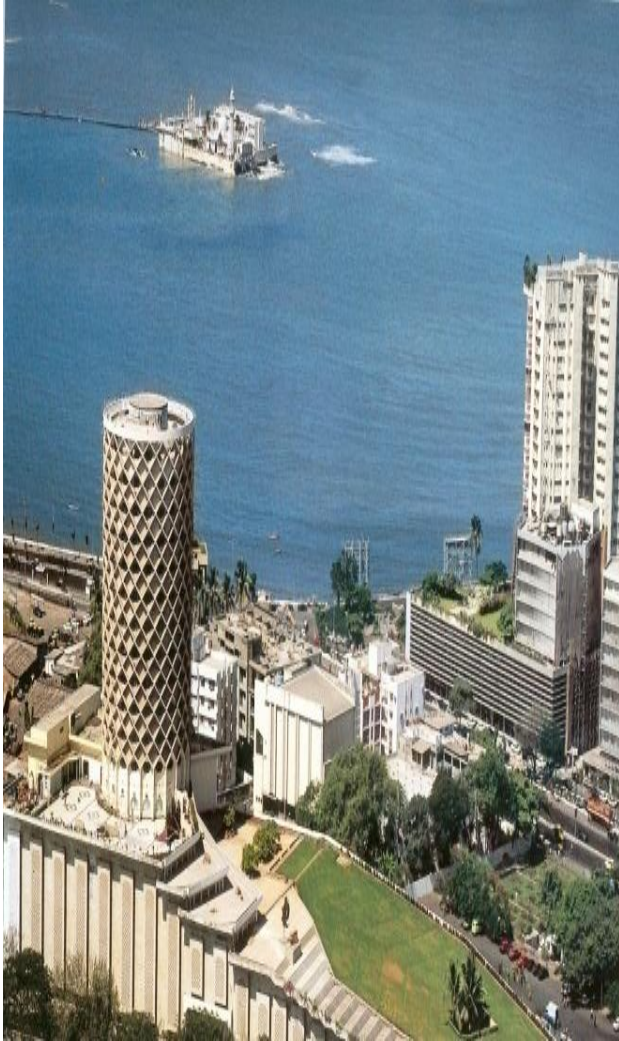


PPP IN WATER SUPPLY AND SANITATION SECTOR



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WATER AVAILABILITY

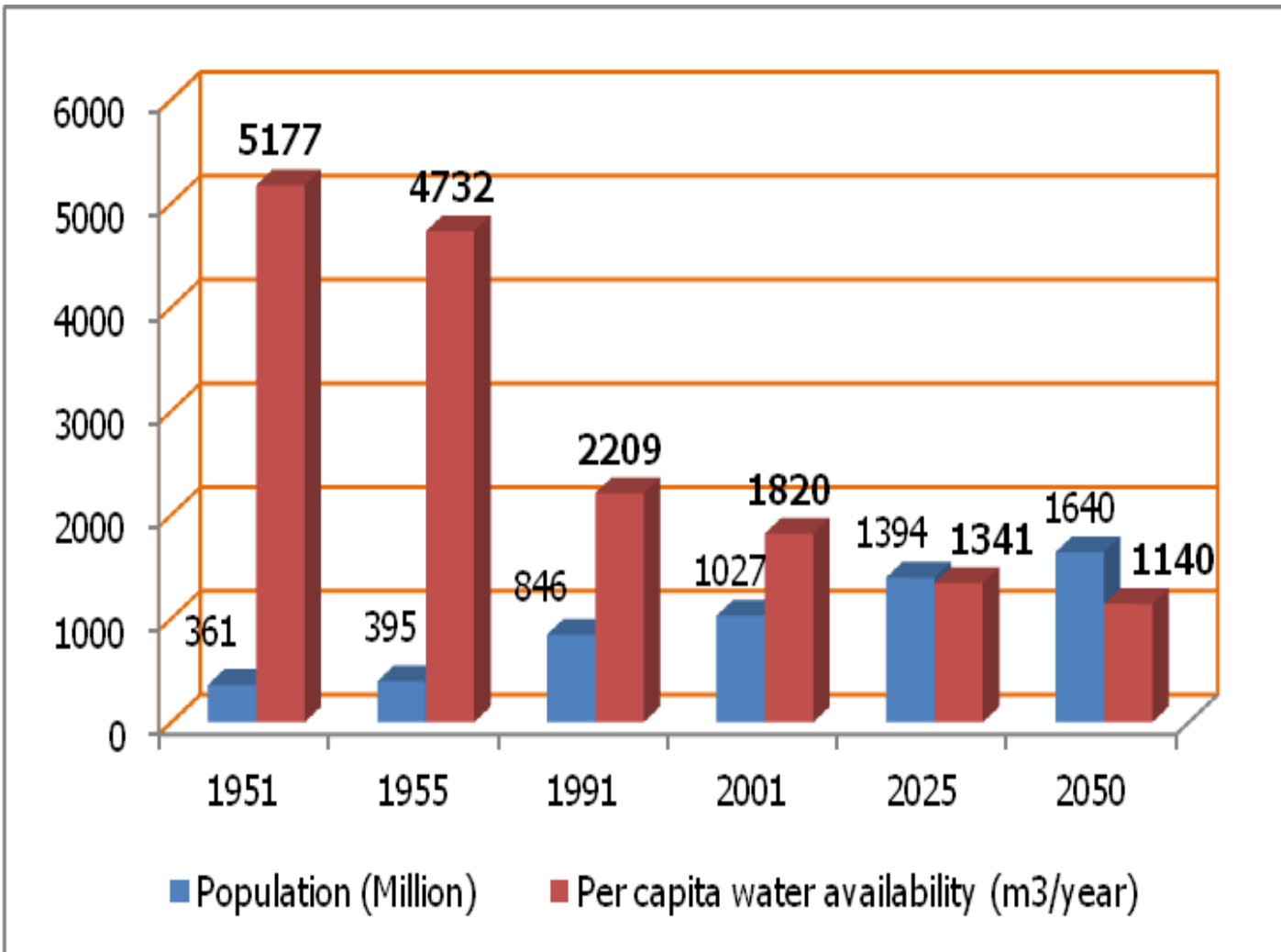
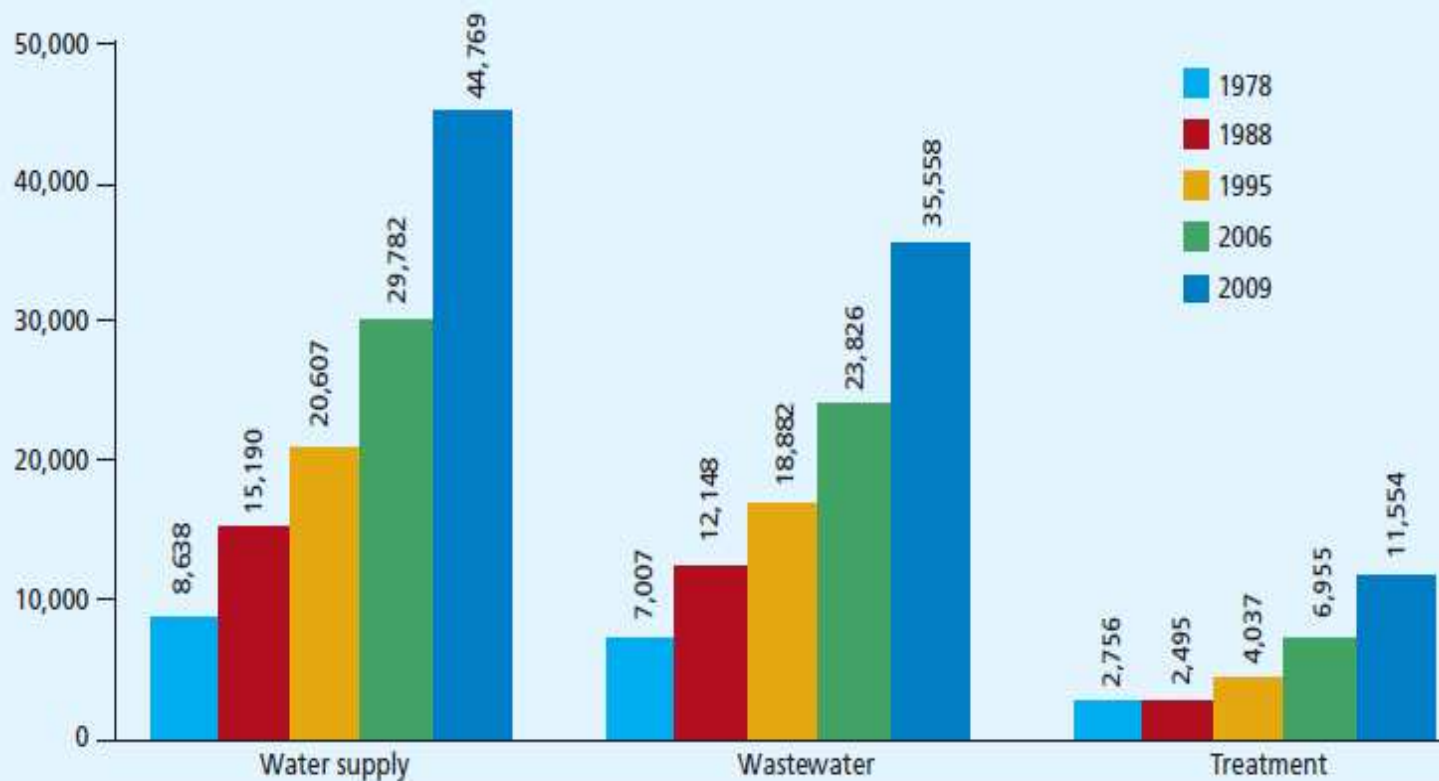


FIGURE 1.2: Water supply, wastewater generation, treatment in class I cities (MLD)

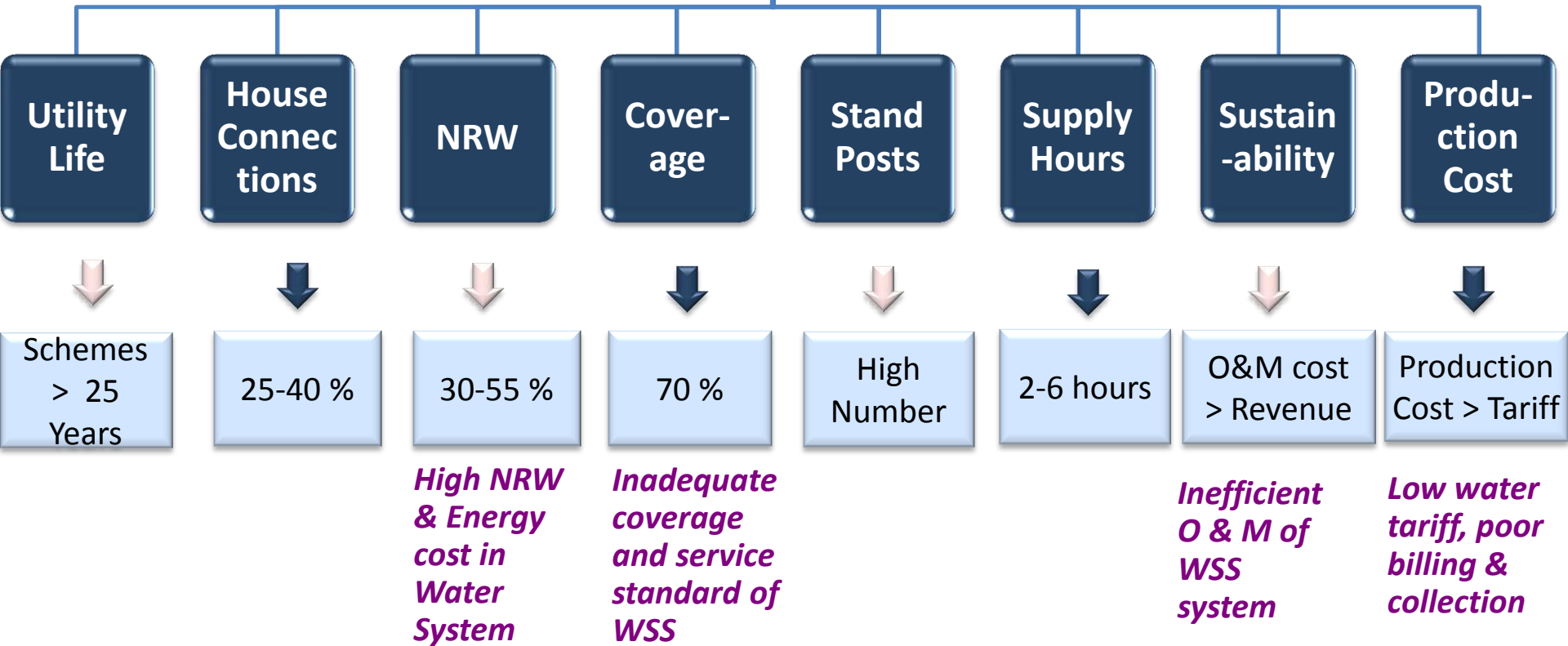


Source: CPCB reports (1978, 1988, 1995, 2006, and 2009)

Scenario - Urban Water Supply & Sanitation - Maharashtra

<i>Component</i>	<i>Investment (Rs Cr)</i>	<i>Physical Achievement</i>	<i>Service Standards for ULB</i>	<i>ULBs that meet Standards</i>
Urban Water Supply	120000	440 schemes	24x7 water supply	Malkapur, few wards in Ambernath/ Badlapur, NMMC
Sewerage	2500	40 schemes	100% sewerage connected system	None
Solid Waste Management	12th FC Grants	Few Projects	Scientific management of Solid Waste	None

Status - Urban Water Sector - India



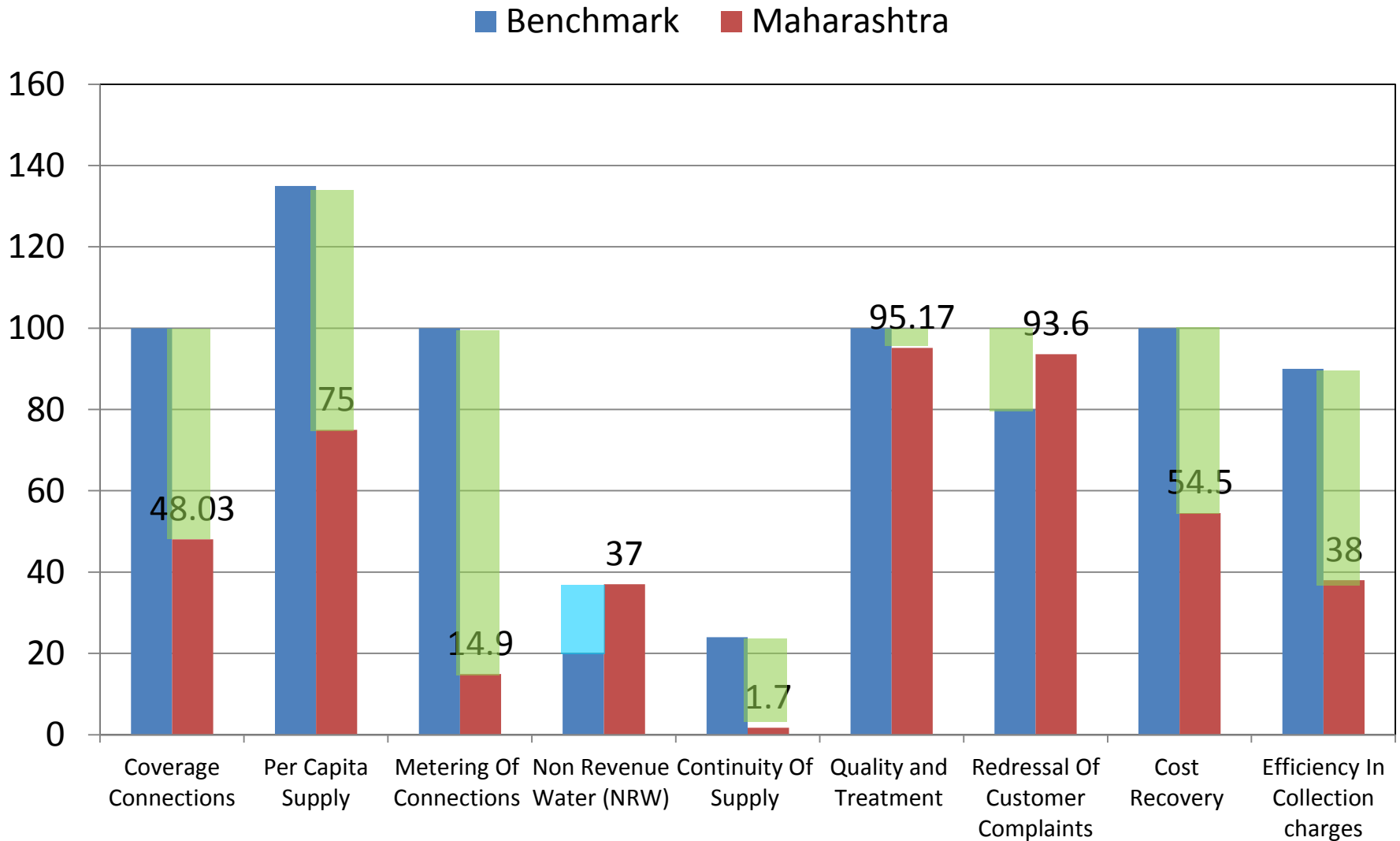
How is Performance Gauged?

Performance Indicators



1. Coverage, Water Supply Connections
2. Per capita supply of water
3. Extent of metering
4. Continuity of water supply
5. NRW Reduction
6. Quality of water Supply
7. Redressal of complaints
8. Cost recovery in water supply services
9. Efficiency in collection of water charges

Gaps in Service Level Benchmarks



Issues

- State - Water deficient
- Barely 1/3 of urban sewage treated
- Deteriorating quality of water
- Debt servicing capabilities of ULBs
- Financial viability

Challenges

- Competing demand
- *Increasing demand*
- Sustainability of source
- *Increasing cost of production and transport of water*
- Affordability & willingness to pay
- *Maintenance of assets*
- Operational sustainability

Reforms in MSNA



Urban Water Supply

Unauthorized connections identified and regularized.

Stand-posts converted into group connections.

Efficient Water billing recovery

Water Audit and Energy Audit



Management of Sewerage and Sullage

Action plan for connecting properties with sewerage/ drainage/ sullage system.

Reforms/ remedies and augmentation of existing system.

Reuse of water after treatment of sullage

Appropriate sullage/ sewerage tax

Reforms in MSNA



Solid Waste Management



Toilet Management

Awareness for Segregation of solid waste
Adopt system of Ghanta Gadi
Develop system for collection of garbage
Private participation for implementation
Charge citizens appropriately for solid waste management

Survey toilets
Repair public toilets (esp in slums, & for ladies)
Action plan to improve toilet facility
Participation of Private Organizations/ NGOs in O&M

Enabling environment

- *MSNA campaign*
- *Increasing willingness to pay*
- *Social and political returns*

Opportunities

- Millennium Development Goals - a priority
- Need for mammoth investment in infrastructure
- Government may not be possible to generate the funds
- Need for private funding

Public Private Partnerships (PPP)

- Ranges from Management Contracts to Revenue sharing
- Viability Gap Funding is also possible through PPP
- *PPP initiatives in Maharashtra – Chandrapur, Nagpur, Aurangabad*

Trends - PPP projects in water sector

Parameters	1990s	2000-04	2005 Onward
Number of PPP projects attempted	5	8	13
Contracts awarded	1	3	13
Current status of contracts awarded	1 operational	2 operational	12 projects are under various stages of implementation/operation; 1 project is currently stalled.
Project scope	<ul style="list-style-type: none"> • 100% bulk water supply 	<ul style="list-style-type: none"> • 75% distribution O&M • 13% bulk water supply • 12% water treatment 	<ul style="list-style-type: none"> • 38% distribution O&M • 31% distribution investment + O&M • 8% treatment + system rehabilitation/upgradation + distribution O&M • 15% bulk system investment + O&M • 8% desalination
PPP model	<ul style="list-style-type: none"> • 100% BOT/BOOT 	<ul style="list-style-type: none"> • 75% management contracts • 25% BOT/BOOT 	<ul style="list-style-type: none"> • 38% management contracts • 62% BOT/DBFOT and similar
Private operator mix	<ul style="list-style-type: none"> • 100% international 	<ul style="list-style-type: none"> • 65% International • 35% domestic 	<ul style="list-style-type: none"> • 65% domestic • 21% international • 14% local/regional

PPP Projects in Sewerage

- *Pay and use Toilets - Andhra Pradesh*
- Wastewater Management, recycle and reuse in Bangalore. BWSSB has set up 14 Treatment plants of secondary and tertiary level of various capacities all around the city with a total capacity of 721 MLD
- *Integrated Sanitation Units – Tamil Nadu. SHGs and other forms of community based organizations (CBOs) in the urban areas look after the O&M.*
- Reuse of waste water for non-potable applications in Surat

Challenges in PPP

- *Regulatory framework*
- Preference for large cities
- *Procurement procedures*
- Variable quality of partner
- *Credibility issues*

Thank you



Difficulties in Urban Water Sector

Lacking

Consumer orientation and professional approach in WSS management

Best Practices

Best practices replication approach missing

Arrears

Huge arrears of loan and water

PPP

No deliberate approach to go for PPP

Accounting

Accounting system reform not perceived

Grants

Non completion of ongoing projects due to inadequate grant for WSS, ULBs not capable to raise loan

Government Policy Frameworks for PPP

- Gujarat, Punjab, Karnataka, and Andhra Pradesh have developed legal frameworks for private participation in infrastructure
- There are also sector specific guidelines issued by the respective State Governments

State actions in creating a framework for PPP in India

State	Framework for PPP
Andhra Pradesh	The Andhra Pradesh Infrastructure Development Enabling Act, 2001 is to facilitate greater private sector participation in infrastructure projects.
Assam	The Assam Policy on Public Private Partnership in Infrastructure development proposes to bring in private sector investment with the PPP mode as the preferred approach for infrastructure projects.
Bihar	The Bihar Infrastructure Development Enabling Act, 2006 is for the rapid Development of Physical and Social infrastructure in the State and to attract private sector participation in the designing, financing, construction, operation and maintenance of infrastructure projects in the State and provide a comprehensive legislation for reducing administrative and procedural delays, identifying generic project risks.
Goa	The Goa Policy on Public Private Partnership applies to all PPP projects sponsored by the Government or PSUs or Statutory Authorities.
Gujarat	Gujarat Infrastructure Development Act (1999) amended in 2006 to facilitate greater private sector participation in financing, construction, maintenance and operation of infrastructure projects.
Karnataka	The Karnataka Infrastructure Policy, 2007 has been evolved with a view to augment and expedite infrastructure development through active private sector participation.
Orissa	The Orissa PPP Policy, 2007 is to create a conducive environment to utilise the efficiencies, innovativeness and flexibility of the private sector to provide better infrastructure and service at an optimal cost.
Punjab	The Punjab Infrastructure Development and Regulation Act, 2002 provides for the partnership of private sector and public sector, in the development, operation and maintenance of infrastructure facilities and development and maintenance of infrastructure facilities through financial sources other than those provided by the State budget.
Rajasthan	Has set up the Rajasthan Infrastructure Development Fund with an initial corpus of US \$ 500,000, contributed by the financial institutions and the State government.
West Bengal	The West Bengal Policy on Infrastructure Development through Public Private Partnership, 2003 was notified to address the need to mobilize private sector investment in infrastructure development and evolve policy guidelines for the purpose.

Constraints in PPP

- One of the most common problems for PPPs in many countries is land acquisition
- Issues in regards to the resettlement programs that are being applied to infrastructure projects
- Capacity related constraints
- Legislative and regulatory environment related constraints
- Project time frames may not be suitable to local bodies.

Questions for Improving WSS Service Delivery ...

How do we ensure:

- **WSS Institutions** that are autonomous and accountable to owners, customers and other stakeholders ?
- **Professional service provision** that is customer oriented and sustainably provides water 24X7 with O&M cost recovery through user fees?
- **Cost effective investments** that support the above?

Need for a Comprehensive State-wide WSS Business Plan:

- WSS Policies
- Institutional Development Plan
- Infrastructure Development Plan

