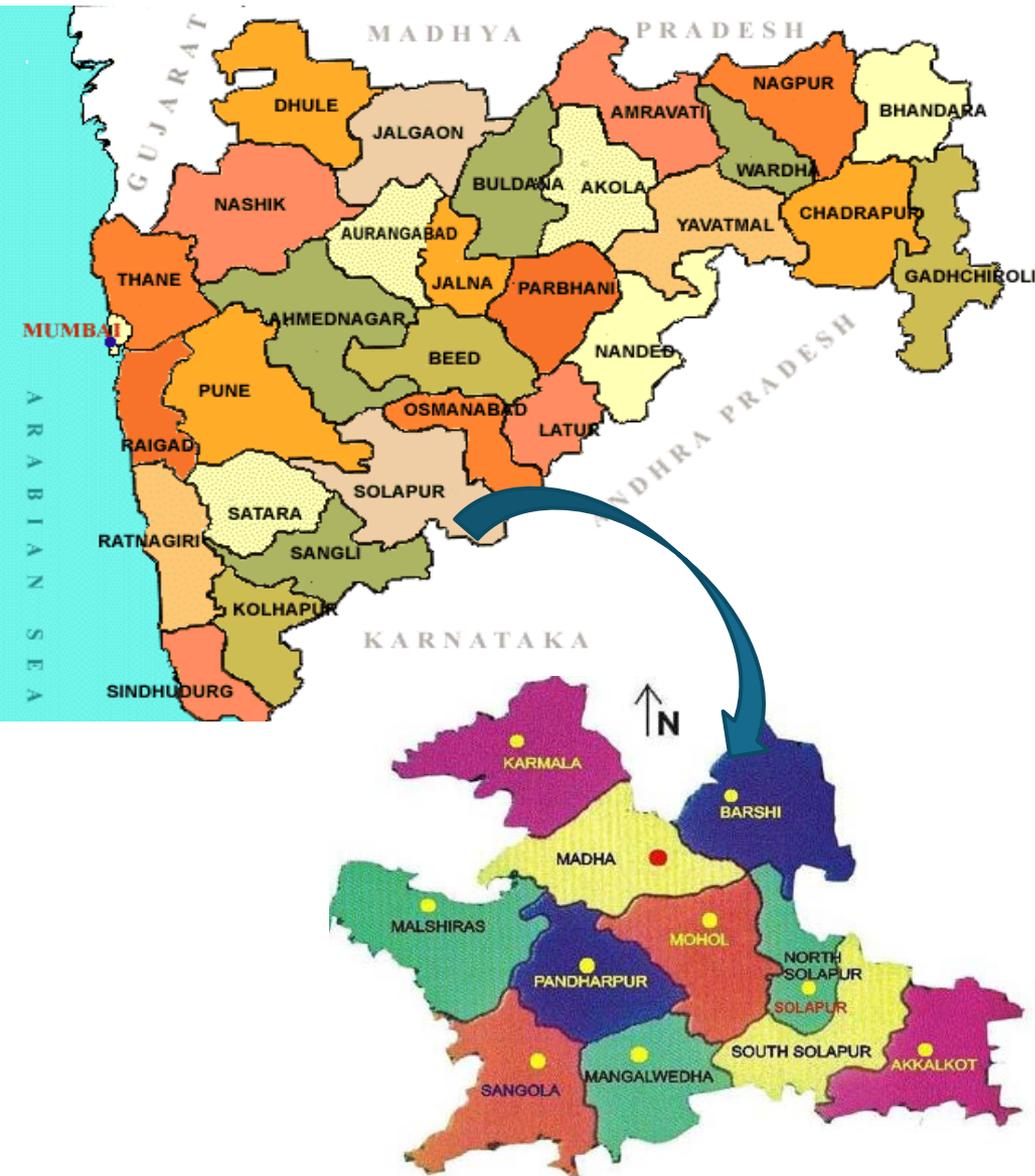




# FIELD ASSESSMENT FOR PERFORMANCE IMPROVEMENT PLAN

# City Profile

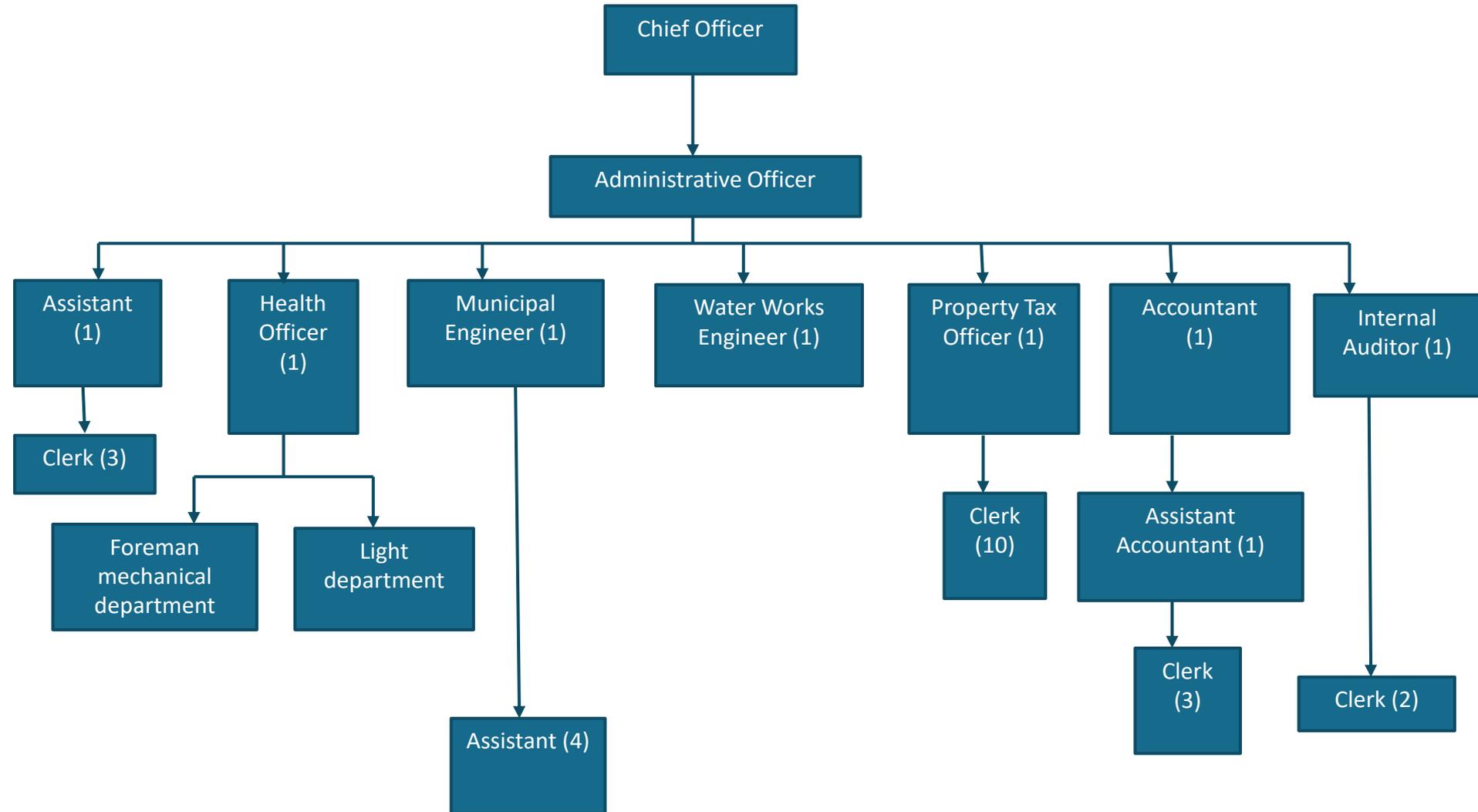


A class council,  
Sholapur division

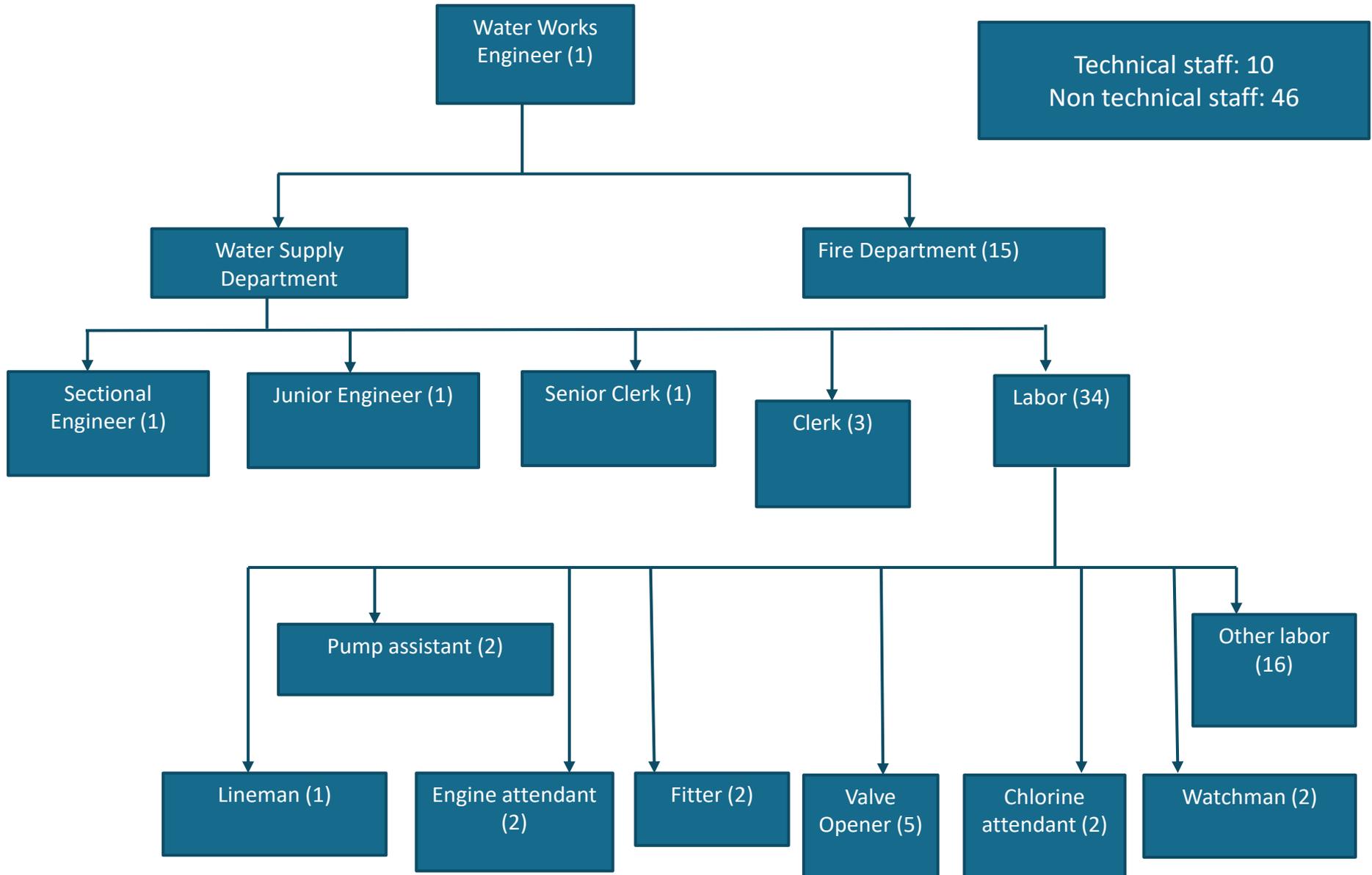
CLASS	A
Population (2010-11)	1,18,475
HHs	24540
Area (Sq. Km.)	36.26
No of election wards	38
No. of slums	32



# Organogram



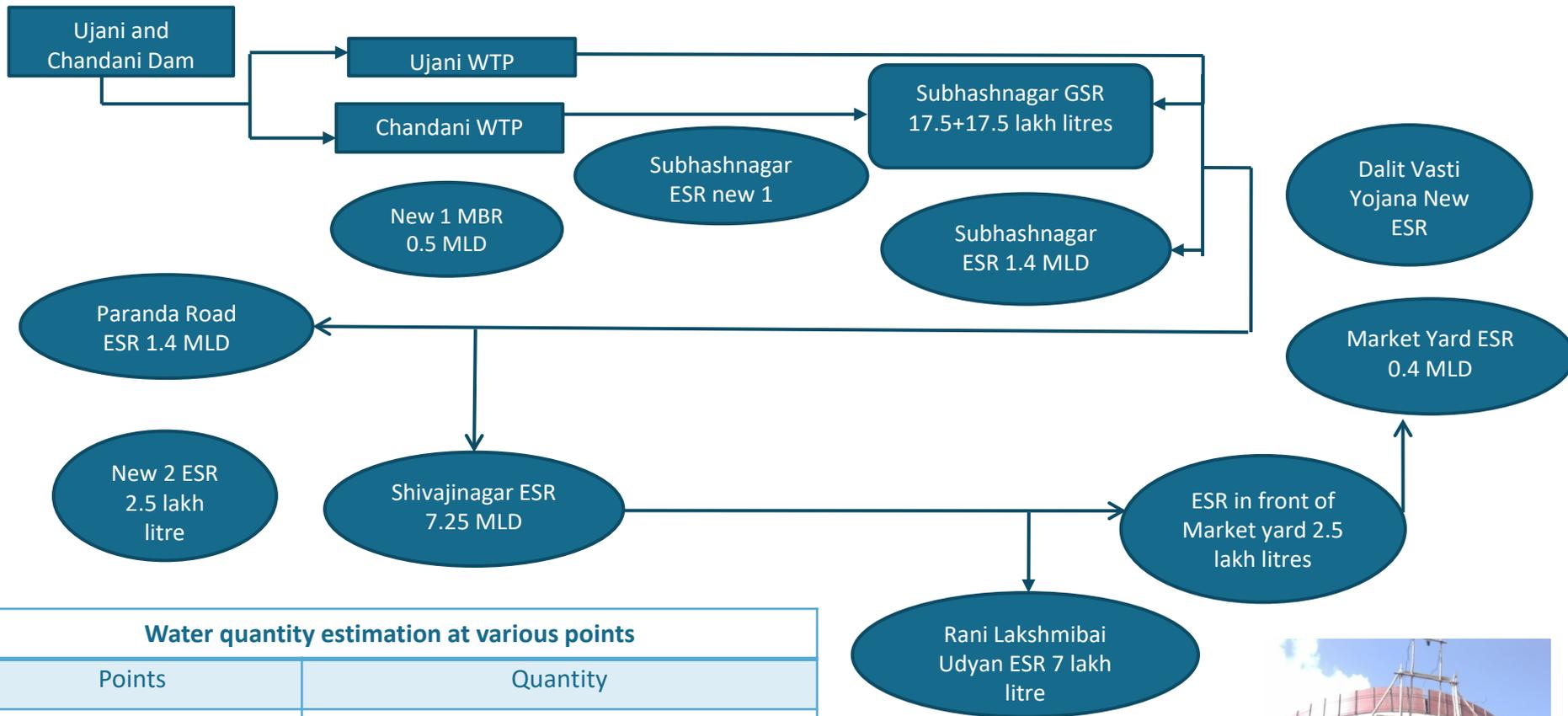
# Water Supply Organogram



# Water Supply Profile

Water supply profile	
Water source	Chandani Dam and Ujani Dam
Daily Water lifted	4 MLD + 14 MLD
Distance of source from the city	20 km, 65 km
Type of connections	Unmetered
Total no of HHs	24540
Domestic connections	13157
No. of HHs with domestic connection	13157
Commercial connections	166
Number of Stand posts	179
No. of days of water supply	25
Daily hours of supply	1 hr.
No. of SR	7 ESR, 1GSR
NO. of new SR ( In progress)	2 ESR, 1 MBR

# Water Supply Distribution System

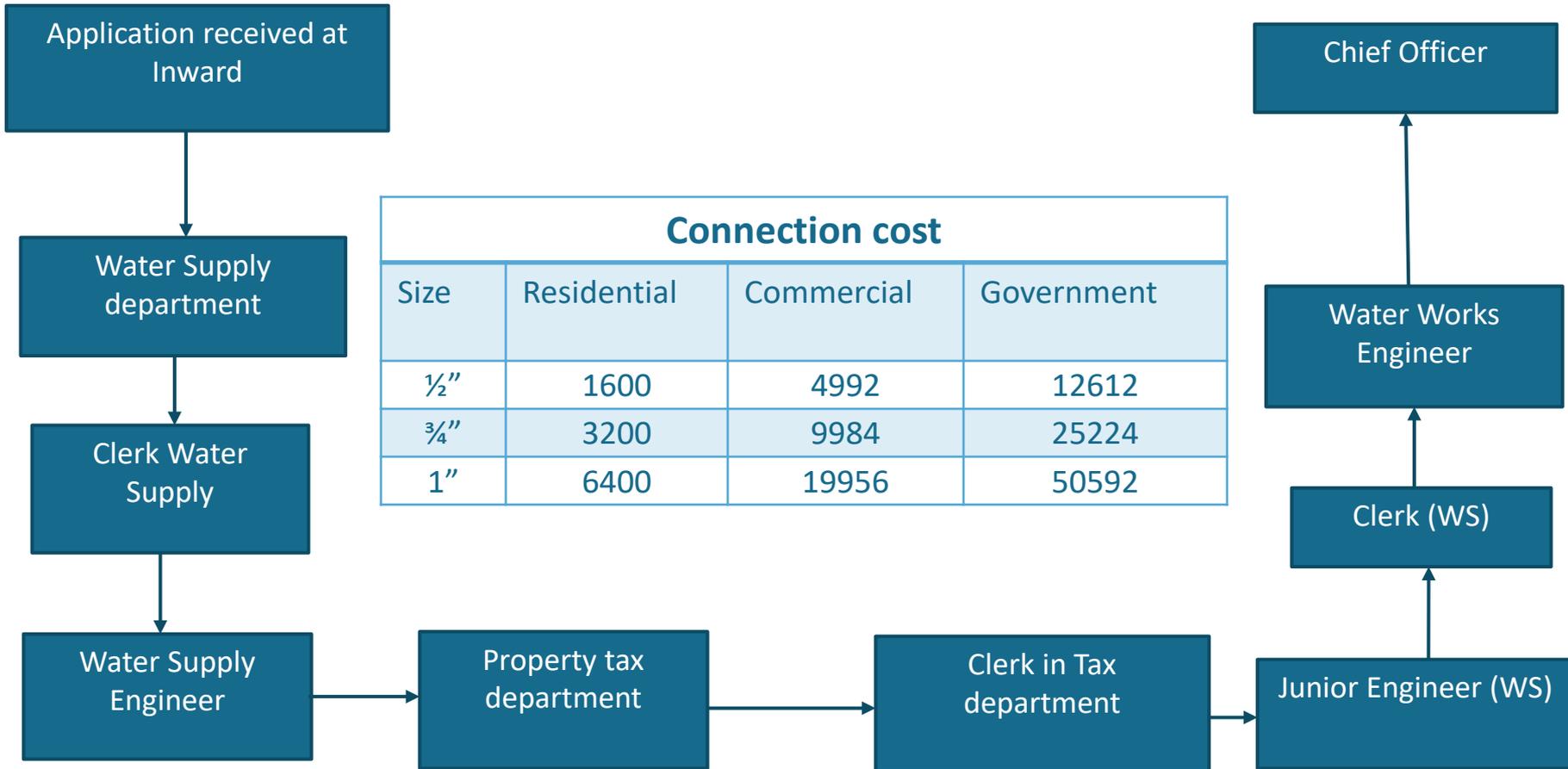


**Water quantity estimation at various points**

Points	Quantity
Chandani & Ujani Dam	4 MLD +14 MLD = 18 MLD
Treated water at WTP	15.2 MLD (20% loss due to distance)
Water Supplied at WDS	15 MLD
Consumer End	14 MLD
Billed consumption	14 MLD
Unbilled Consumption	1 MLD
Unauthorized use	ND (survey not done by ULB)



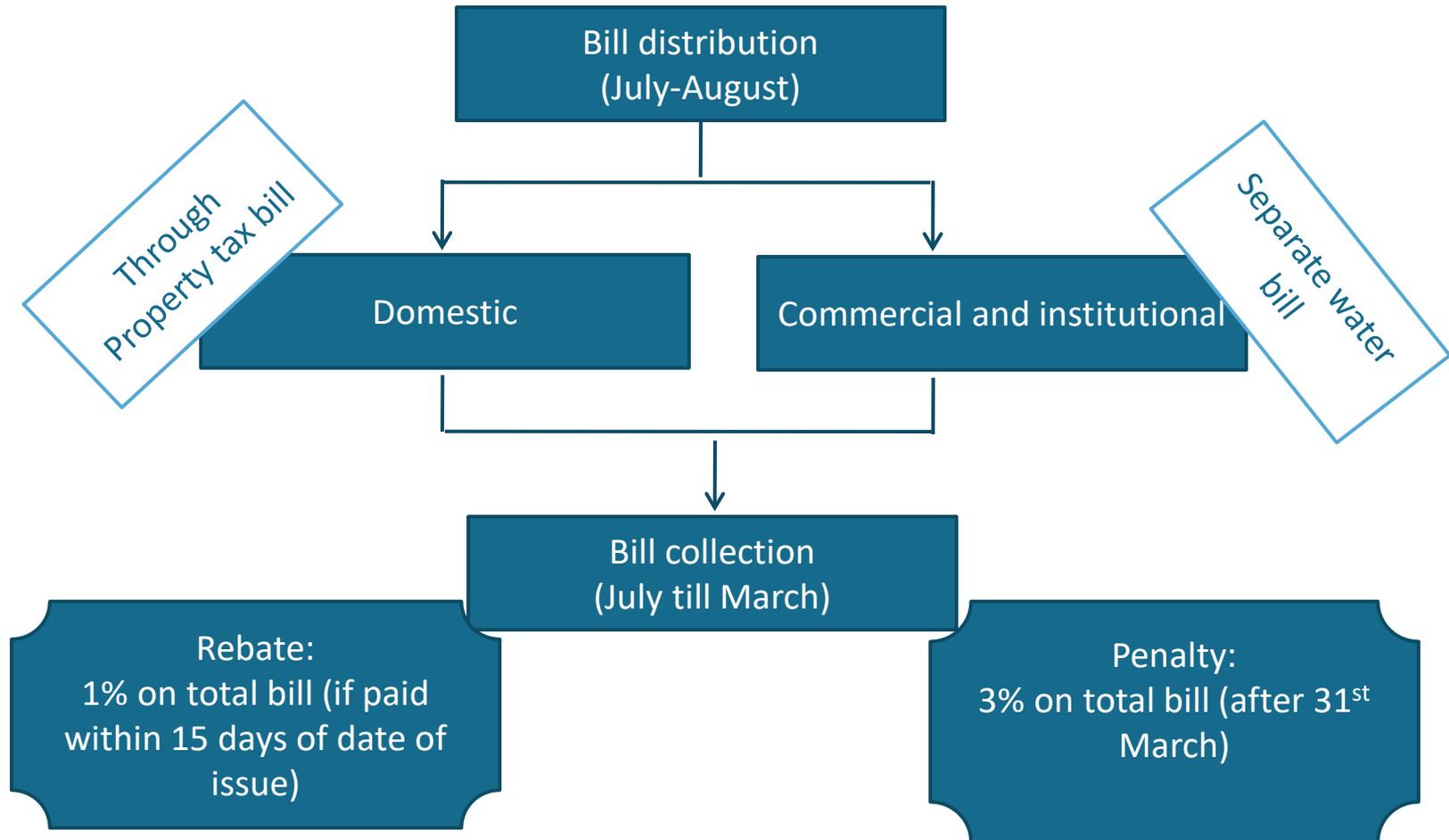
# Water Supply Connection Process Mapping



Connection cost			
Size	Residential	Commercial	Government
½"	1600	4992	12612
¾"	3200	9984	25224
1"	6400	19956	50592

- Documents required
- Connection form
  - Land occupancy certificate
  - Property tax receipt

# Water Supply Billing System



# Ongoing Contracts

## Barshi Municipal Council & Ashirwad Electricals, Barshi

Service contracted	COST
O&M of rising main, WTP, Head works of Barshi-Kurduwadi line	49,71,373/-
Chandani rising main, WTP, Head works O&M	17,82,632/-

## Barshi Municipal Council & Maharashtra Jeevan Pradhikaran

Service contracted	SCHEME
Laying of 2.5 km of rising main & pumps of Barshi-Kurduwadi line	100 % Government aid

# Ongoing Projects

## Maharashtra Sujal Nirmal Abhiyan

Phase	Details	Status
Phase I	Laying of Gravity main from MBR to Marketyard2 ESRs, Pump house to MBR rising main	The phase work completed 711 mm MS pipeline of length 1 km cost around 2.5 crores
Phase II	Construction of 2 new ESR & 1 MBR	The construction work is in progress
Phase III	This phase envisages conducting Energy and Water Audit.	ULB has floated tenders for this. Received tenders from 3 companies: <ol style="list-style-type: none"><li>1. Ameya Hydro Engineering Works, Nagpur</li><li>2. S.M. Polymers, Kalwa, Thane</li><li>3. Synergy Engineering and Environmental Solutions, New Mumbai</li></ol> The process of audit would be completed within 1.5-2 years, after the MoA

# Water Supply 24x7- Barshi

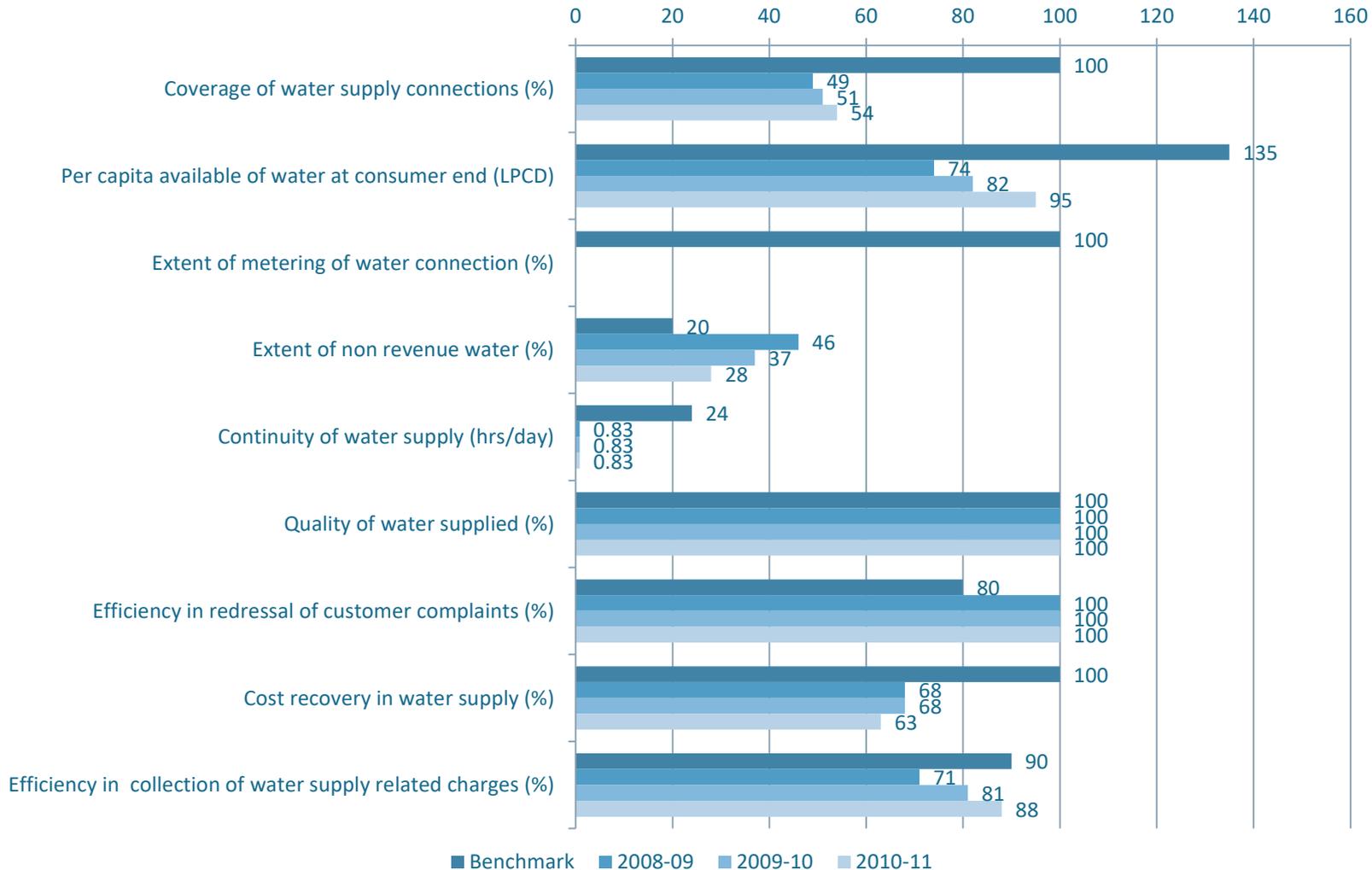
Service contracted
O&M of rising main, WTP, Head works of Barshi-Kurduwadi line
Chandani rising main, WTP, Head works O&M
Laying of 2.5 km of rising main & pumps of Barshi-Kurduwadi line

## Maharashtra Sujal Nirmal Abhiyan

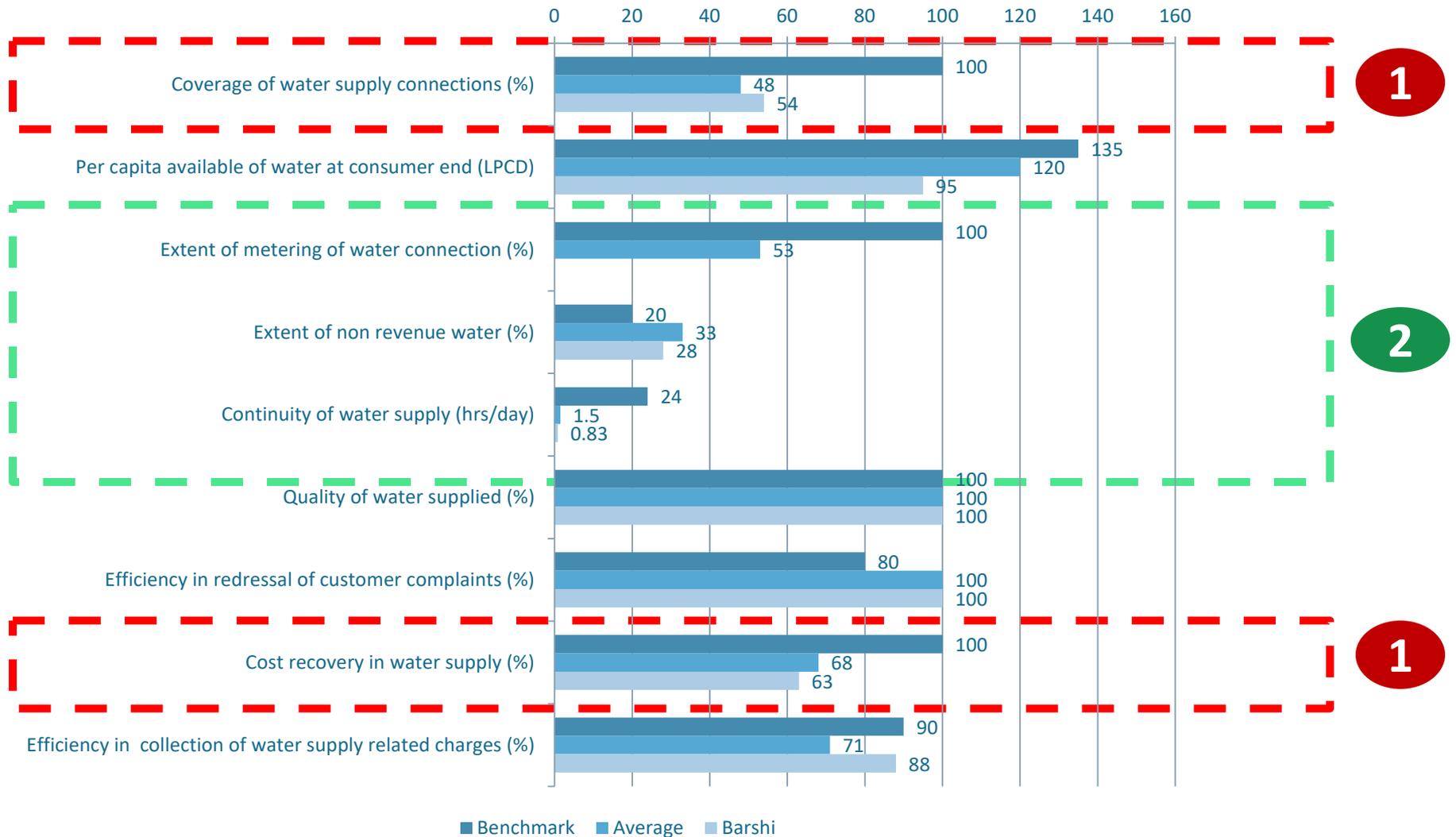
- Laying of Gravity main from MBR to Marketyard2 ESRs, Pump house to MBR rising main
- Construction of 2 new ESR & 1 MBR
- Energy and Water Audit

	Existing Situation	Augmentation IN Water Supply
Water source	Chandani Dam and Ujani Dam	Chandani Dam and Ujani Dam and Pathari Yojana
Daily Water lifted	4 MLD + 14 MLD =18 MLD	5 MLD + 21 MLD +1 MLD = 27 MLD
Total no of HHs	24540	24540
HHs with Domestic connections	13157	24540
Commercial connections	166	166
Number of Stand posts	179	0
LPCD	95	135

# Water Supply KPIs



# Water Supply Priorities



# Actions Need Reforms

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## Connection Policy for urban poor -

- Facility to pay water supply bills in installment
- Subsidy should give for deposits

## Legalization of Illegal connections -

- Involvement of Non officials
- Identification of Illegal connection

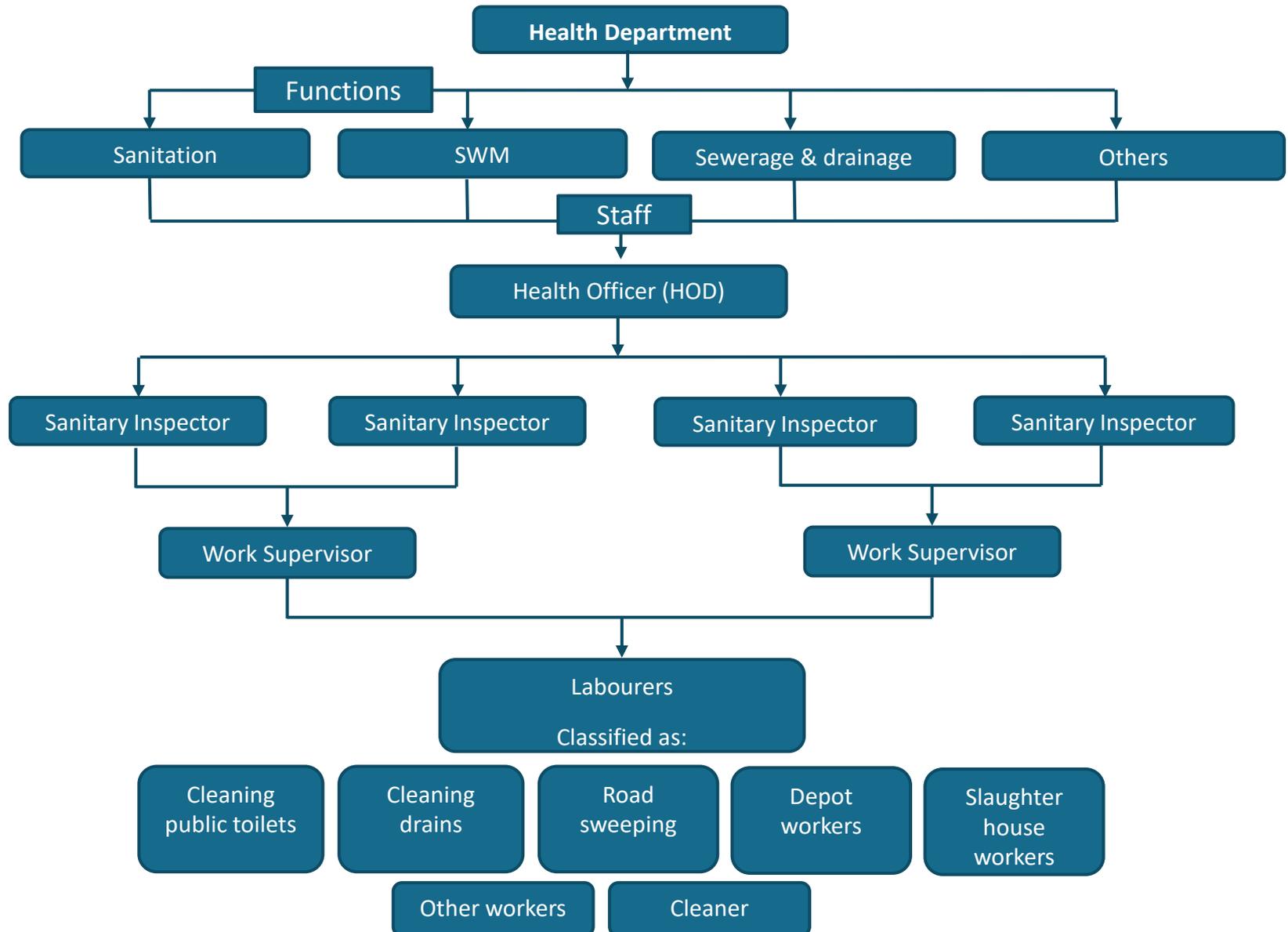
## Selection of Voluntary leaders from Community -

- Participation of community for Monitoring which helps to maintain the system & social audit by community itself

## Metering system -

- Water Meters should be install at every households

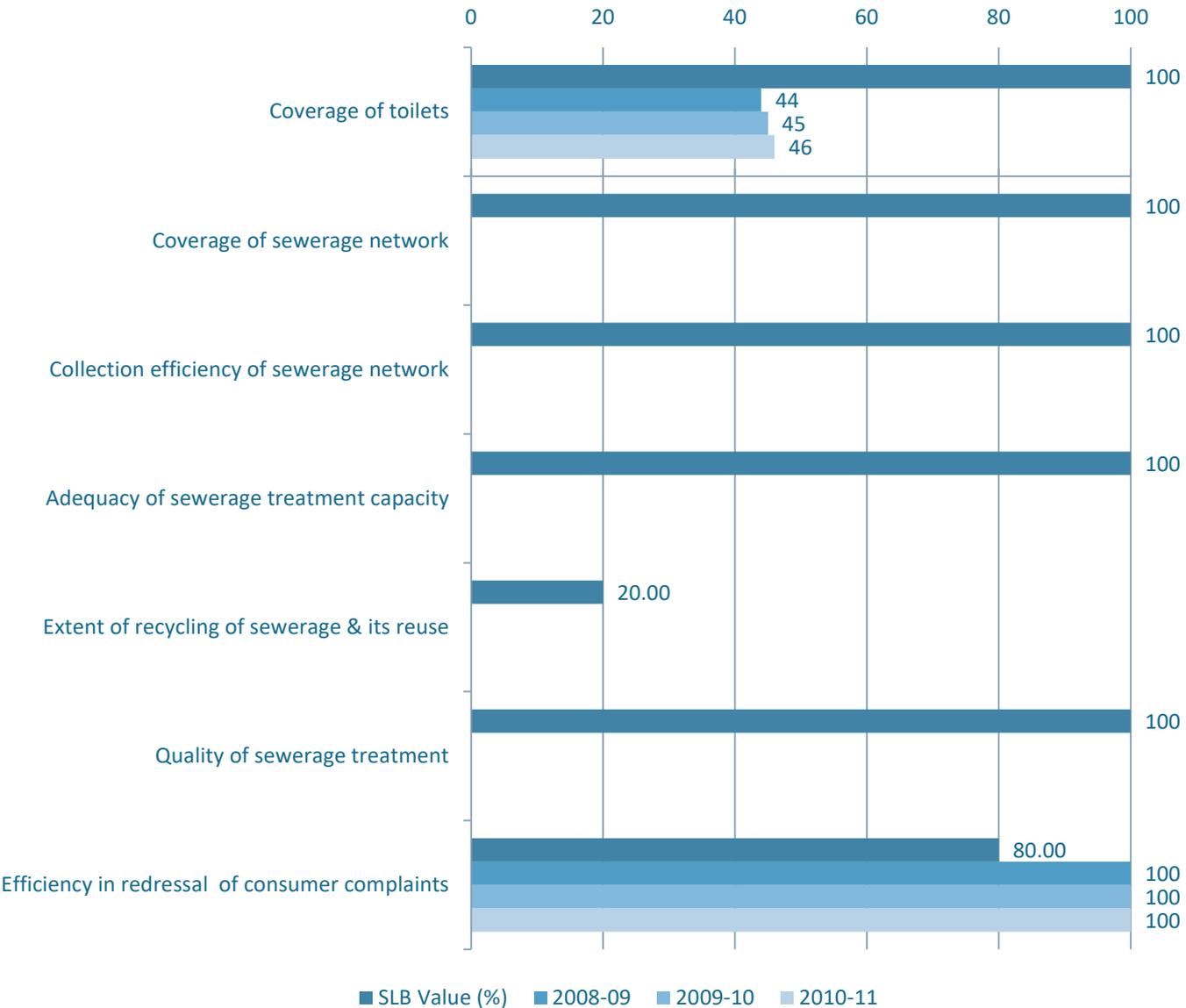
# Health Department Organogram



# Sewerage and Drainage



# Sanitation KPIs



- No STP
- No recycling and reuse of sewerage
- No cost recovery in sewerage

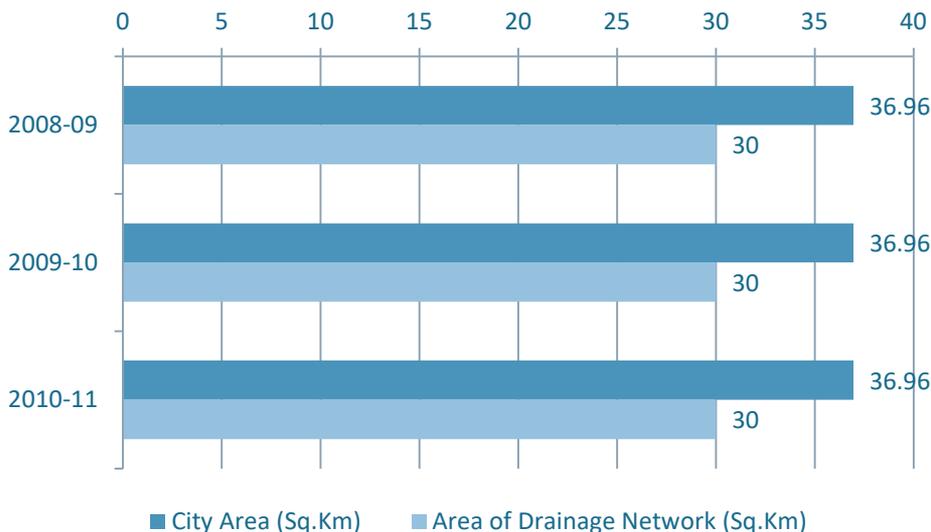


Proposed STP and underground sewer

# Sewerage and Drainage Coverage

<b>Total area of Barshi city</b>	<b>36.96 sq.km</b>
Area covered by underground sewerage network	0 Sq. km
Area covered by open drainage + closed drainage network	30 Sq. km
Length of open + closed drainage network	137.76 Sq. km

- Good coverage of closed and open drainage network
- 70% of pucca drains and 30% of kutccha drains (in fringe area)
- Twin objectives of drainage network: a) sewerage collection/ transportation throughout the year b) storm water drainage in monsoon season
- Major sewerage outfall location outside the city, where untreated sewerage is directly discharged into water body



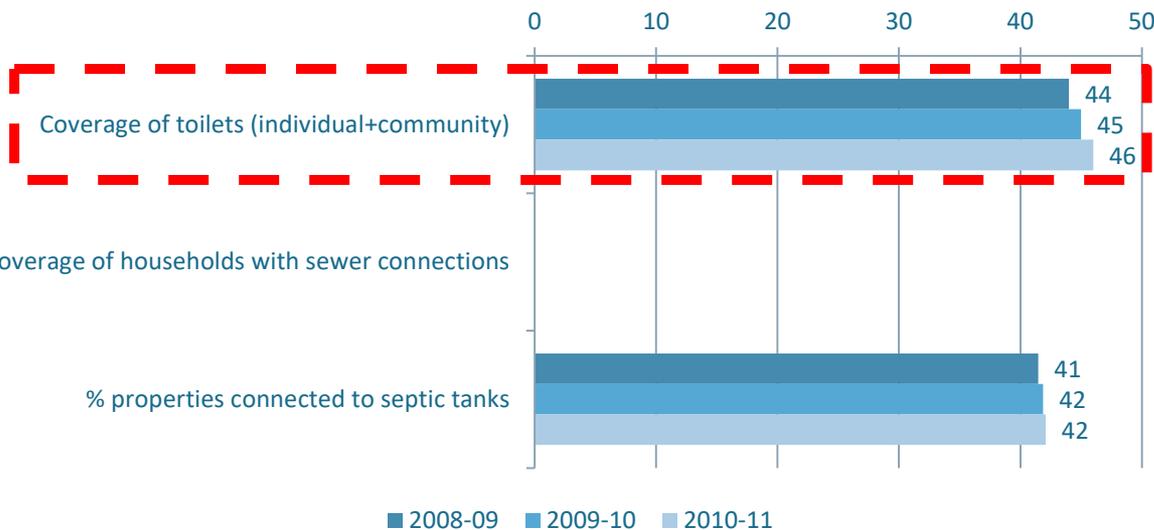
Open drains



Major nallah



# Toilet and Septate Management



1

Low cost- no cost

Increase coverage of toilets

Proposed 1214 individual toilet blocks under ILCS

## Septage Management

- Emptying of private septic tanks is done by ULB itself, for which 2 suction machines are deployed
- Cost to empty septic tank within city limits is Rs. 450/per trip, while for out side of the city limit is Rs. 2500/per trip
- Approximately 200 septic tanks are cleaned annually
- Emptying of public septic tanks through contractor, using ULB's suction machines
- The contract also involves cleaning of public and community level toilets and urinals, for which ULB pays Rs. 2,91,000/- per month to Bharat Vikas Group
- All collected fecal sludge is used for producing compost

# GP by Barshi Municipal Council

## Composting of all collected MSW and septage sludge at Depot

- The depot is the site where composting of SWM and septage sludge is carried out
- Depot, spread over an area of 30 acre, having 326 dump pits excavated of dimension 30x10x3 feet
- ULB has deployed 1 Work Supervisor and 4 laborer at depot
- Pit utilizes all collected waste and fecal sludge through out the year and in March of every year the composed manure is auction amongst the farmers
- Source of revenue income for ULB

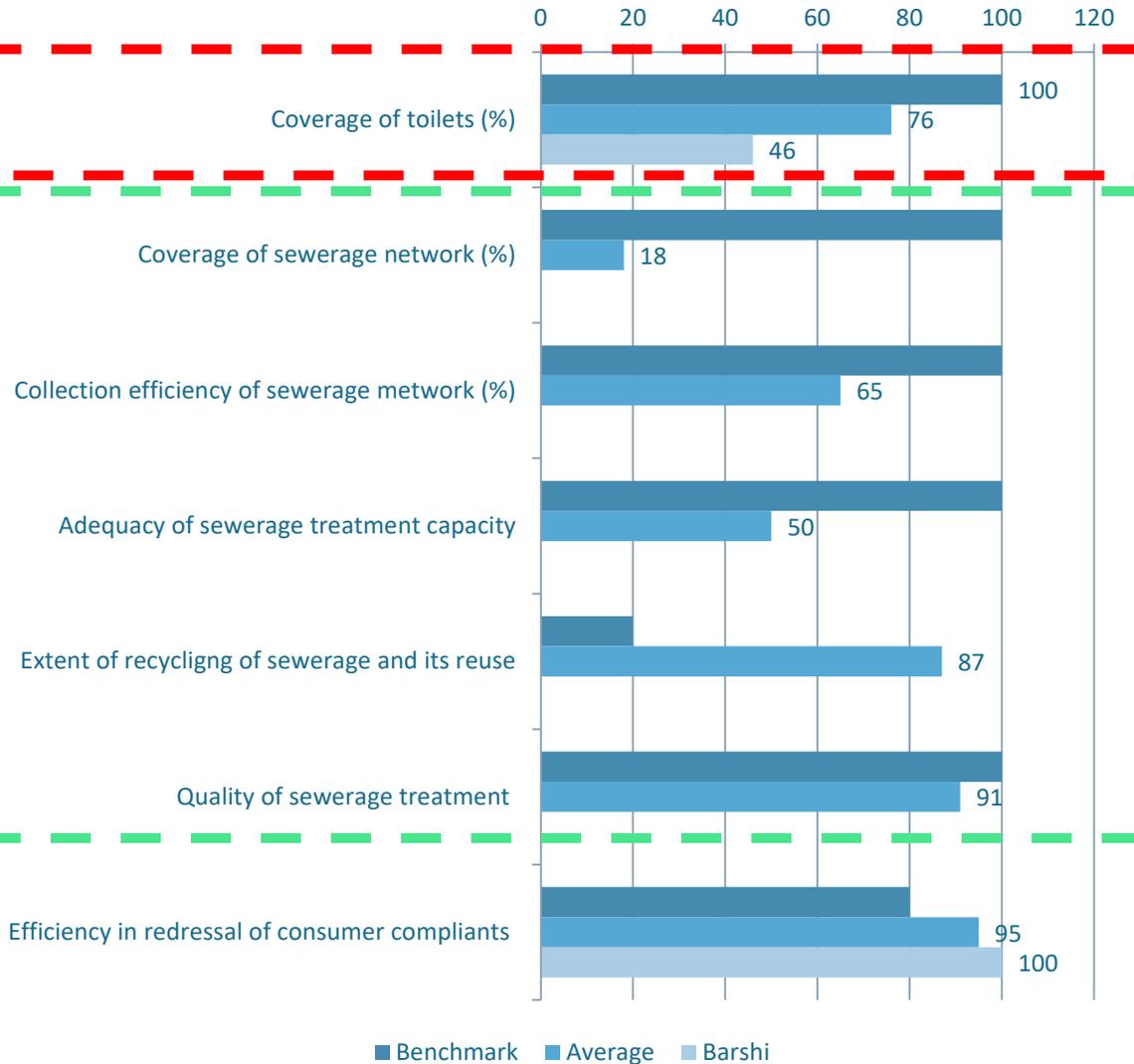
Depot



Compost pit



# Sanitation – Priorities



1

Increase coverage of individual + community toilets

2

Proposed STP & underground sewerage network

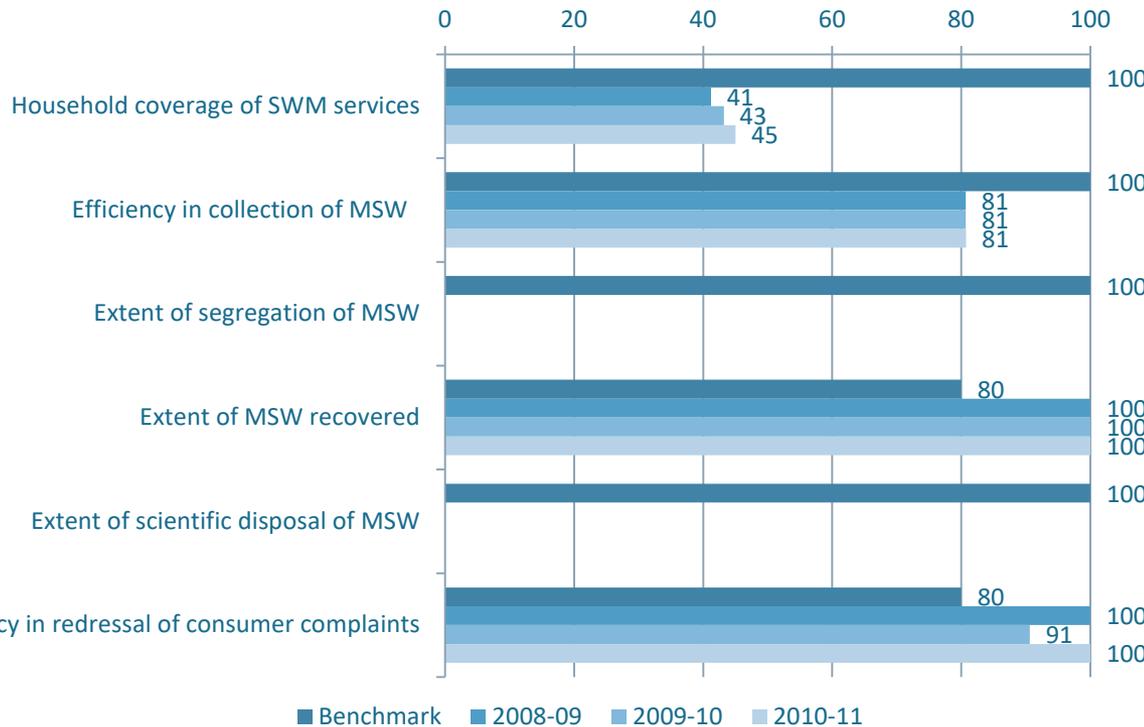
Low cost- no cost

Efficient monitoring of contracted services, upgrading kuttcha drains, Primary treatment of sewerage

# Solid Waste Management



# Solid Waste Management



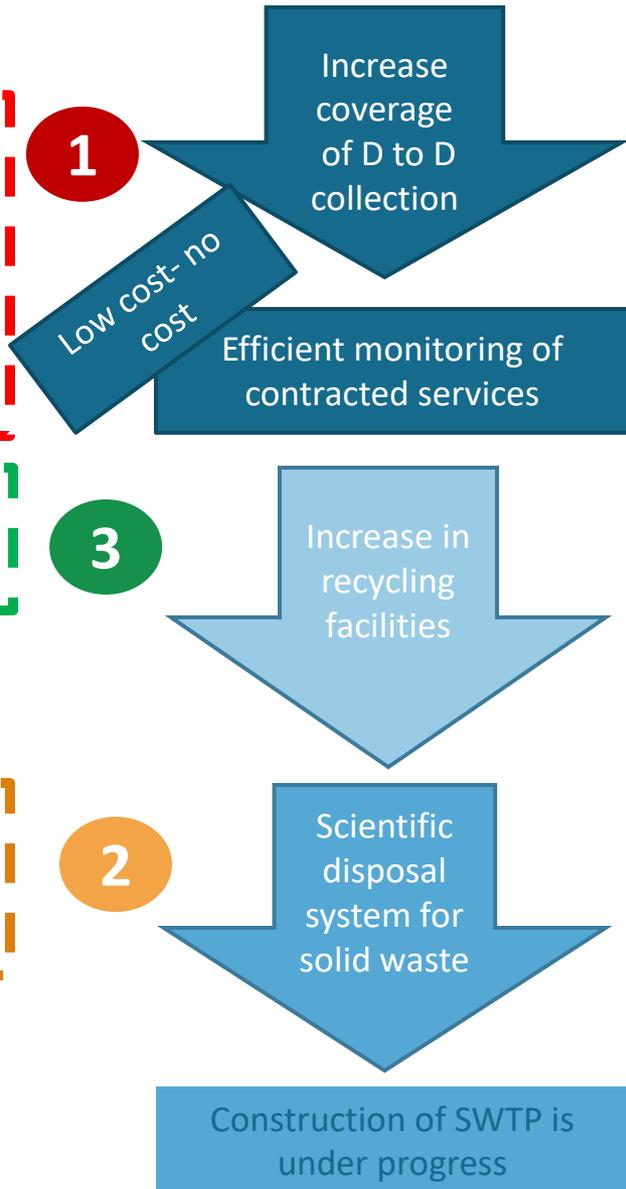
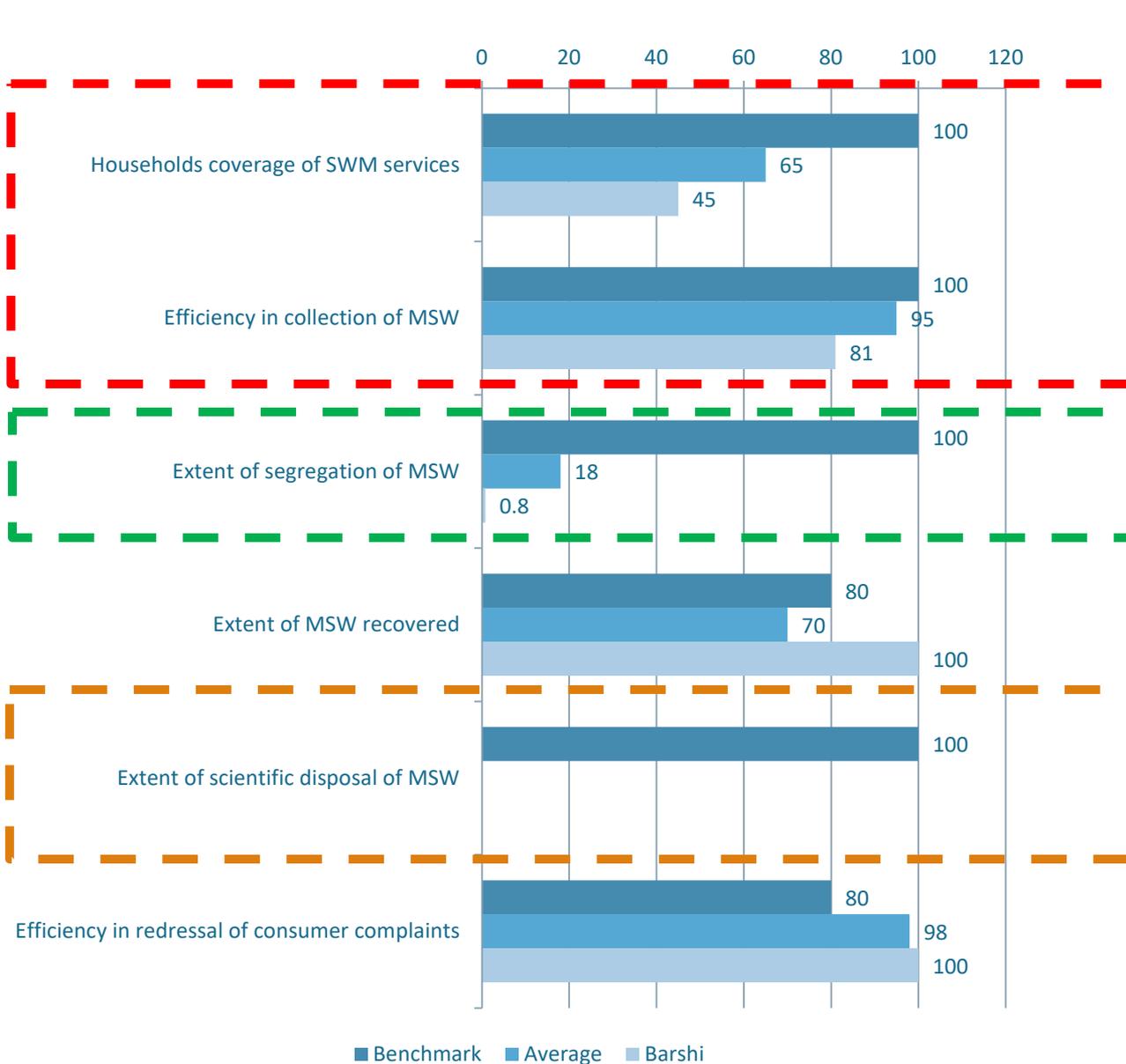
- ULB contracts service for door to door collection, transportation to Depot site, road sweeping to BVG, India
- BVG covers D to D collection for all 38 wards
- Deployed machines: 1 Sweeping machine, 1 Compactor, 5 Ape, 2 Tractor, 3 Dumpers
- 30 secondary storage bins are also provided

- No segregation of dry and wet waste
- No landfill site
- All solid waste and septage sludge is used for producing compost at depot
- Composting managed by ULB

Composition of MSW	
Contents	Composition
Organic matter	42%
Plastic	17%
Inset refuge	16%
Paper	8%
Glass	4%
Metal	3%
Other	10%
Total	100%

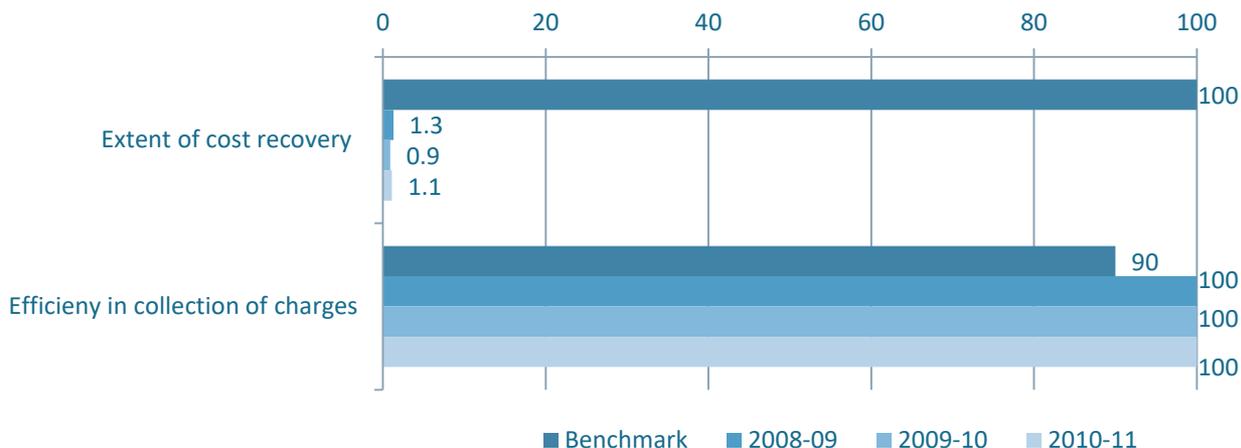


# Solid Waste Management - Priorities



# Sanitation and SWM- Health Department

## Cost recovery in Sanitation and SWM



1

Introducing  
Drainage tax  
&  
SWM tax

## Staff composition in sanitation and SWM

Post	Sanctioned	Working
Health Officer	1	1
Sanitary Inspector	4	2
Sanitary Supervisor	2	1
Safai Karam chari	211	207
Cleaners/Drivers	1	1
Total	219	212

# Ongoing Projects

## Public Private Partnership Contract between Barshi Municipal Council & Bharat Vikas Group

Service contracted	Expenditure incurred
Cleaning and sweeping all roads in Barshi city manually and also with the help of machine (tractor mounted sweeping machine); Collection and transportation of all MSW to Depot (vehicles provided by ULB)	7,98,000/-
Cleaning open and closed drains and transportation of waste obtained from them to Depot, hence after spraying of pesticides in that area	6,11,000/-
Cleaning and repairing of all public urinals and public toilets within municipal limits of Barshi	2,91,000/-
Total amount to be paid (per month)	17,00,000/-

- Date of Memorandum of Agreement: 16.08.2010
- Tender duration: 5 years

# Sanctioned Projects

## Public Private Partnership

Project	Technical consultant	Project status	Proposed project cost (INR)	Scheme	Other details
Solid Waste Treatment Plant	Patwardhan, Pune	Sanctioned	70 Lakhs sanctioned. 45 Lakhs received	12 <sup>th</sup> Finance Commission and Maharashtra Suvarna Jayanti Nagarotthan Mahaahiyam (District Level)	Shed construction under completed. Installation of SWTP will commence in July-Sept. 2011 and will complete in 6 months further. O&M of plant will be given to technical consultant for next 5 years and ULB will receive royalty for it (PPP)



Employment opportunities to unskilled and semi skilled workers during construction and service to few persons in O&M

Possible impacts on service delivery through changes in KPIs due to the project

- Increase in efficiency of MSW collection
- Increase in segregation of MSW
- Extent of MSW recovered can reach to SLB value
- Scientific disposal of MSW
- Fixed revenue generation through royalty obtained from PPP
- Revenue generation through SWM tax collection

# Proposed Projects

Project	Technical consultant	Project status	Proposed project cost (INR)	Scheme	Other details
Sewerage network	Yash Associates, Aurangabad	Proposed, not yet sanctioned	139.62 Cr.	Maharashtra Suvarna Jayanti Nagarutthan Mahaahiyan (State Level)	<u>Phase I:</u> Construction of STP and underground sewer network in gaothan area of Barshi <u>Phase II:</u> Construction of underground sewer network in remaining area of Barshi

## Possible impacts on service delivery through changes in KPIs due to the project

- City will come under coverage of sewerage network, reaching to household level
- Efficient collection of sewerage through the network
- Adequate treatment of sewerage can be done and its quality can be accessed
- Recycling of waste water and its reuse (for agriculture, industrial and other purposes) will save drinking water
- Revenue generation for ULB through sale of treated waste water
- Proper utilization of sludge through its sale, contributing to revenue income
- Revenue generation through sewerage tax collection
- Underground network will prevent pollution on road and near human settlements

Employment opportunities to unskilled and semi skilled workers during construction and service to few persons in O&M

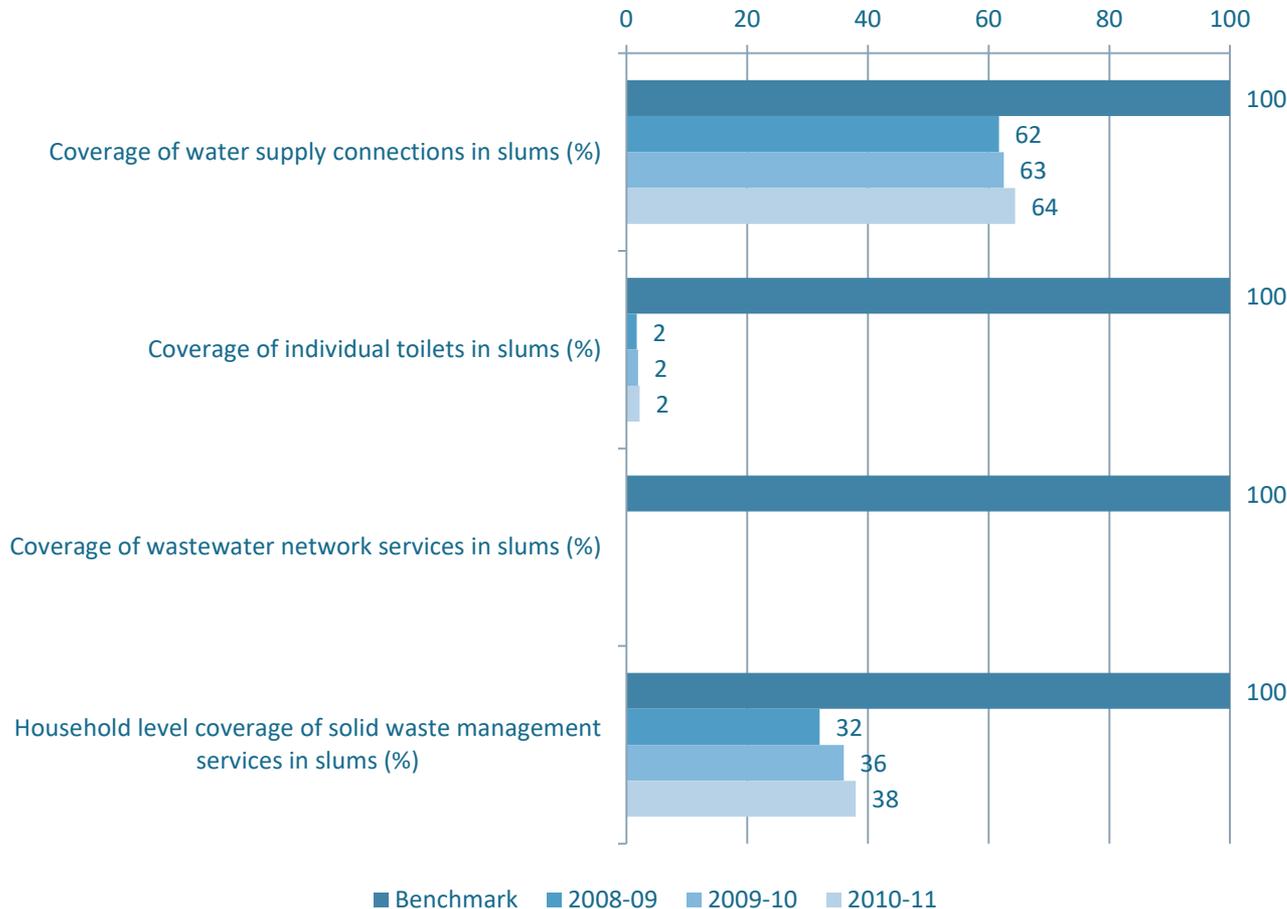
# Slums



# Slum Profile

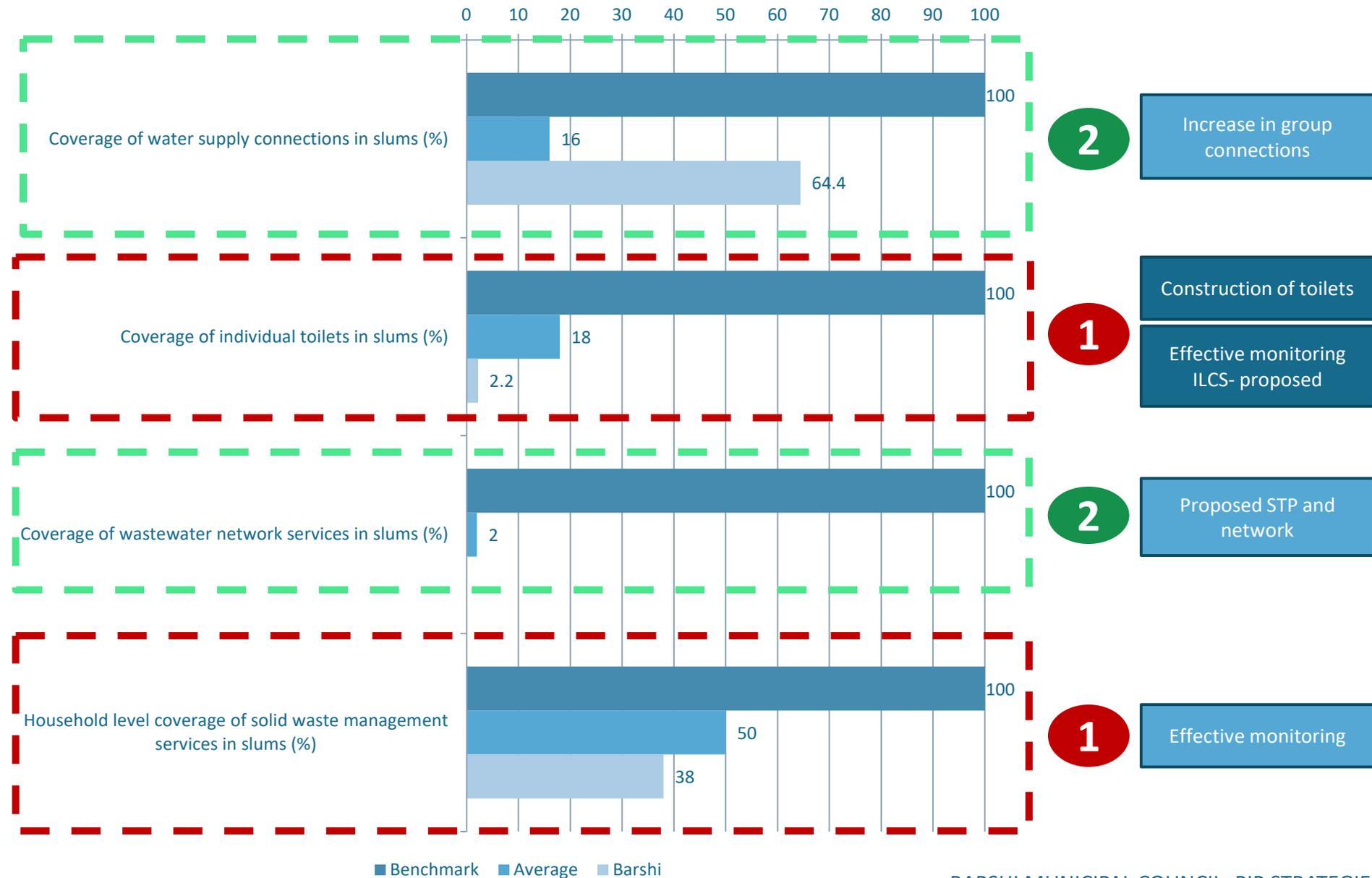
Total no. of Slums	32
Total no. of notified slum	29
Total no. of HHs in Slum	9719
Total Population of Slum	48595
Household size in Slum	5
Total no. of BPL families	4179
% of slum population	41. 02
No. of individual water connections	6259
No. of group water connections	0
No. of HHs covered by D to D collection	2955
No. of public standposts	47
No. of HHs individual toilets	5229
No. of public toilets	6
No. of seats in public toilet	253
No. of community toilets	13
No. of seats in community toilets	237
% of functional seats in public and community toilet	50% (approx.)
No. of mobile toilets	10
No. of functional mobile toilets	5
No. of seats in functional mobile toilets	50
No. of persons defecating in open	13700 (approx)
No. of OD sites	36

# WSS in Slums



- No group connections in slums
- No sewerage connection in slums
- Collection from secondary bins is greater than D to D collection

# WSS in Slums - Priorities



# Problems identified in slums

- Low coverage of individual water connection
- No group connections
- Non functionality of public and community toilet in-spite of contracted service
- MSW collection more concentrated from secondary storage bins than D to D collection
- Absence of toilet facility in some slums
- Ignorance among the people about the proper usage of facilities provided by ULB
- Some of the houses are not having enough area to construct toilets

# Key Factors to Reform System

- ULB should give emphasis on Group Toilet.
- Special toilets should be construct for children (UNICEF model) as well as physically handicapped persons.
- People should feel their responsibility to maintain community Toilet.
- More importance should give to IEC aspect for getting results for the ODF city.
- Mobilization of people is the key factor to change the behavior of people.
- Training of Slum dwellers for importance of Water & Sanitation is necessary.
- Schools should give more emphasis on lessons of cleanliness to students.
- ULB should construct more Community Toilets where there is no Toilet facility in the slum.
- More importance should give to make aware Citizens of Barshi City not only construction of Toilets but for the sustainable Open Defecation Free of City.

# Financial Data on Outstanding

- Total Number of loans taken by ULB = 13
- Current outstanding loan amount = Rs. 996.71 Lakhs
- Total number loans on Water supply = 8
- Amount of loan taken for water supply sector =Rs. 978.28 Lakhs
- Current outstanding amount for water supply = Rs. 532.34 Lakhs

ULB pays its debts regularly, so no penalty dues

Thank You