



Presentation from  
**2015 World Water  
Week in Stockholm**

[www.worldwaterweek.org](http://www.worldwaterweek.org)

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# Online assessment system for water and sanitation services in India

*World Water Week 2015*

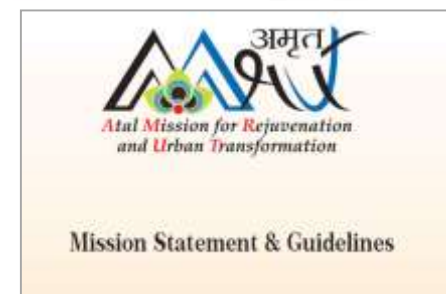
# Need for performance information

Government of India (GoI) has launched various programs for water supply and sanitation service improvements:

- ❑ Swachh Bharat Mission – Thrust on elimination of open defecation and cleanliness
- ❑ AMRUT – To achieve benchmark of universal coverage of water supply and sanitation
- ❑ Smart cities – Promote cities that provide core infrastructure and give a decent quality of life to its citizens

Monitoring outcome of these programs require assessment of service levels.

Funding is linked to service level improvement  
Online performance assessment tool  
developed by PAS helps in monitoring  
service level improvement



# PAS

Assess service delivery in water and sanitation

profile for **400<sup>+</sup>** Cities

Performance Assessment System

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



# misallocated investments??

And YET.....

~~\$2.58 Bn~~  
~~8.0%~~

APPROVED COST FOR SEWERAGE PROJECTS

LACK OF UNNORM- PREMISES  
LATRINE FACILITY

FUNDS ALLOCATED FOR SEWERAGE PROJECTS

OPEN DEFECATION

~~\$2.61 Mn~~  
~~0.6%~~

~~\$3.58 Bn~~  
~~8.4%~~

APPROVED COST FOR WATER SUPPLY PROJECTS

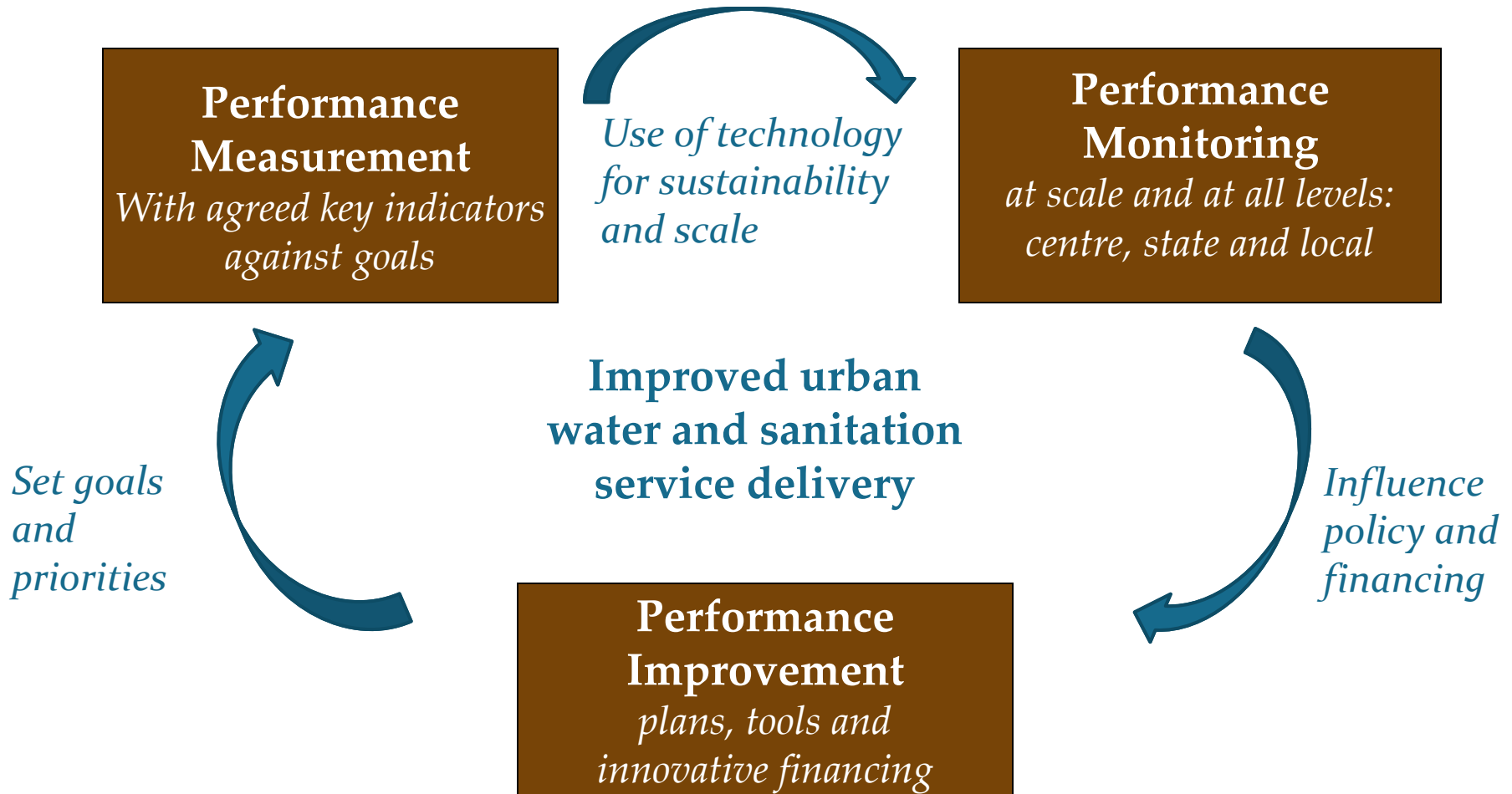
LACK OF UNNORM- PREMISES  
WATER SUPPLY FACILITY

FUNDS ALLOCATED FOR WATER SUBPHONES

UNTREATED  
TAP WATER

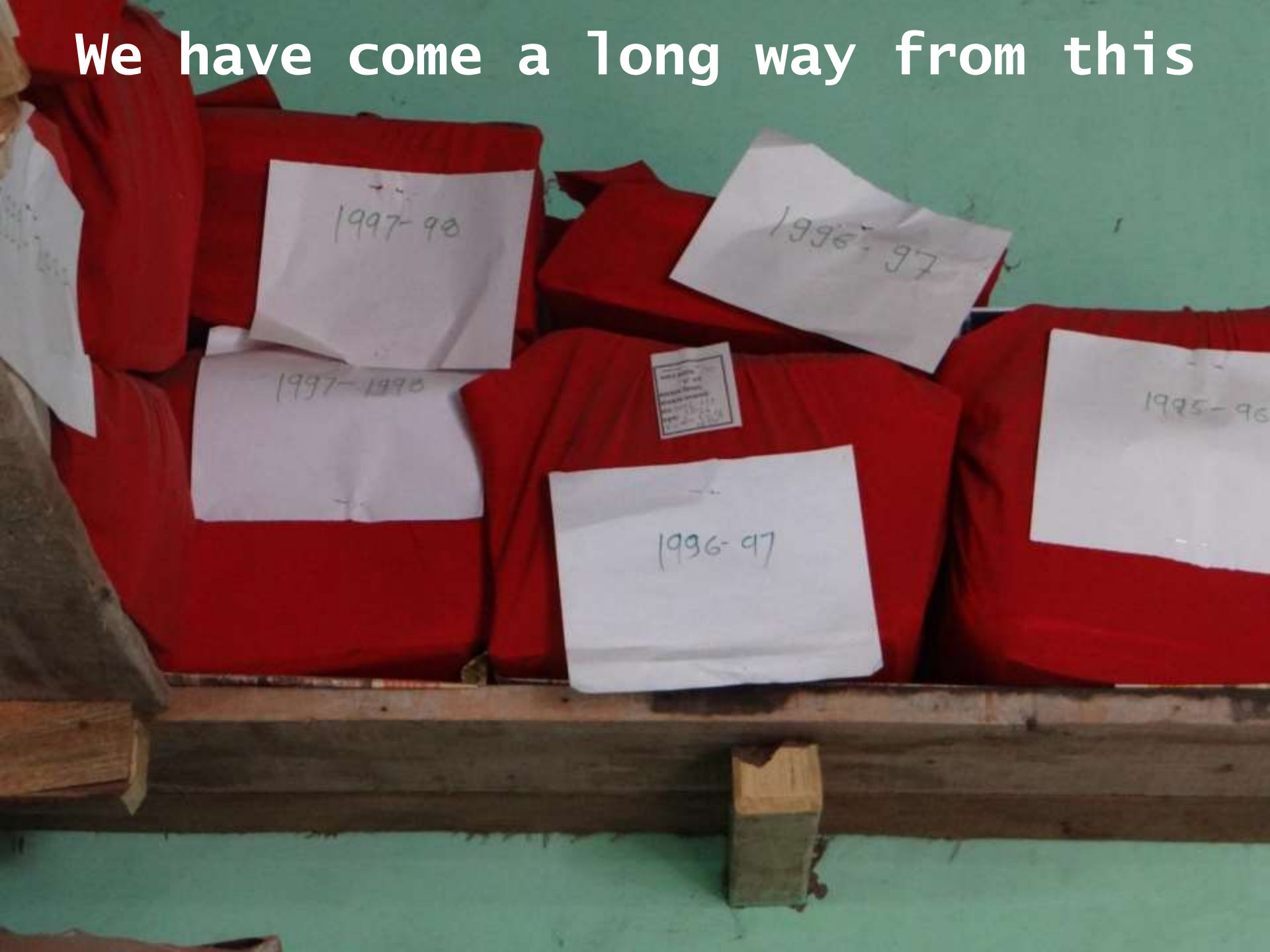
~~\$2.61 Mn~~  
~~0.6%~~

# PAS Approach – moving to a virtuous cycle



**Measure and monitor performance to reward and learn from success and demonstrate results**

We have come a Long way from this



1997-98

1996-97

1997-1998

1996-97

1995-96

# Data management practices in Indian cities



Absence of data recording system at ground level

If recorded, then it was not collated to be analyzed / reported to higher level



Most of the records are paper based and fragmented.

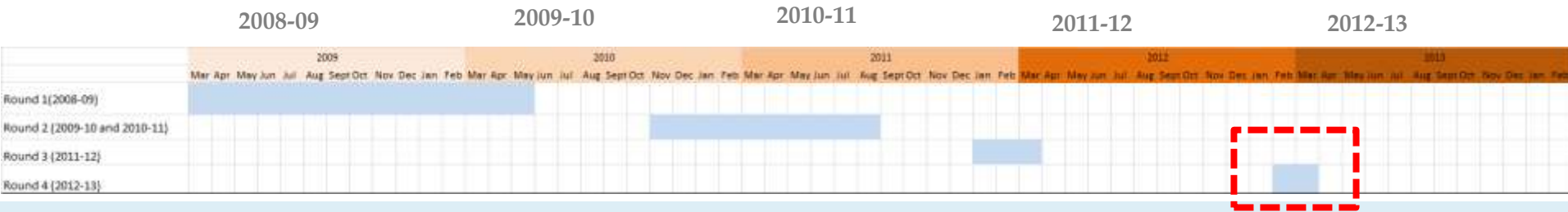


Maintained in isolation and were not usually shared with each other

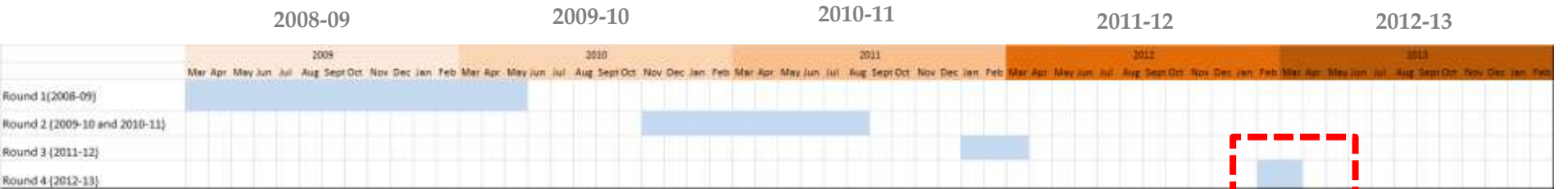


# Time taken for annual assessment

## Annual Assessment in GUJARAT over five year assessment period



## Annual Assessment in MAHARASHTRA over five year assessment period



Data collection through city visits in Year I (2008-09), supported by Partners

Support by State Government for Annual Assessment

Training in use of tools

capacity building

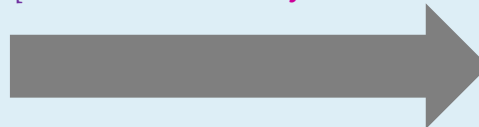
Tools translated in local language

Support for resolving data issues

Constant hand holding by PAS team



Data collection through online modules in Year V (2012-13). Self assessment by select ULBs



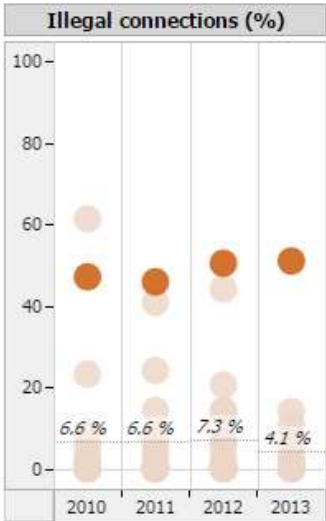
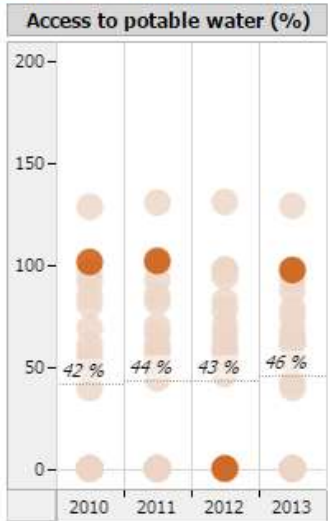
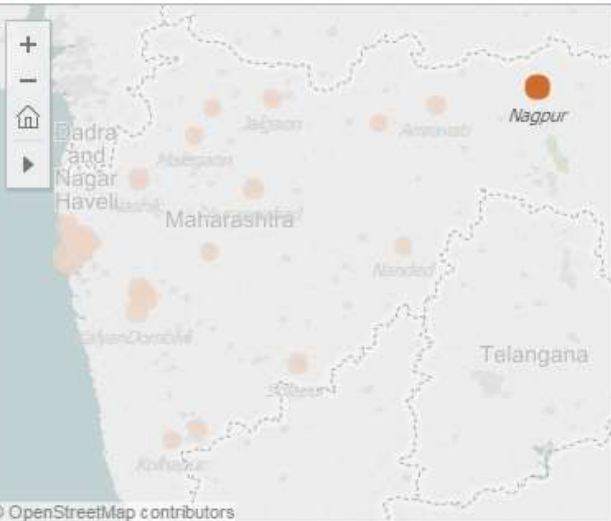


# State and city level interactive dashboard

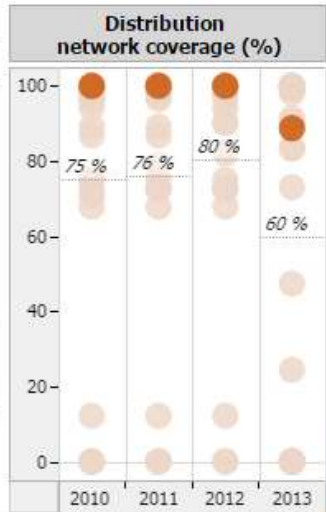
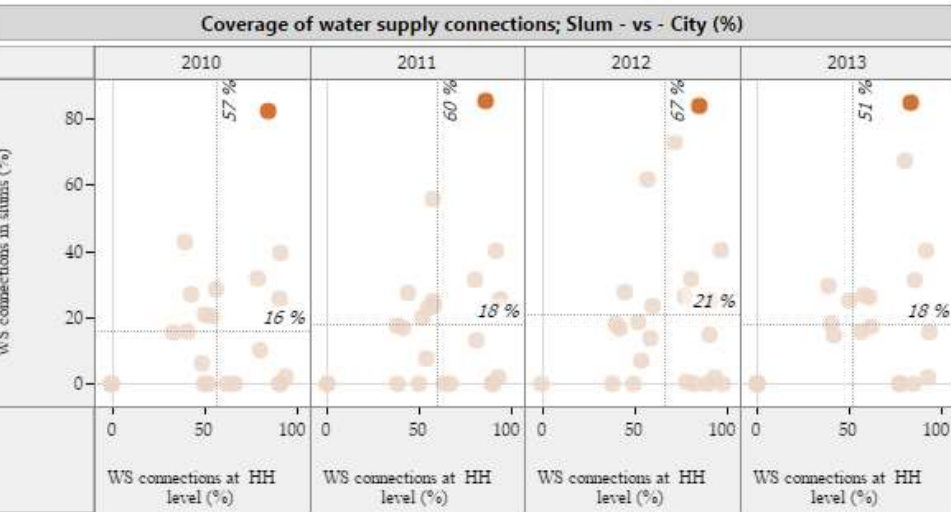
State Profile 1 | State Profile 2 | City Profile | Access and Coverage | Service levels and Quality | Financial Sustainability

## Indicators for Access and Coverage in Water Supply

ULB : Nagpur, Class : MC



- Select ULB
- Ahmednagar
  - Alota
  - Amravati
  - Aurangabad
  - Bhivandi
  - Dhule
  - Greater Mumbai
  - Jalgaon
  - KalyanDombivli
  - Kolhapur
  - Malegaon
  - MirajBhayandar
  - Nagpur**
  - Nanded
  - Nashik
  - Navi Mumbai
  - Pimpri Chinchwad
  - Pune
  - Sangli
  - Solapur
  - Thane
  - Ulhasnagar
  - Vasai Virar



Interactive data visualization that provides valuable insight

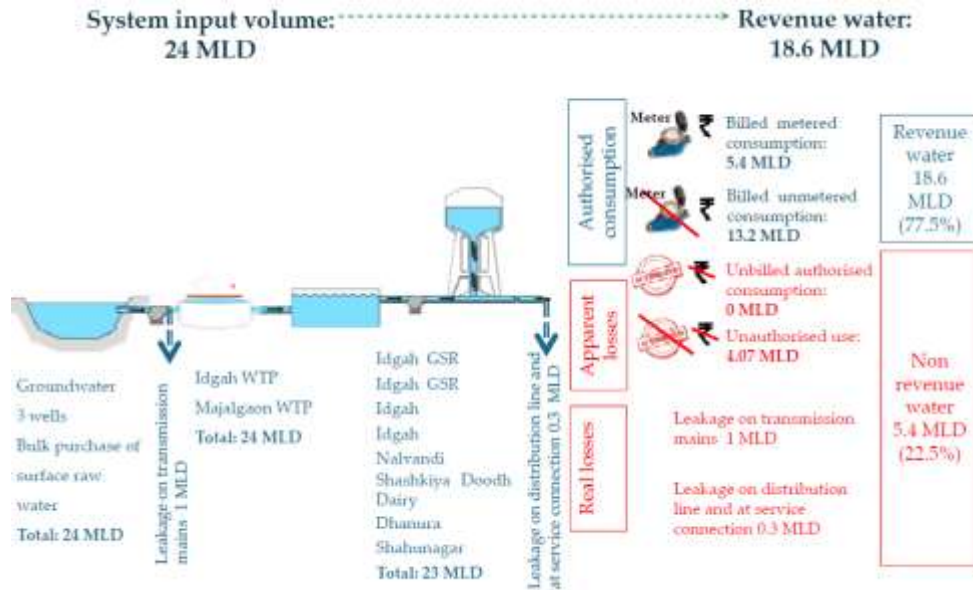
Allows drilling down from indicators, charts and maps to read data better

Allows combination of multiple data sources to keep track of performance

Indicates points of action or decision required

# City level assessment reports

## Schematic diagram of water supply system



## Theme wise analysis reports



Access and coverage



Equity in access to service

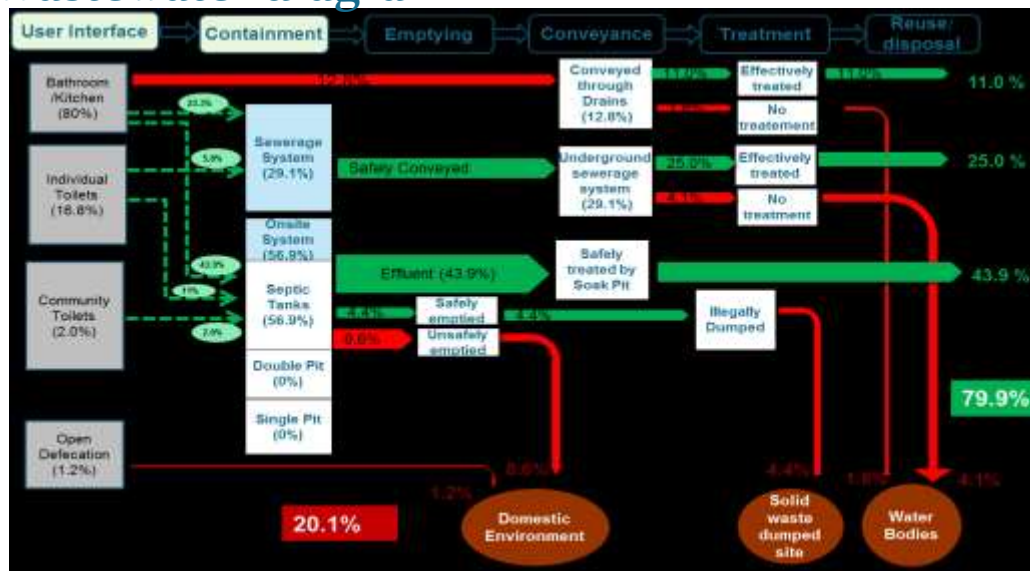


Service level and quality



Efficiency in service operations

## Wastewater diagram



Financial sustainability

# Replication in Other states



Chhattisgarh State (6 million urban population) has used online PAS – SLB module for data collection and analysis for the year 2014-15

**NATIONAL DATABASE  
for 1800 CITIES for  
18 STATES for 3 YEARS**

Comparison of state wise share of slum HHs with share of slum HHs resorting to OD

Now available online on [www.pas.org.in](http://www.pas.org.in)

The figure shows a screenshot of a web-based dashboard with various data tables and charts. Below it is a bar chart titled 'Comparison of state wise share of slum HHs with share of slum HHs resorting to OD'. The chart compares the 'Relative percentage share of slum HHs' (blue bars) and the 'Share of slum HHs resorting to OD' (grey bars) across 18 states. The states listed on the x-axis are: Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Mizoram, Odisha, Punjab, Rajasthan, Tamil Nadu, and West Bengal. The y-axis represents the percentage share, ranging from 0 to 100.

Online system can be used for monitoring various government programmes : Smart cities, AMRUT, Swatchh Bharat Abhiyan



Roll out in Other states: CEPT in partnership with National Institute of Urban Affairs (NIUA) will provide technical support to interested states

# Approach to performance improvement planning

## Conventional Approach



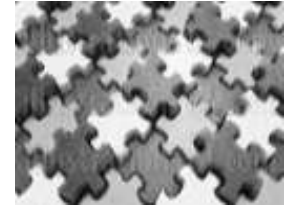
**'PROJECT'**  
*based approach*

Oriented towards **OUTPUTS**

**SUPPLY DRIVEN**

Focus on **INDIVIDUAL PROJECTS**

## PAS Approach



**'SERVICE'**  
*based approach*

Oriented towards **OUTCOMES**

Starting point is current performance – **NEED DRIVEN**

Focus on **SECTORAL SOLUTIONS**

# Performance Assessment to Improvement

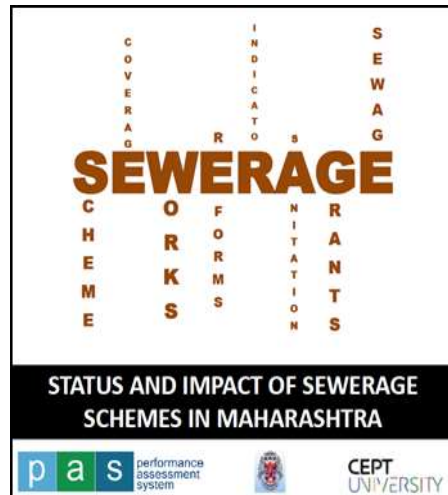
## State Level



UWSS information is used in preparation of policies for improvement of urban sanitation

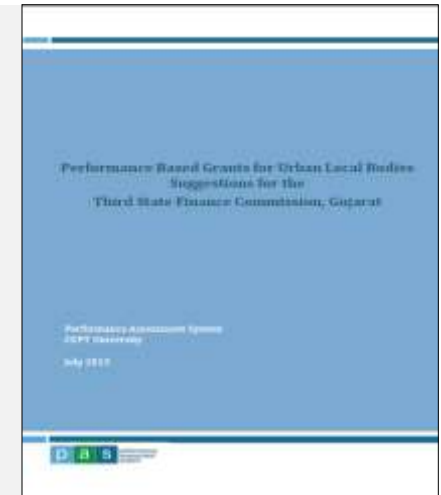
**Gujarat - Mahatma Gandhi Swachhta Mission**

**Maharashtra - Swachh Maharashtra Abhiyan**



Monitor service level improvements through various UWSS programme / projects

Recommendations to introduce performance base grant system in Gujarat and Maharashtra



# What value additions did we intend to bring?

- **No Pilots**.....operate at Scale to make an impact
- **Work with all levels of Governments** – National, State and Local and influence policies and implementation
- **Capacity building** of city and state level officials on Benchmarking
- Develop a system that can be **mainstreamed and sustained in the government** with its own resources
- Focus on the **‘real’ context for benchmarking** water and sanitation in developing country context – equity, on-site sanitation



# Key lessons

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- ❑ **Scale is critical** to demonstrate importance of performance assessment systems
- ❑ **Working with governments is essential**, but so is patience....adequate time required to mainstream in government system – 5 to 7 years
- ❑ **Government ownership and regular reviews** are essential
- ❑ Once fully set up, PAS can be used for both **outcome monitoring and rational investment decisions**
- ❑ Benchmarking exercise needs to be linked to **performance based funding**



**Thank You**

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