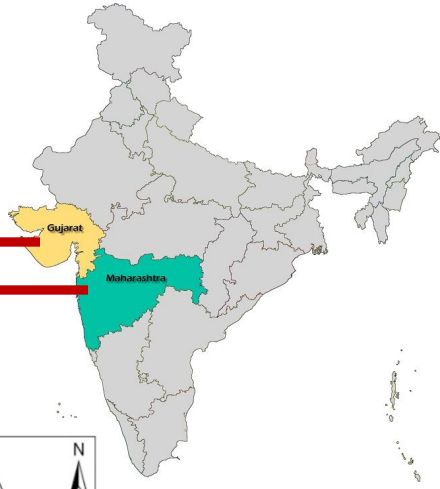
States and Urban Coverage - PAS Project

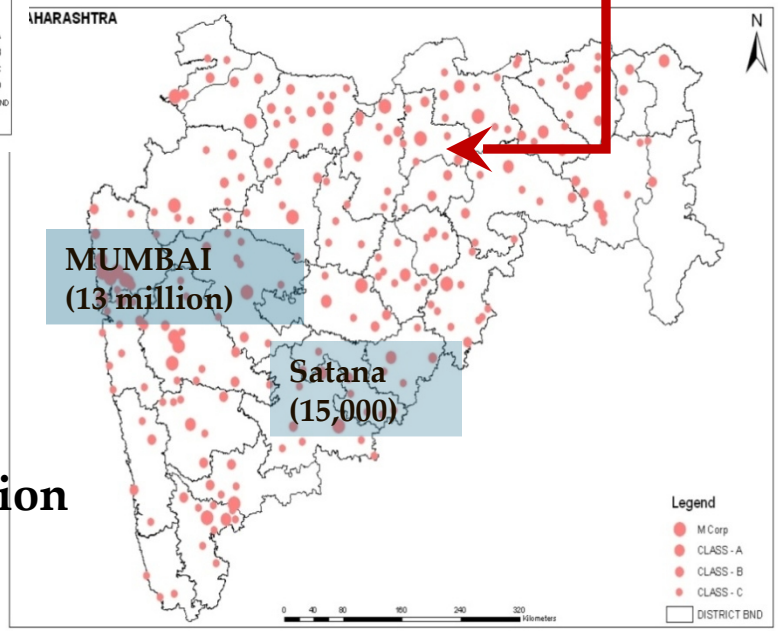


Gujarat State

166 Urban Centers

Population – 26 million





Maharashtra State

248 Urban Centers

Population – 51 million

Source: Projections by the Office of the Registrar General, India, 2001

Measurement Framework Goals-Reforms-Local Action

A. **Service Delivery Outcomes**
Service Goals

- *Universal access and coverage*
- *Service levels and quality*
- *Financial sustainability*

Key Performance Indicators (KPIs)

B. Intermediate Operational Outcomes
Key Reforms

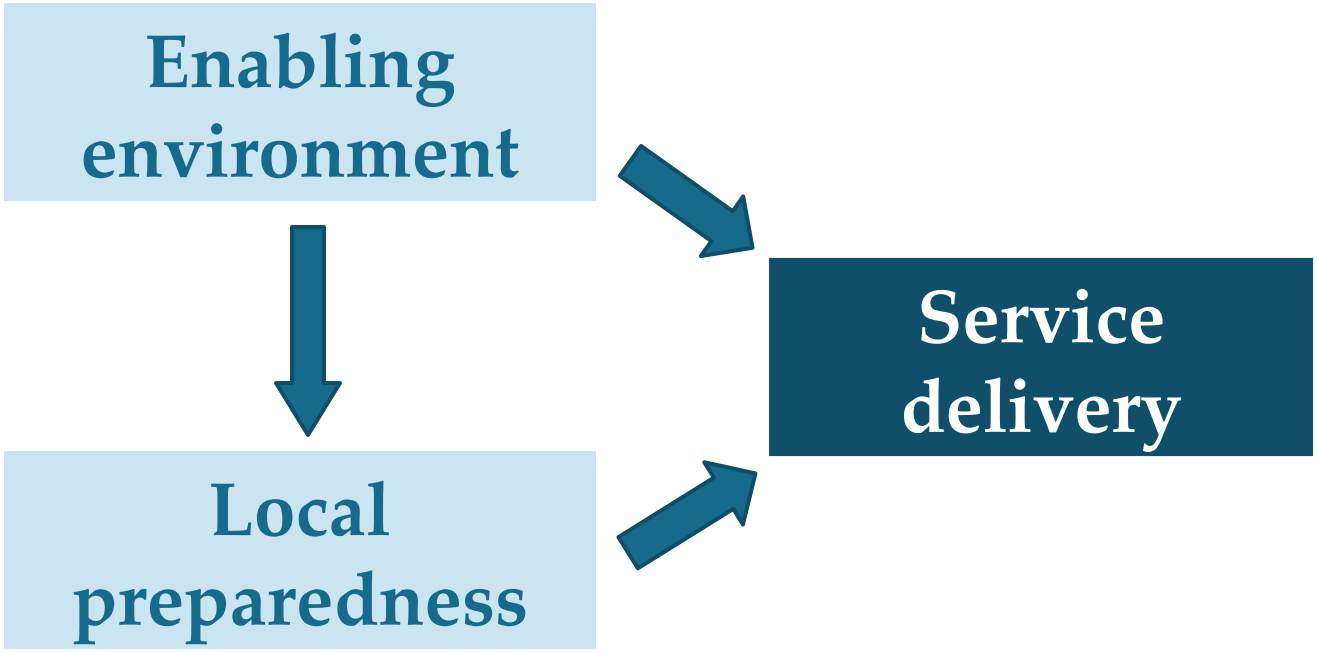
- *Efficiency in service operations*
- *Equity in service delivery*

C. Indicators for Local Action

E.g. for Equity, Water quality, Non-revenue water, Consumer grievance redressal

Key indicators are aligned with Government of India's Service Level Benchmarks (SLB) Initiative

Framework for Equity Assessment



Equity Assessment – PAS Project

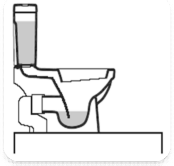
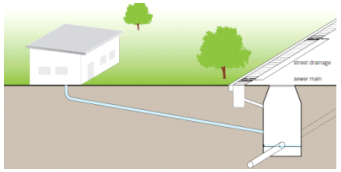
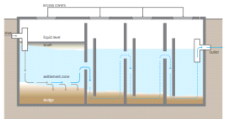
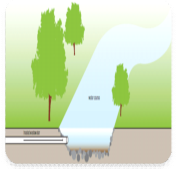
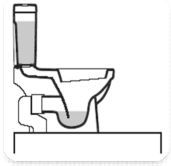
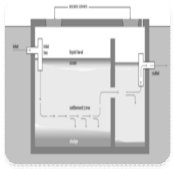
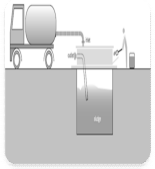
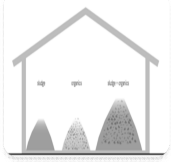
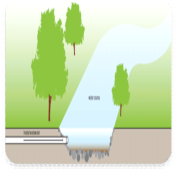
- **Service provider surveys**

  - ULB surveys – Services in slums (water, toilets, sewerage, SWM); policy, finance for slum services and connection processes
  - Slum settlement surveys – service levels, quality
  - Mapping of slum locations (50 cities) and detailed plans of each slum (Ahmedabad) for use in planning

- **Household surveys**

  - State level (by size class of cities) estimates for slum and non-slum households for: access and coverage, service levels and quality, costs and complaint redressal

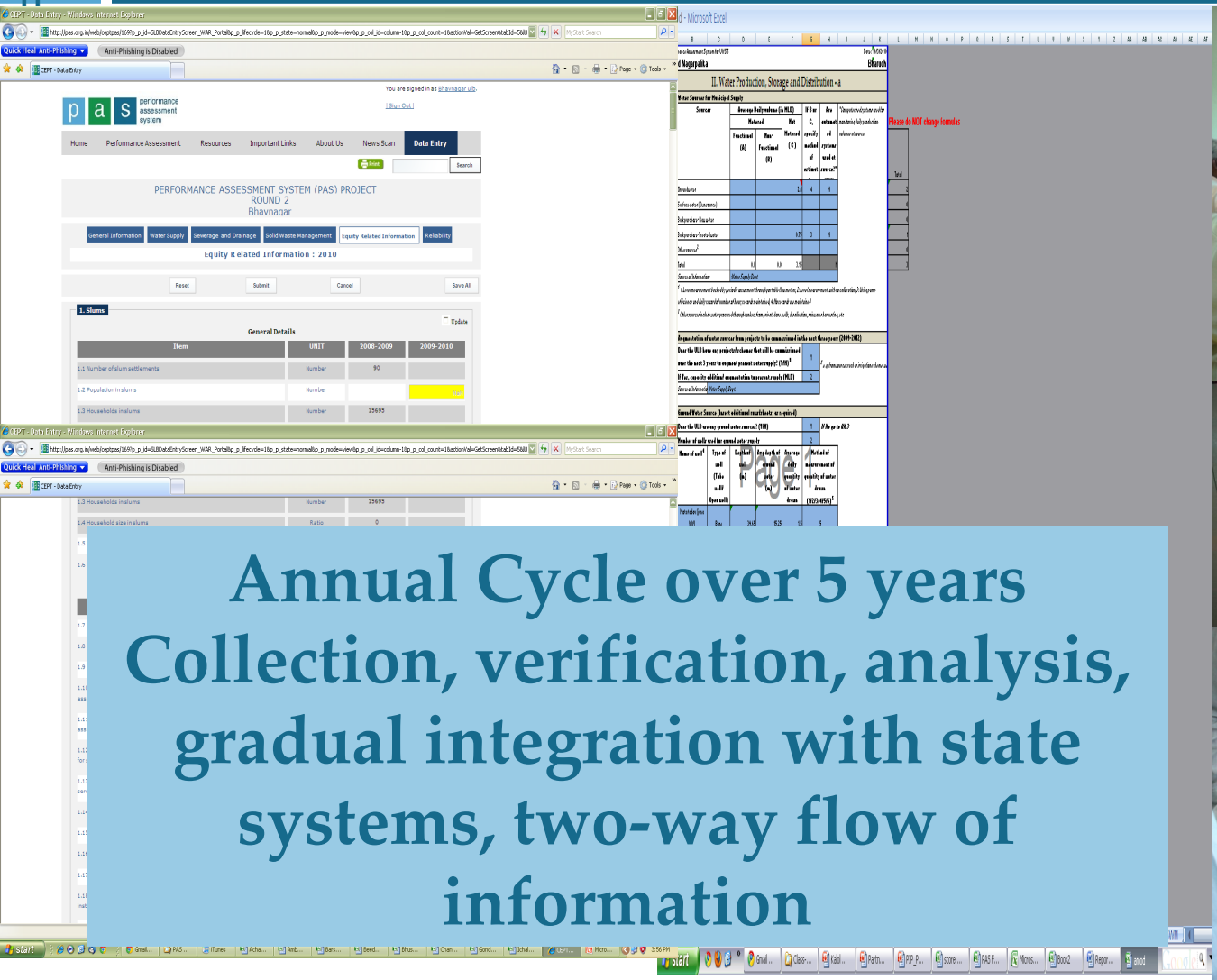
Adding Indicators for Non-sewered Cities

				
Capture	**Collection**	**Conveyance**	**Treatment**	**Recycle n Reuse**
Sewered cities				
• Coverage of toilets (residential & non residential)	• Coverage of wastewater network services	• Collection efficiency of wastewater network	• Adequacy of wastewater treatment capacity • Quality of wastewater treatment	• Extent of reuse and recycling of wastewater
				
Non Sewered cities				
• Coverage of toilets (residential & non residential) • Coverage of households with toilets	• Coverage of properties with safe disposal system • Number of connections to septic tanks in the city • % of septic tanks cleaned annually	• Number of septage sucking machines/1000 septic tanks	• Presence of septage treatment facilities • % capacity of plant to wastewater generated • Adequacy of primary treatment capacity • Extent of primary treatment	• Reused supply water

Cities with sewerage

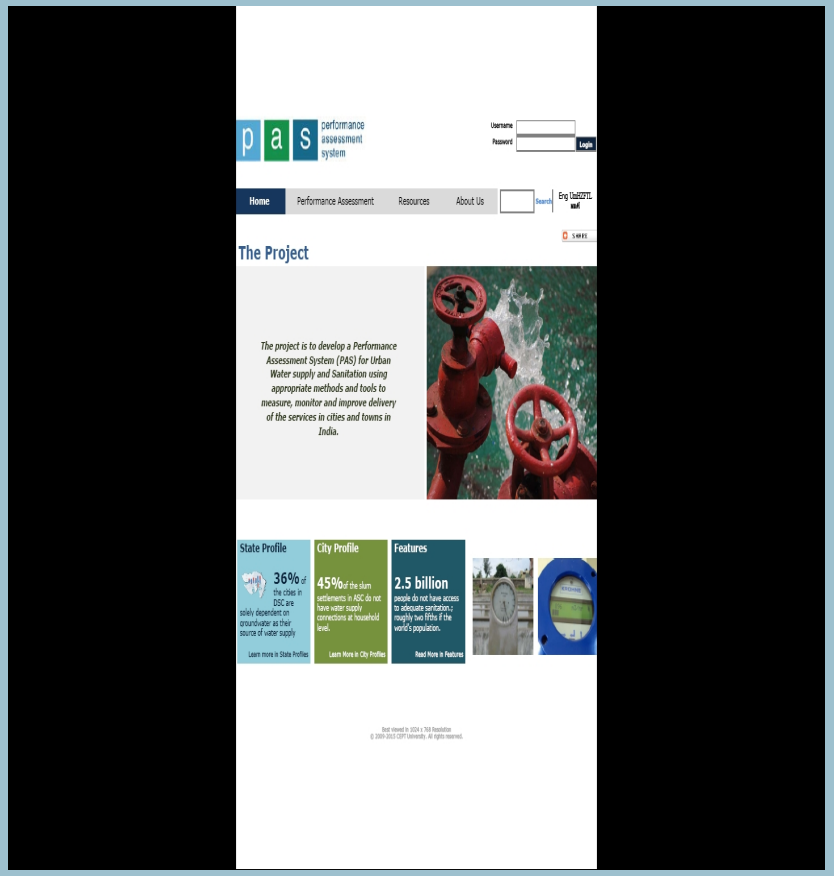
Cities with onsite sanitation systems

Data Collection Tools: excel -> online



Annual Cycle over 5 years Collection, verification, analysis, gradual integration with state systems, two-way flow of information

Performance Monitoring



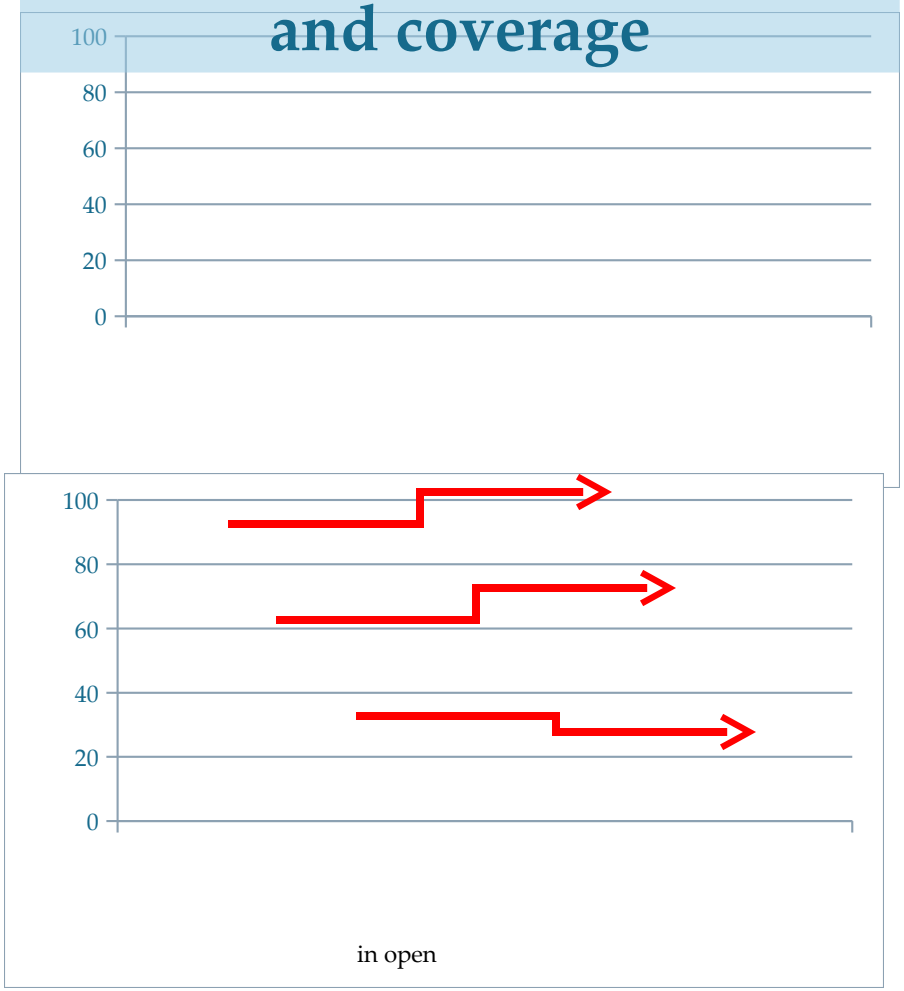
Gujarat and Maharashtra state wide PAS web portal for performance monitoring

- **Web portal set up**
- **Differential access by user category**
- **Includes:**
  - ✓ **Tools for measurement**
  - ✓ **Monitoring results at state and local level**
  - ✓ **Tools for improvement**
  - ✓ **Good practices for improvement**
  - ✓ **Local language**

pas.org.in

Services in Slums – 2009-10 & 2010-11

Trend analysis for access and coverage



Enabling Environment Policies and funding

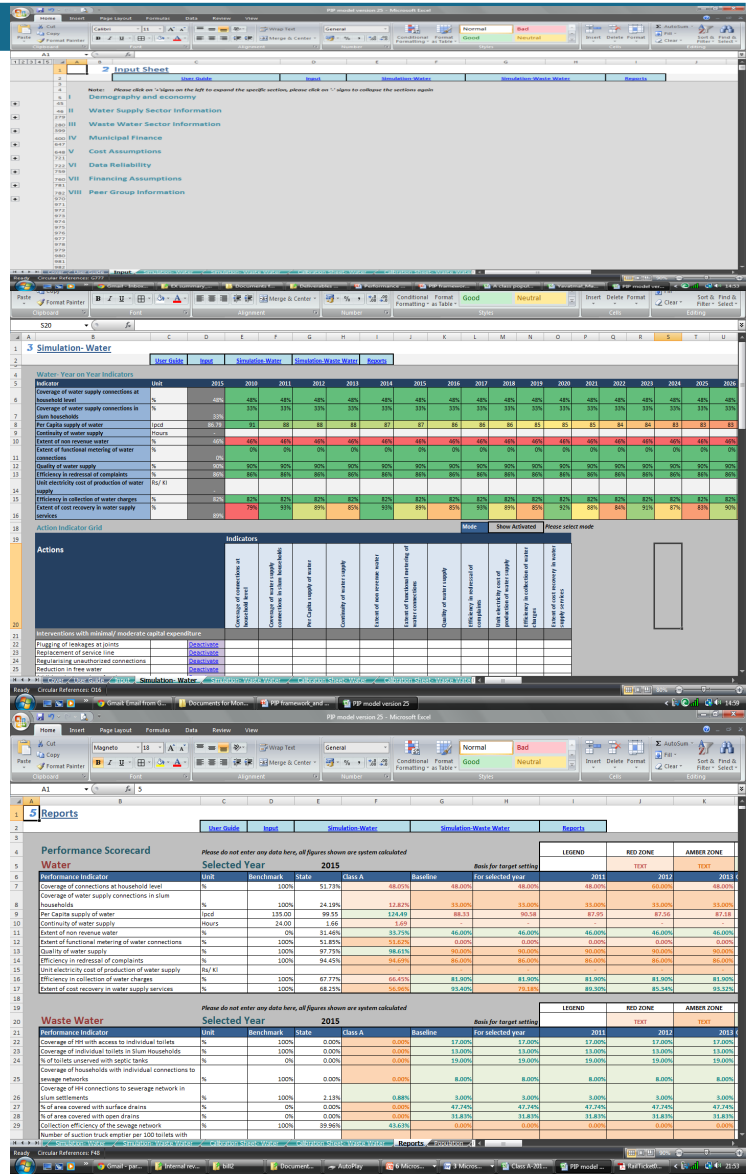
- **Policy Support**: 95% of cities surveyed have a policy provision to provide UWSS services to slum settlements

- **Pro-poor budget allocations**: The annual budget allocations for pro poor service provision ranges from 2-20%, with > 50% reporting 20% allocation

Source: Based on preliminary results from PAS Project Round II from 90 cities in Gujarat for 2009-10 and 2010-11

PIP Toolkit for Decision-Making

- ✓enables the utility **to benchmark itself with its peer group** and universal norms
- ✓comprehensive list of **actions and improvement measures**
- ✓distinction between **'low-cost no-cost' and capital intensive** interventions
- ✓**impact of actions** on service delivery, revenues, costs, and financing
- ✓ enables an **assessment of financial sustainability**

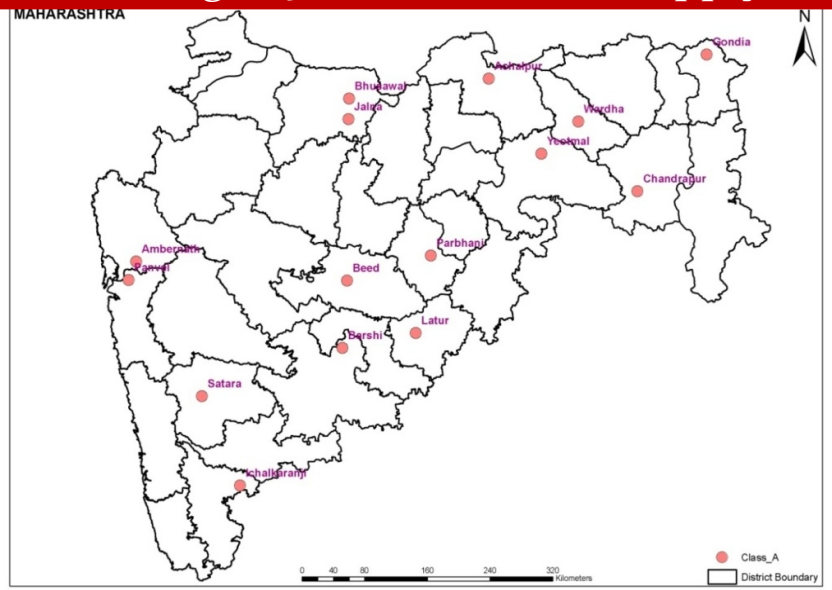


Performance Improvement Plans

PIPs are being prepared for 15 Class A cities of Maharashtra to make cities **open defecation free and have 24x7 water supply.**

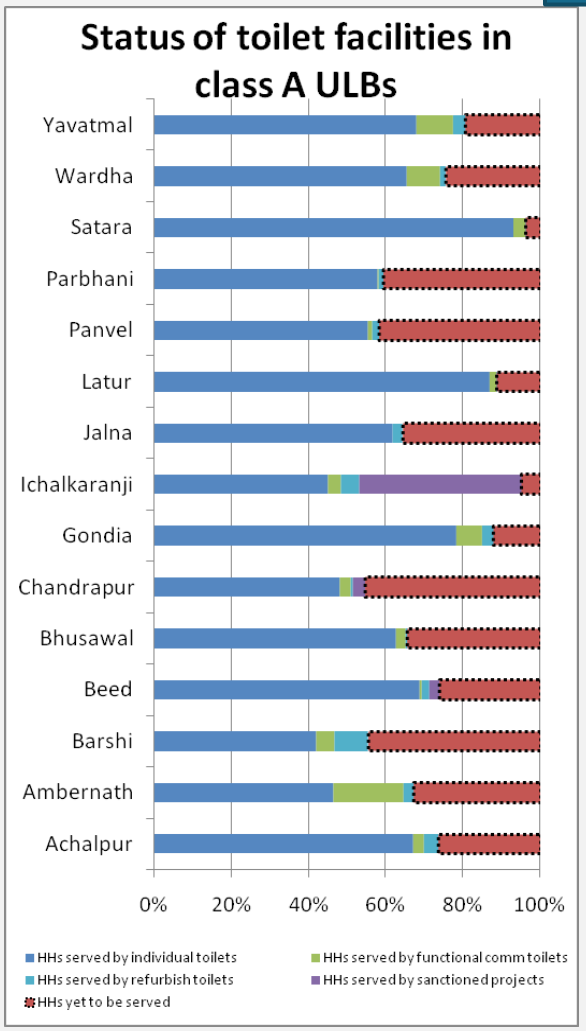
About 32% population resort to open defecation due to lack of safe sanitation facilities.

9 cities do not supply water daily.
Average 1.5 hours of water supply



Plan for Open Defecation Free

I] Assessment of toilet facilities and gap to reach ODF



II] Strategy for OD plan formulation

Life-cycle costing

In just a span of 5 years, the construction and O&M cost of community toilet overweighs expenditure on provision of individual toilet

In 10 years, community toilets prove to be 25% more expensive

In addition, individual facilities provide better service and privacy.

The proposal includes providing individual toilets. In areas with space limitation group toilets for 3 -5households.

Proposed toilet share to meet gap
Individual toilets = 75%
Shared toilets = 25%

III] Proposal for ODF for 15 cities

Targeted community mobilization and IEC campaign

↓

Number of toilets required:
Individual toilets = 136,115
Shared toilets = 15,124

↓

Funding requirements:

Public funds required	Rs. 293 cr
Beneficiary contribution	Rs. 71 cr
IEC campaign costs	Rs. 63 cr

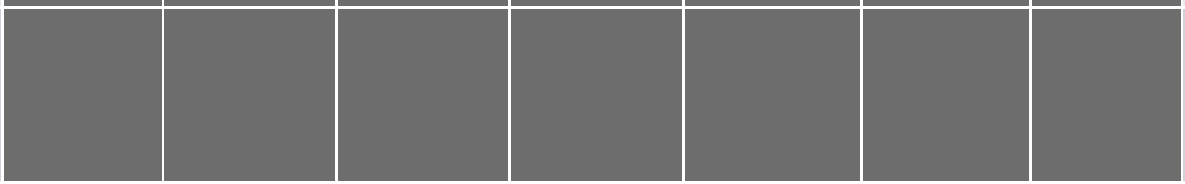
Total expenditure = Rs. 430 cr

Moving Towards 24 x 7 Water Supply

Group 1: Reforms are already under implementation	Ambernath								77
	Gondia								61
	Satara								60
	Yavatmal								40

Projects in progress Proposed Projects No existing projects

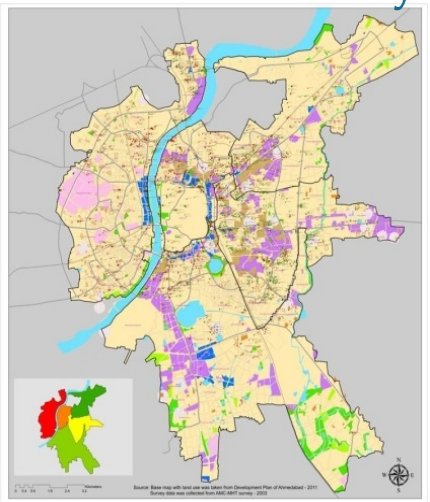
** Cost assumption : Rs 5000 per person # MJP SOR 2009 - 10*

Group 2: Reforms are partially implemented	Achalpur		33
	Barshi		26
	Beed		105
	Bhusawal		94
	Chandrapur		182
	Ichalkaranji		30
	Panvel		96
	Wardha		34
Group 3: Need to first augment water sources	Jalna		106
	Latur		115
	Parbhani		155

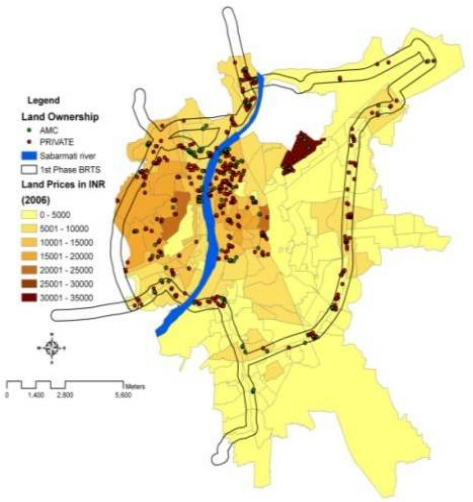
GIS based Slum Information System Tools for Decision Making

- Helps in policy decisions and effective planning; ranging from a single slum settlement to the entire city.

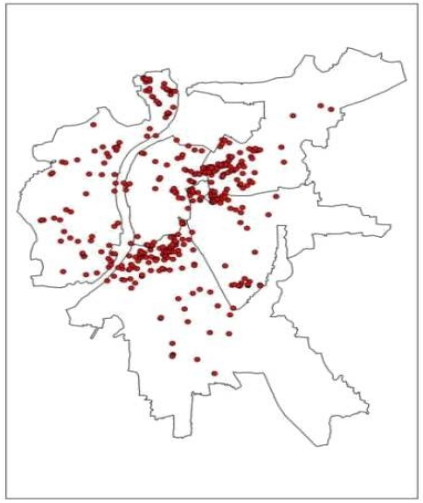
Location of slums w.r.t. land use of city



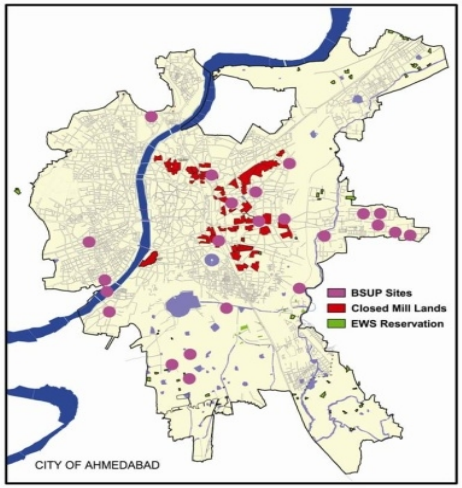
Slum pockets located on High land price



Identification of slums that need to be relocated



Land bank Identification



- Identify the slums under different various slum redevelopment model
- Decision making in Infrastructure Planning and implementation
- Allows the inter-departmental linkages and regular updating of slum database

Demonstration: Web Enabled GIS Based MIS for Slums

AHMEDABAD MUNICIPAL CORPORATION

Map Browser | Analysis | About Us | Exit

Name of Zone

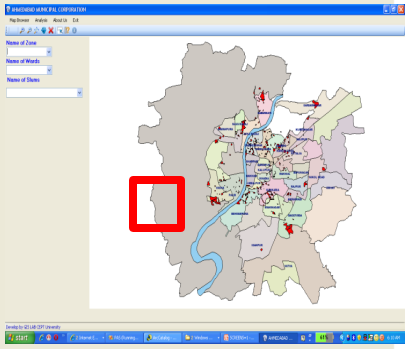
WEST

Name of Wards

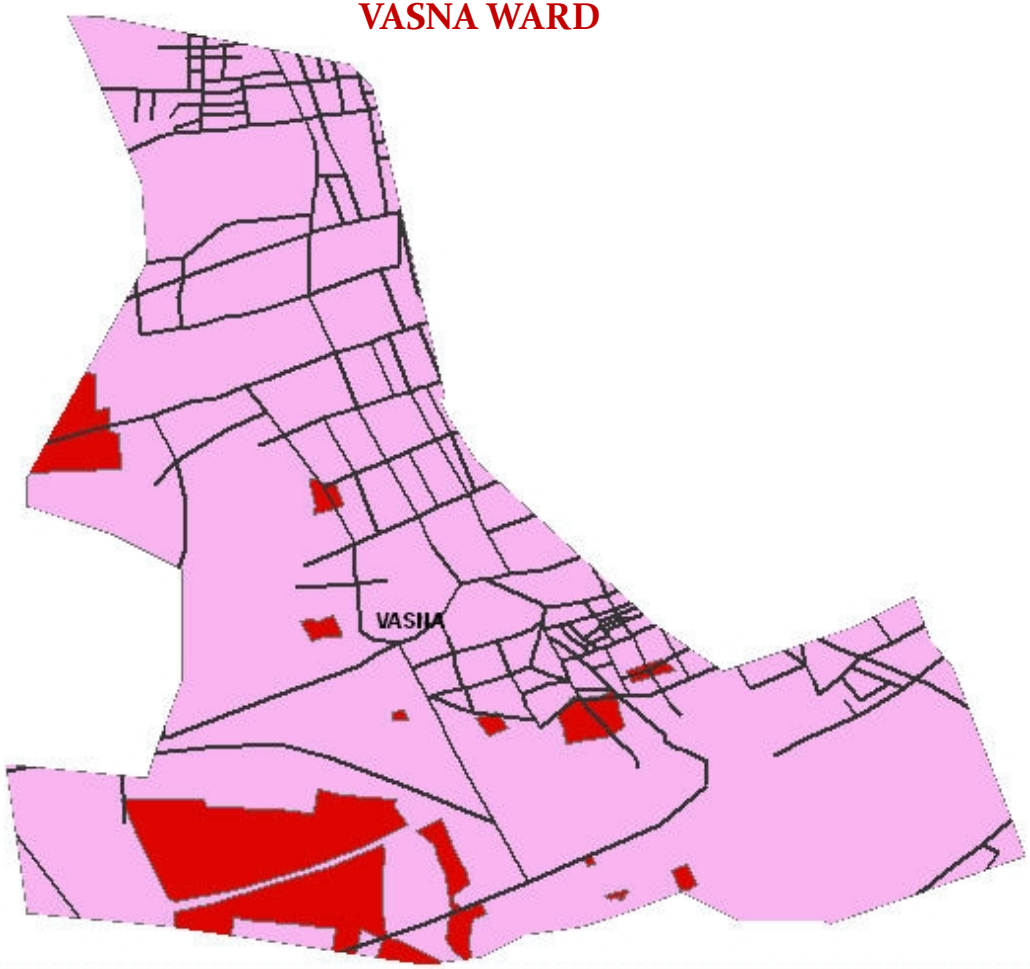
VASNA

Name of Slums

No. of Slums : 16



VASNA WARD



SLUM
WARD_FINAL
WATERBODIES

Develop by GIS LAB CEPT University

start | 2 Internet E... | PAS (Running... | ArcCatalog - ... | 2 Windows ... | SCREENS=1 -... | AHMEDABAD ... | 61% | 6:10 AM

Demonstration: GIS Based MIS for Slums: Jadiba Nagar

Web enabled GIS based MIS module will be linked with e-governance through AMC intranet System

Summing Up

- Setting up **robust performance assessment systems** is critical for accountability for improved service delivery
- Performance benchmarking not as a one-off report but as a **mainstreamed annual cycle** by state and local governments
- Explicit **inclusion of equity, non-sewered sanitation**
- Linking **measurement to improvement** with simple **support tools** and consultative processes
- Ensuring **local ownership and dissemination**




Thank You

www.pas.org.in

www.spcept.ac.in

meeramehta@cept.ac.in