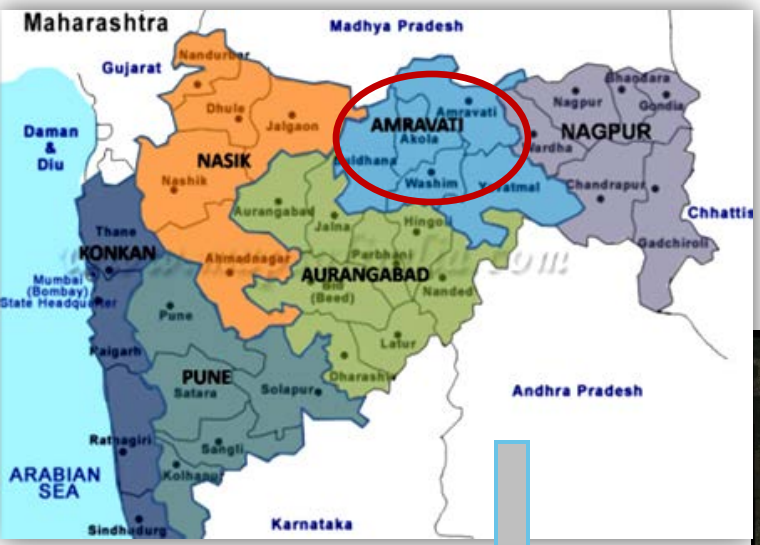
# FIELD ASSESSMENT FOR PERFORMANCE IMPROVEMENT PLAN

p a s performance assessment system

## ACHALPUR MUNICIPAL COUNCIL

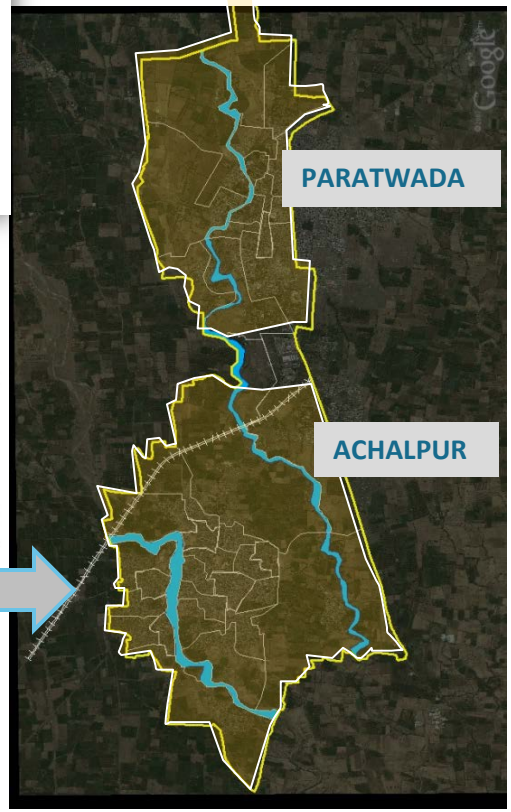
# City Profile




Maharashtra


Amravati District

**Achalpur** is a Municipal Council in Amravati District in Maharashtra. It has a twin city known as **Paratwada**.




Achalpur Municipal Council

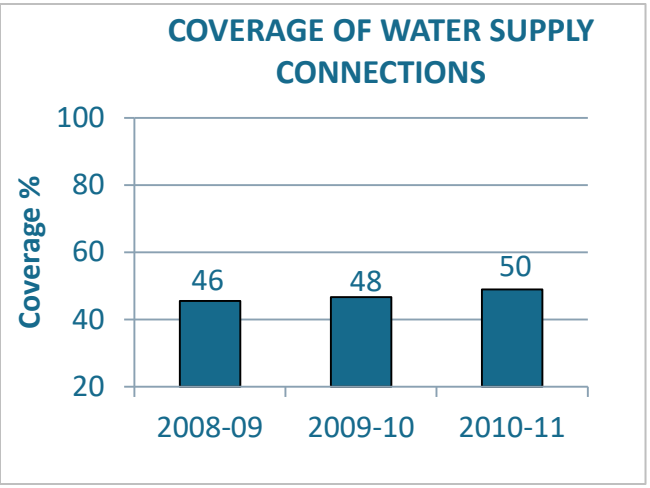
| | |
|---|---|
| Population | 112293 |
| Number of Households | 22742 |
| Number of Slums (Notified) | 27 |
| Number of Slums (Non Notified) | 5 |
| Number of Slum Households | 12548 |
| City Area | 16 sq km |
| No of wards | 38 |
| Gross density (per Ha) | 70 |

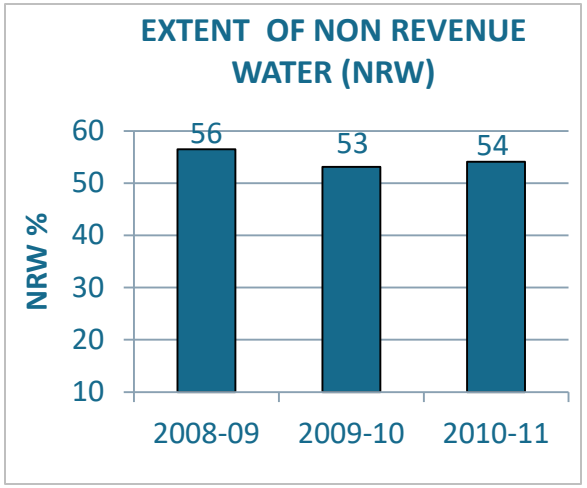
# Water Supply

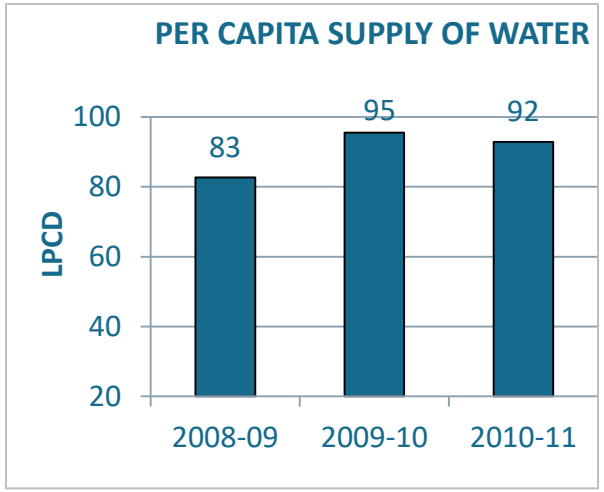

| Source of water | Ground water |
|---|---|
| Total volume of water produced in 2011 | 13.75 MLD |
| No of Tube/Bore wells | 13 no. 9 in Achalpur<br>4 in Paratwada |
| No of ESRs and their capacity | 4 no. 2 in Achalpur<br>ESR1-1.7MLD<br>ESR2-1.9MLD<br>2 in Paratwada<br>ESR1-1.1<br>ESR2-1.2 |
| Hrs of Supply | 3 hrs per day |
| No of days of WS in a month | 30 days |
| Total no of WS connections | 11126 |
| No of Connections in slums | 2777 |
| No of Public stand posts & hand pumps | 150 PSP 90 Hand pumps |

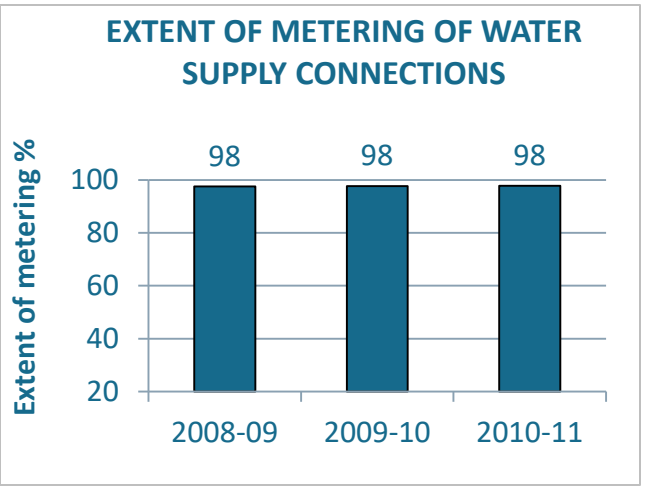


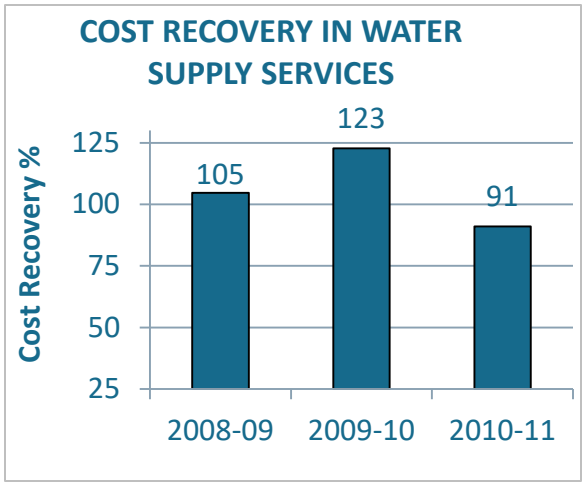

# Review Of WS KPIs

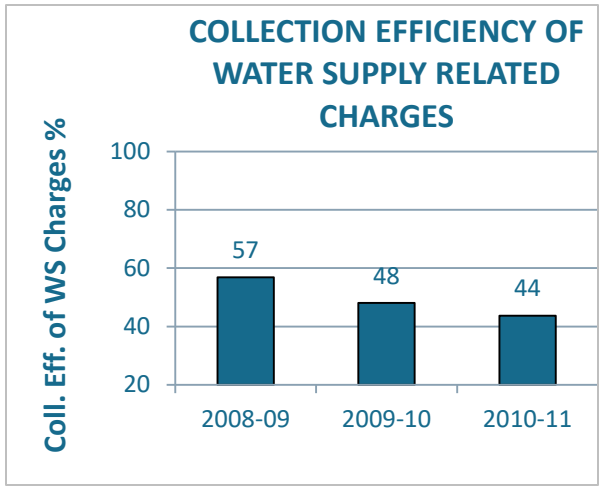


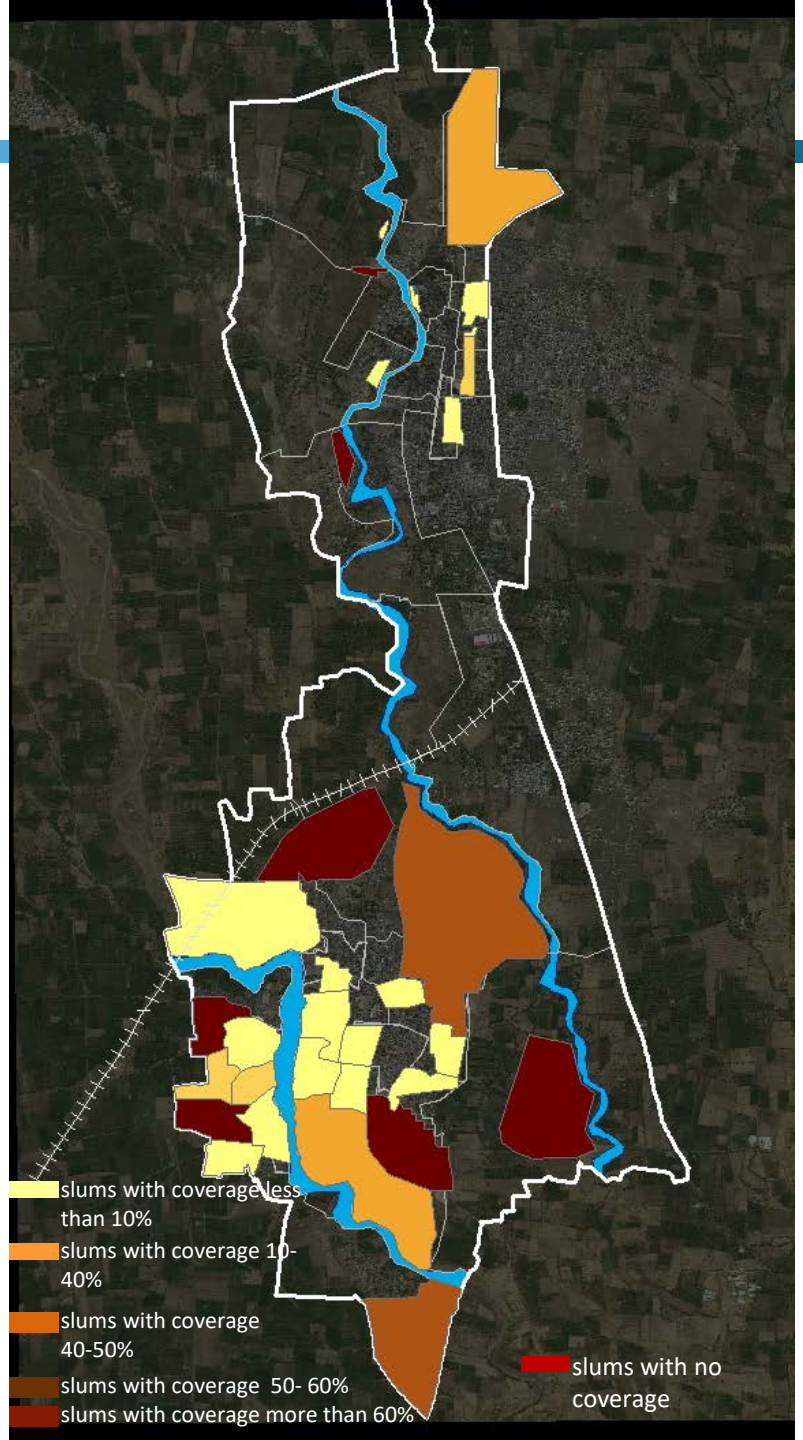



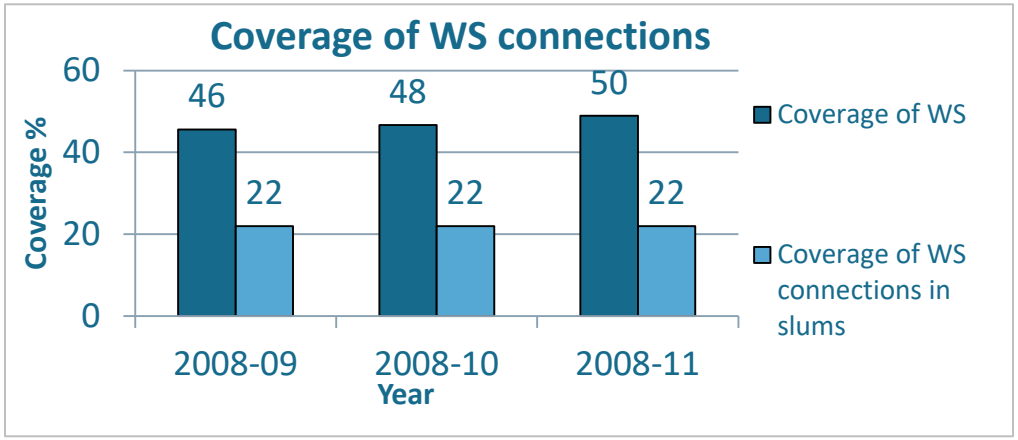



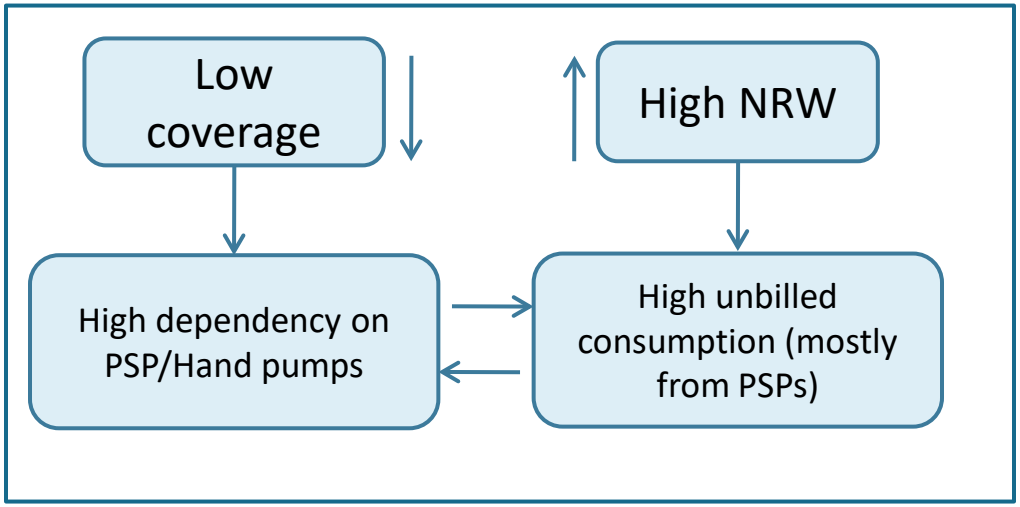

- Low coverage of WS connections.
- High Extent of Non revenue water.
- Decreasing collection efficiency

# Diagnostic-Water Supply




## Coverage of WS connections




- All slum settlements do not have WS network.
- No special policies for WS connections in slums

# Diagnostic-Water Supply

**Coverage of WS connections**

## WS connection Process in Achalpur

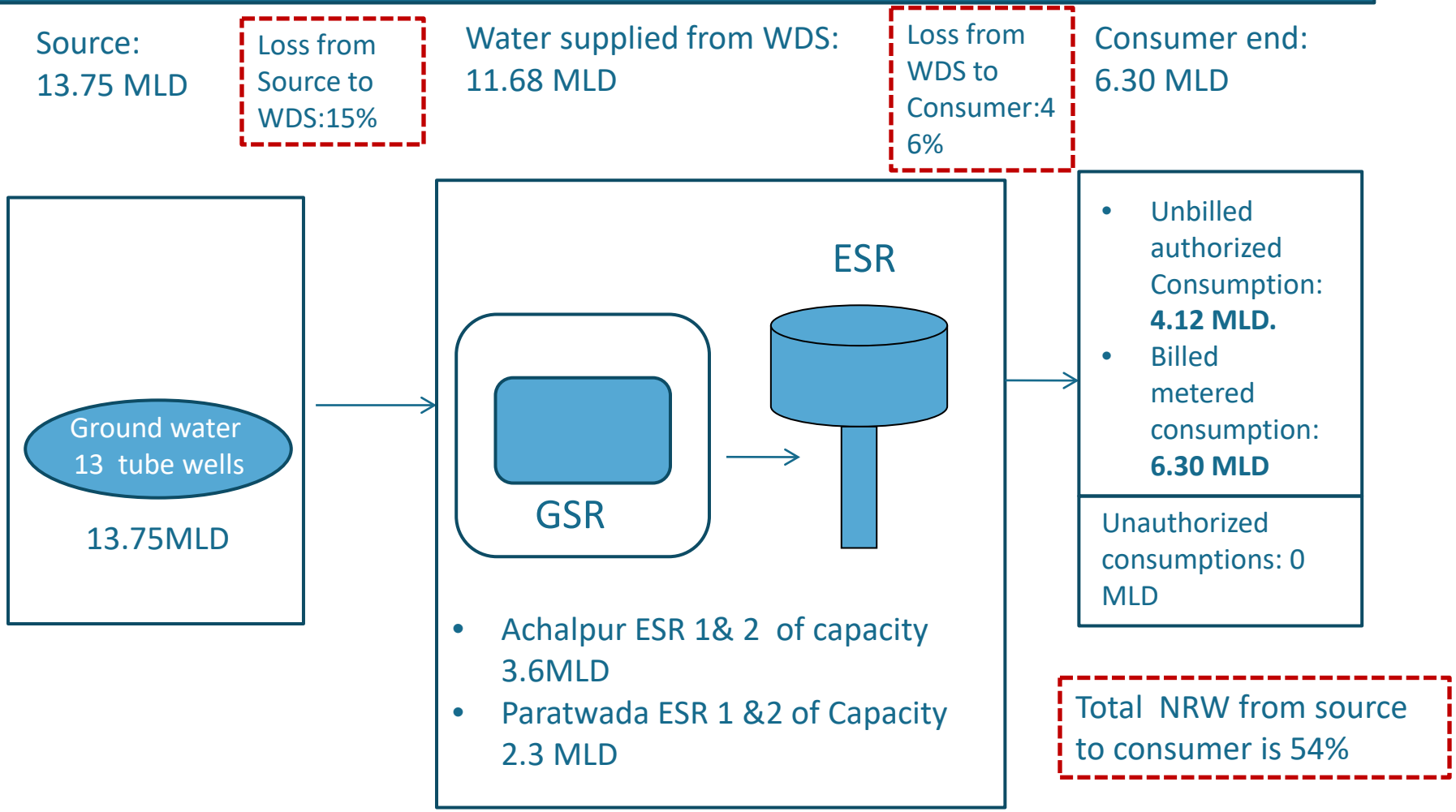
Total time required to get a connection is **20-25 working days**

1. **Application for NOC from ULB**
   - Ownership/PTR/Address records of the applicant are verified to check for duplication.
   - NOC is granted by CO.
   - Time required to get NOC from all the department : 7-10 days
2. **Application for WS connection submitted to WS department**
   - Application for WS connection is submitted to Jr. Engineer WS dept.
   - Documents required NOC, Photograph of the applicant and copy of PTR.
3. **Site verification**
   - Site verification and plumbing layout for the site is prepared by the certified plumber.
   - Time taken for site verification by plumber 8-10 days.
   - Plumber issues verification certificate and report to the applicant.
4. **Payment of deposit/Application for purchase new Meter and ferrule**
   - Payment of Deposit and road cutting charge.
   - Testing of meters purchased by the WS engineer/Staff based on the conditions prescribed on the application form.
   - Time taken: 4-5days
5. **Installation of Ferrule and meter by the plumber**
   - Connection process is lengthy.
   - Requirement of property tax register record.

# Diagnostic-Water Supply

**NRW Estimation**

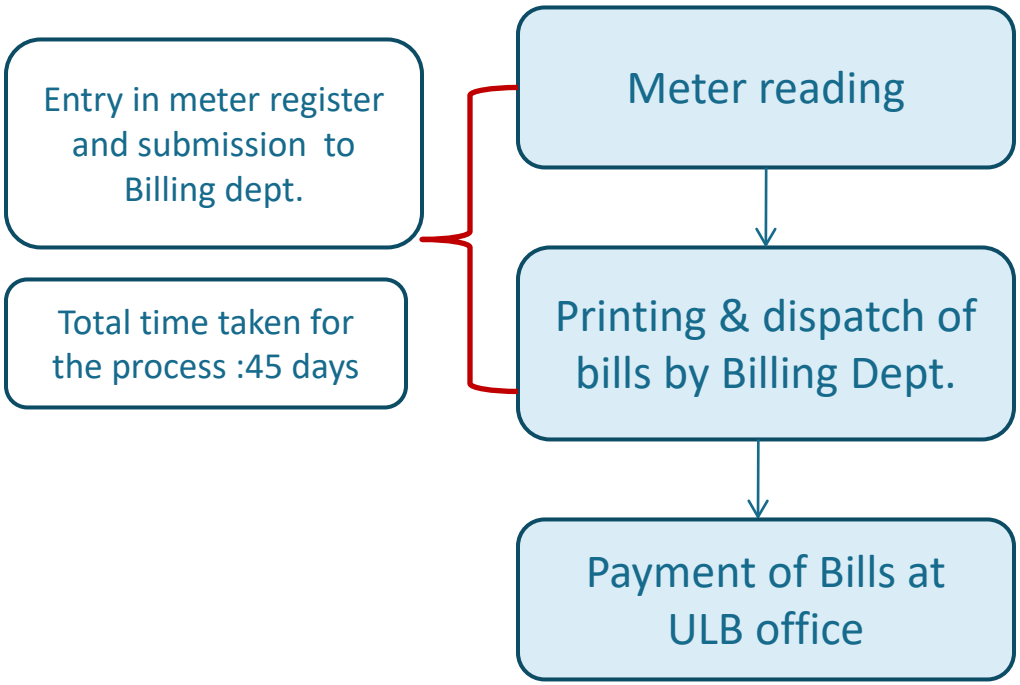
**Schematic diagram of water supply system in Achalpur**



# Diagnostic-Water Supply

**Collection efficiency**

**Schematic flowchart for Billing and collection process for Domestic connection in Achalpur**




- Time taken by Meter readers to Take readings:30-35 days.
- Only 3 meter readers.

- Time taken for printing and dispatch of bills: 10 days

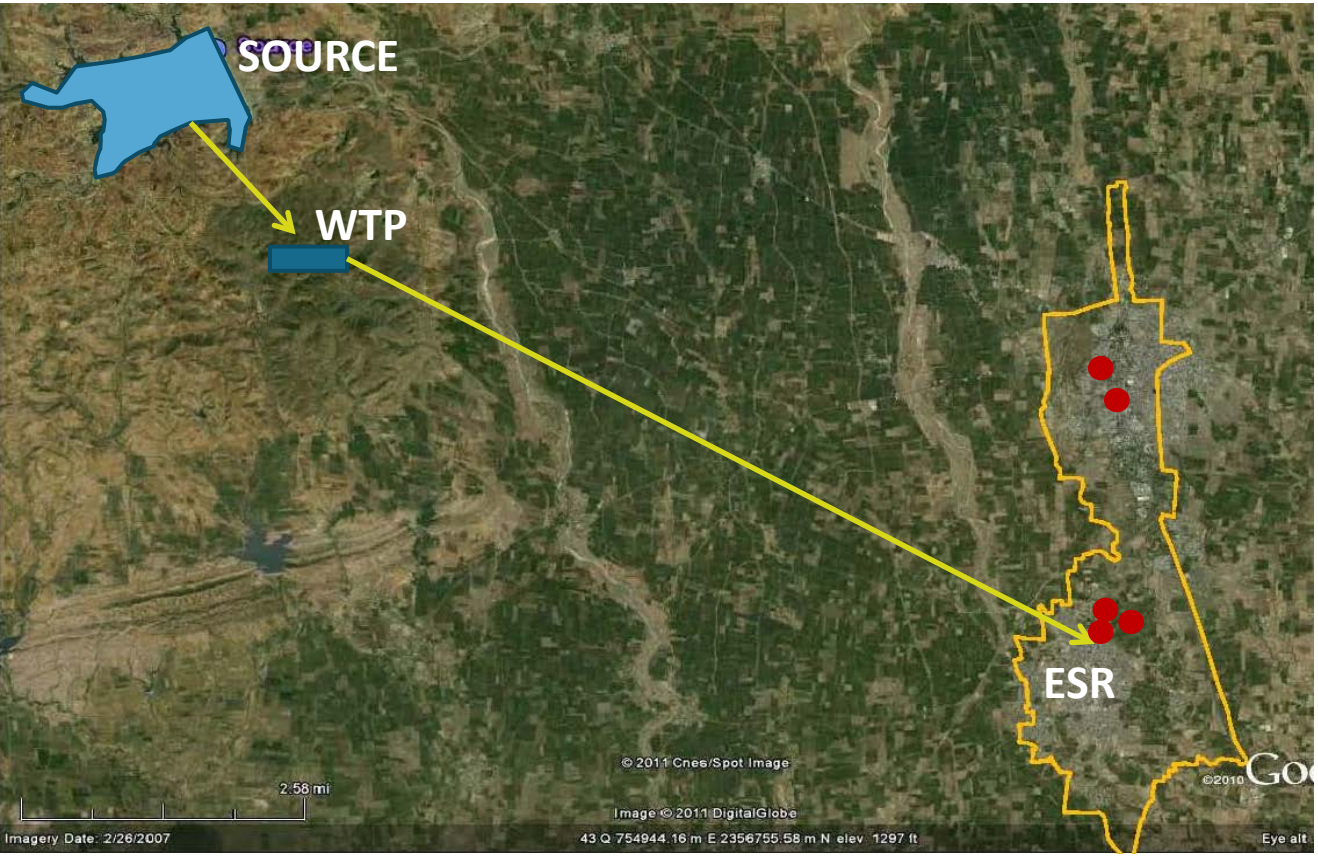
- Time given for payment to the customers: 7days after the receipt of bill.
- No other options of repayment are available.

- **Billing process is lengthy.**
- **Time given for payment is less.**
- **There are only 3 meter readers. (Less manpower)**
- **No other possible options for payment.**

# Water Supply- Proposed Projects

**PROJECT DETAILS:**

- **WS SCHEME FROM CHANDRABHAGA DAM TO WTP.**
- **WTP**
- **REPLACEMENT OF OLD NETWORK AND LAYING OF NEW NETWORK IN UNSEARVED AREAS.**
- **TOTAL VOL OF WATER RESERVED IS 26.5 MLD.**
- **TOTAL COST OF PROJECT- 37 Cr**




**IMPACT OF PROPOSED PROJECT:**

1. **SOURCE OF WATER WOULD BE SURFACE WATER.**
2. **LPCD WOULD INCREASE TO 135 FROM CURRENT RATE OF 122.**
3. **COVERAGE OF NETWORK WOULD INCREASE TO 100%.**

# Water Supply-Action Plans

| ISSUE / REQUIREMENT | POSSIBLE ACTIONS | COST |
|---|---|---|
| Low coverage of WS connections in slums due to higher dependence on PSPs and Hand pumps. | ➢ Removal of PSPs and HPs<br>➢ Increasing No of new connections<br>➢ Removal of entry barriers<br>➢ Process changes | Low/ No Cost |
| High Non Revenue Water due to High volumes of Unbilled authorized supply from PSPs. | ➢ Removal of all PSPs | Low Cost |
| Low collection efficiency of WS related charges due to<br>➢ Less staff<br>➢ No other repayment options | ➢ Increasing staff | Low Cost |

# Water Supply-Action Plans

**Coverage of WS connections and NRW**

Low coverage

High NRW

High dependency on PSP/Hand pumps

High unbilled consumption (mostly from PSPs)

Removal of all 150 PSPs and Hand pumps

Increase no of WS connections

- Removal of entry barriers. (Special policy for WS connections in slums).
- Process change etc( WS connection process).

- Clubbing of actions for making the process simpler and faster.
- Effective time of taking WS connection can be reduced by 8-10 days.

Application for NOC from ULB

Application for WS connection submitted to WS department

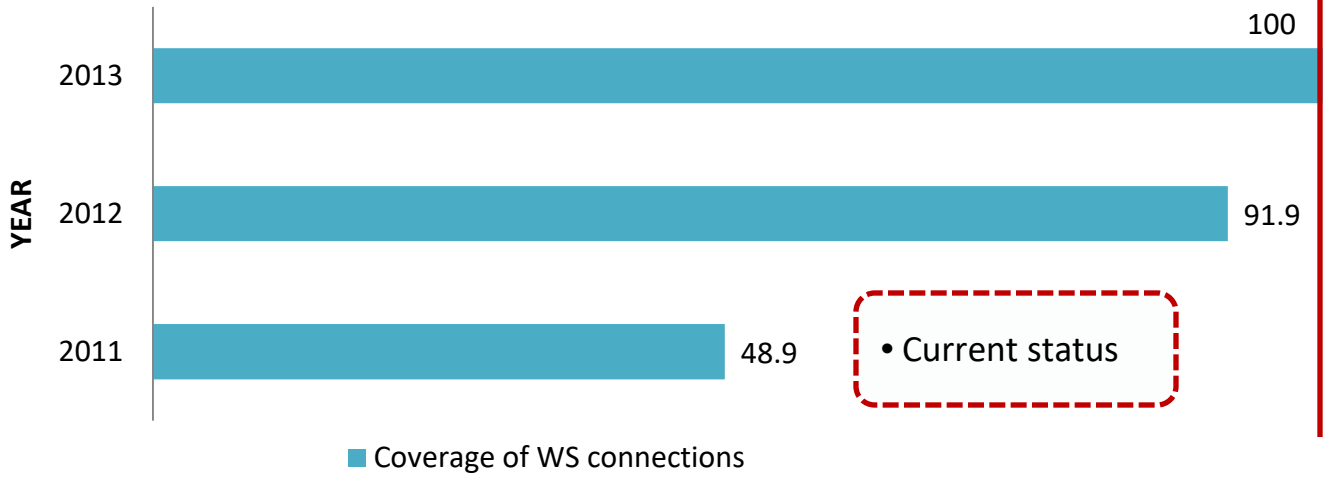
Site verification

Payment of deposit/Application for purchase new Meter and ferrule

Installation of Ferrule and meter by the plumber

# Impact of Proposed Actions

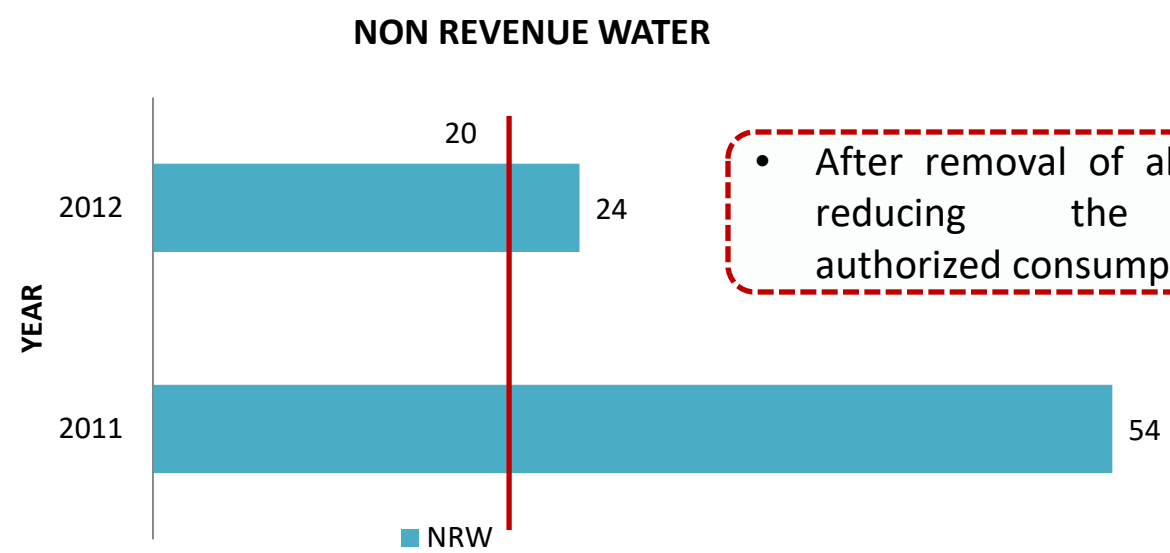
**Coverage of WS connections and NRW**




- Current status

- After addition of WS network in unserved areas under UIDSSMT project scheduled to finish in 2013

- After removal of all PSPs and HPs and simultaneously adding new connections




- After removal of all PSPs and reducing the unbilled authorized consumption

# Water Supply-Action Plans

**Collection efficiency of WS related charges**

Increasing collection efficiency

Improve Billing system

- Reducing billing time
- Increasing the staff/meter readers/ PSP.

Improve collection system

- Increasing payment time
- More options for repayment of WS bills

Reduce this time to 15 days by increasing Staff

Meter reading

- Time taken by Meter readers to Take readings:30-35 days.
- Only 3 meter readers.

Printing & dispatch of bills by Billing Dept.

- Time taken for printing and dispatch of bills: 10 days

Increase payment time to 15days

Payment of Bills at ULB office

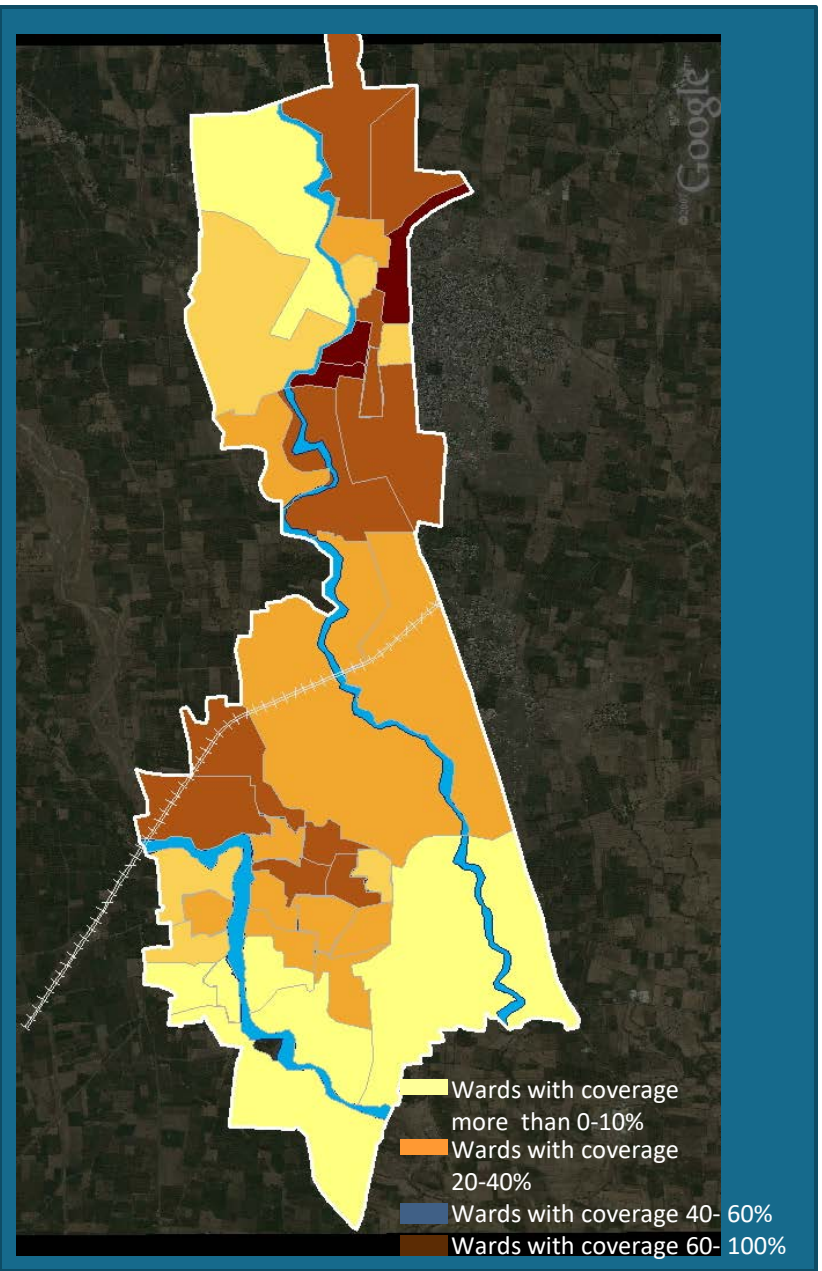
- Time given for payment to the customers: 7 days after the receipt of bill.
- No other options of repayment are available.

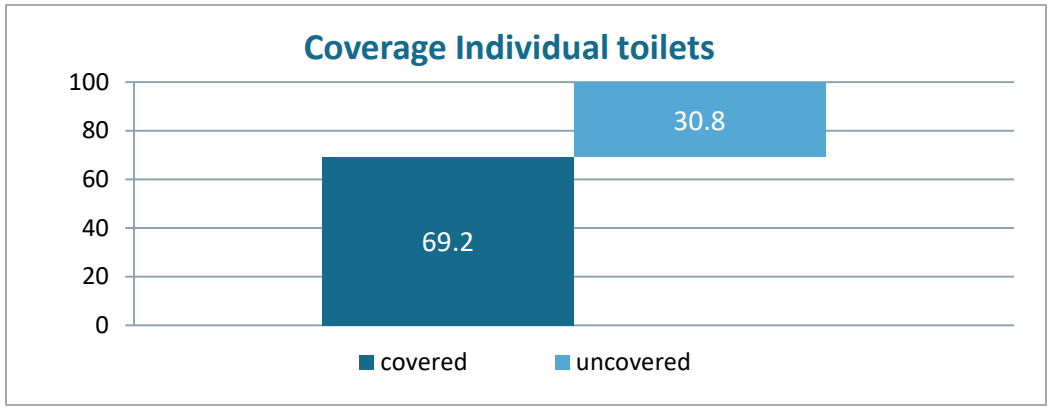
# Step Towards 24*7 WS

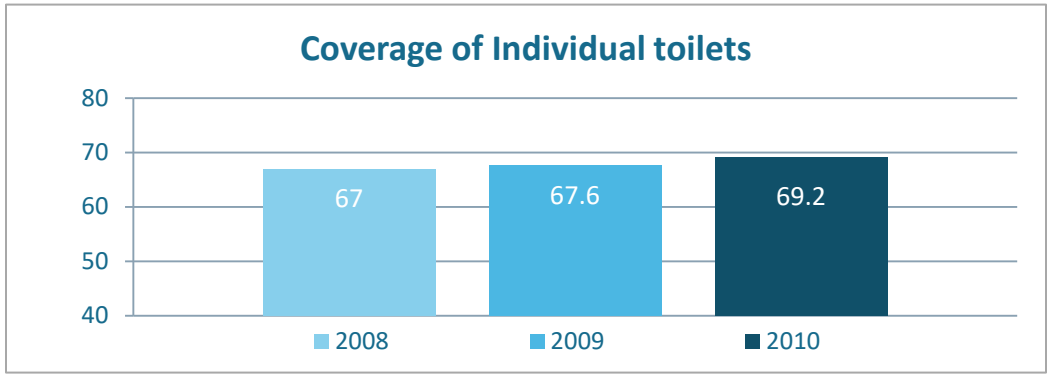
## Activities required to achieve 24*7 WS

- Increasing Coverage of WS connections to 100%.
- Removal of PSPs and Hand Pumps.
- Careful selection of demo zone.
- Identification of private contractor.
- Careful drafting of performance contract
  - Single responsibility for diagnosis, design, implementation, and O&M.
  - Demanding realistic targets and timeframes.
- Detailed HH and socio economic survey for that zone.
- Ring fenced budget for the pilot zone.
- Hydraulic modeling, replacement of old and deteriorated network, augmentation of storage capacity if needed.

# Sanitation-Toilets



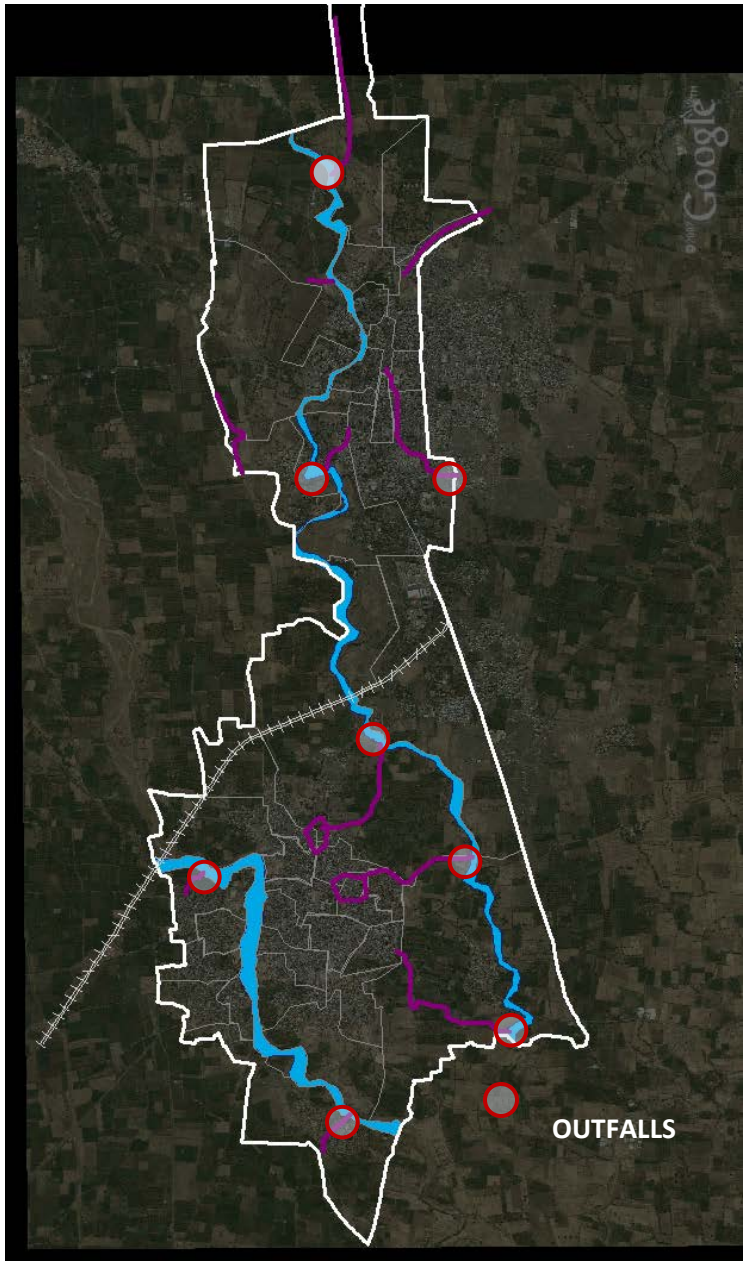



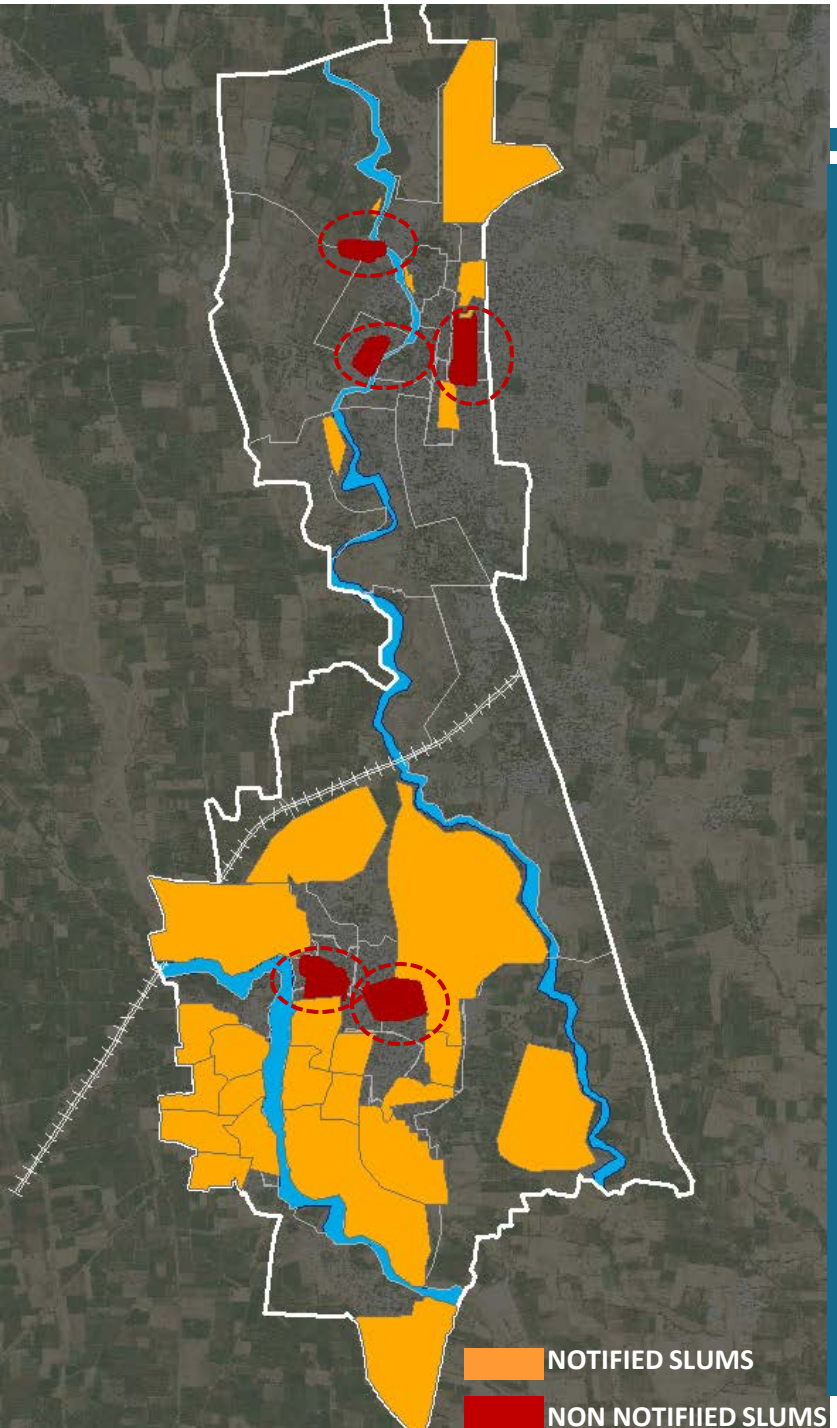

**The coverage of individual toilets is 70% whereas the coverage of toilets including access to functional community toilets is 77%.**

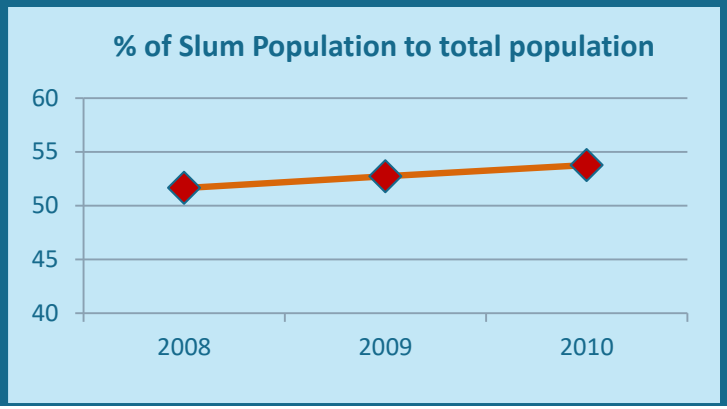
**Indicating 23% of people defecating in open**

# Sanitation-Open Drains

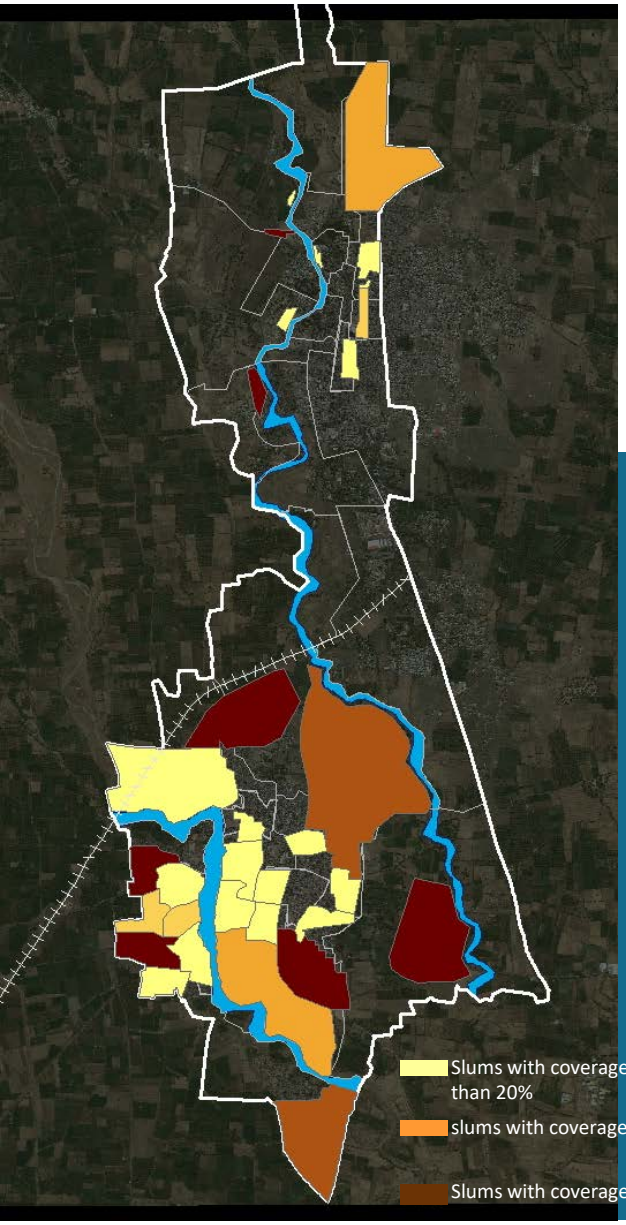


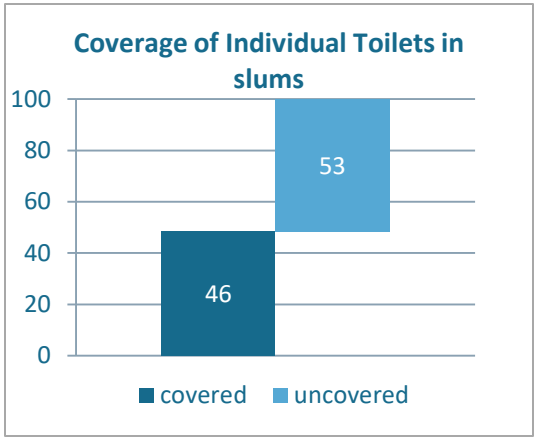

# Sanitation-Slums

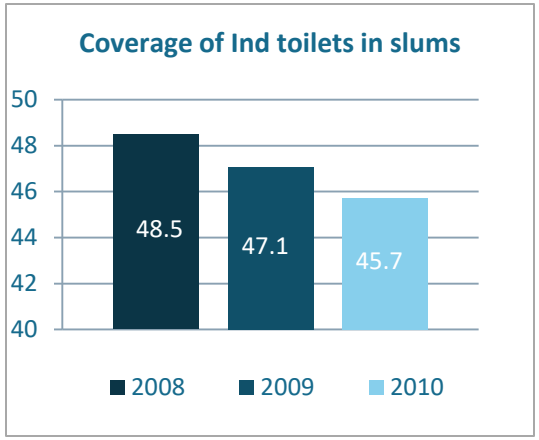


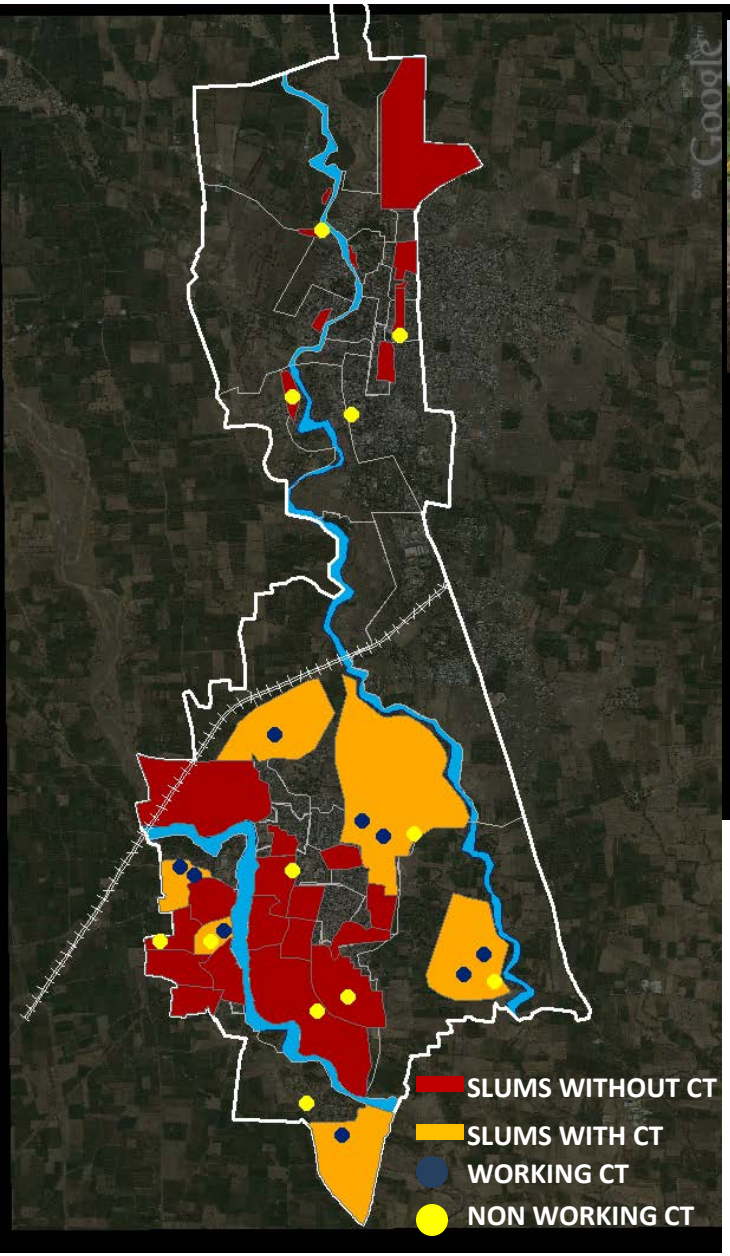



# Individual Toilets-Slums



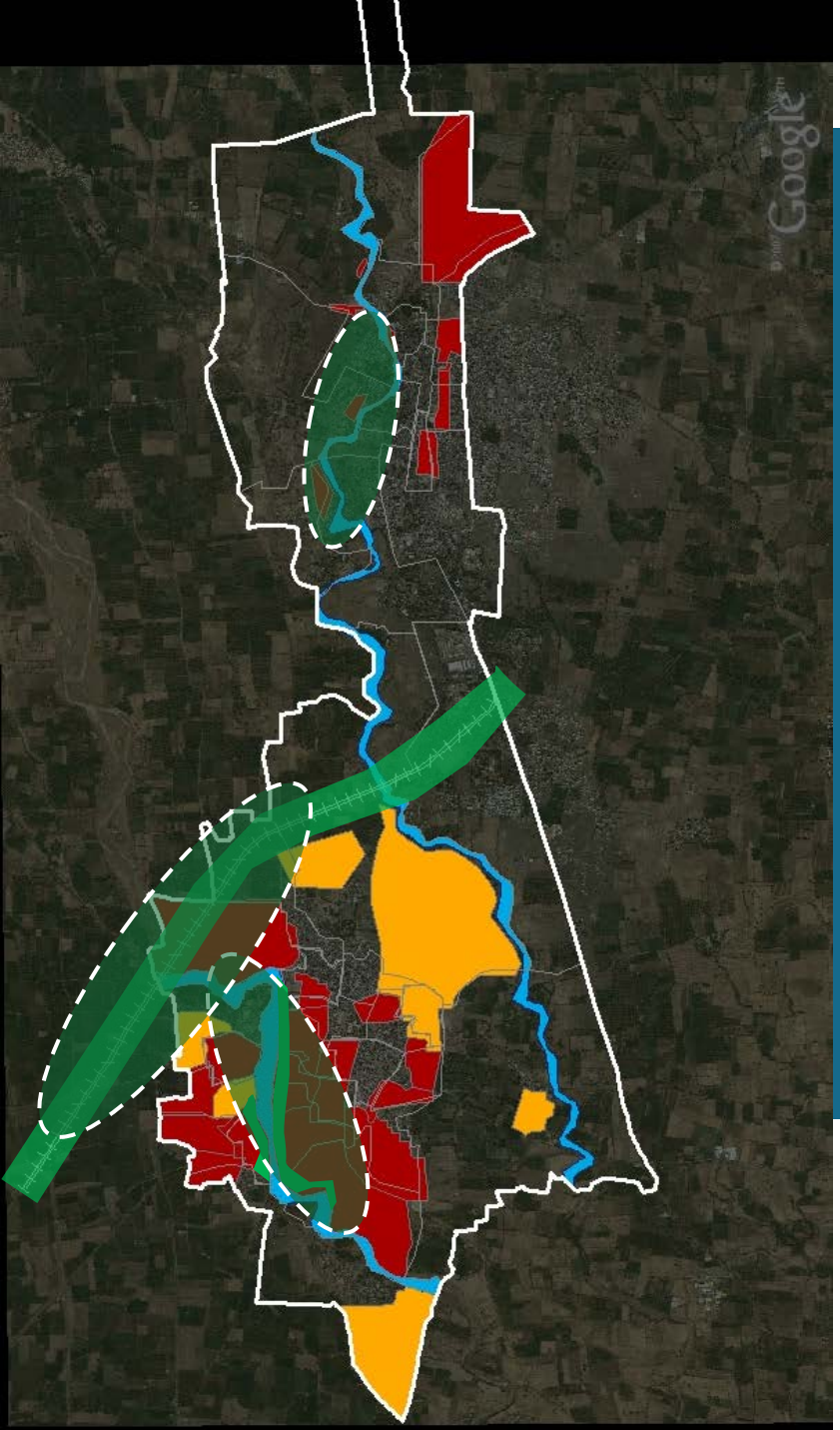






| | |
|---|---|
| No of Community Toilets | 21 |
| Working condition | 9 |
| Total no of seats | 310 |
| Total no of functional seats | 125 |

# Sanitation- O D Sites



**The OD sites are mainly along the railway track and nallas**

# Sanitation – Action Plans

| ISSUE / REQUIREMENT | POSSIBLE ACTIONS | COST |
|---|---|---|
| Increase HH level coverage of Individual toilets | ➢ Build more Individual toilets | High Cost |
| Increase HH level coverage of toilets in slums | ➢Refurbish existing community toilets | Low Cost |
| | ➢Build new community toilets | High Cost |
| Maintenance of Community Toilets | ➢Regular Cleaning of CT | Low Cost |
| Maintenance of open drains | ➢Monitoring Regular cleaning of drains | Low Cost |

# Sanitation – Action Plans

## OPTION 1 – INDIVIDUAL TOILETS

| | CURRENT STATUS | REQUIRED | EXISTING PROPOSAL | COST | COST | IMPACT |
|---|---|---|---|---|---|---|
| NON SLUMS | 89% coverage in slums | 1125 individual toilets | _ | 2.0 Cr | 1.4 Cr | Individual Toilet Coverage increase to 100% |
| SLUMS | 50% coverage | 6097 individual toilets | IHSPD (965 HH) | 11.5 Cr | 7.7 Cr | Toilet coverage increase to 100% |

Considering shared septic tanks

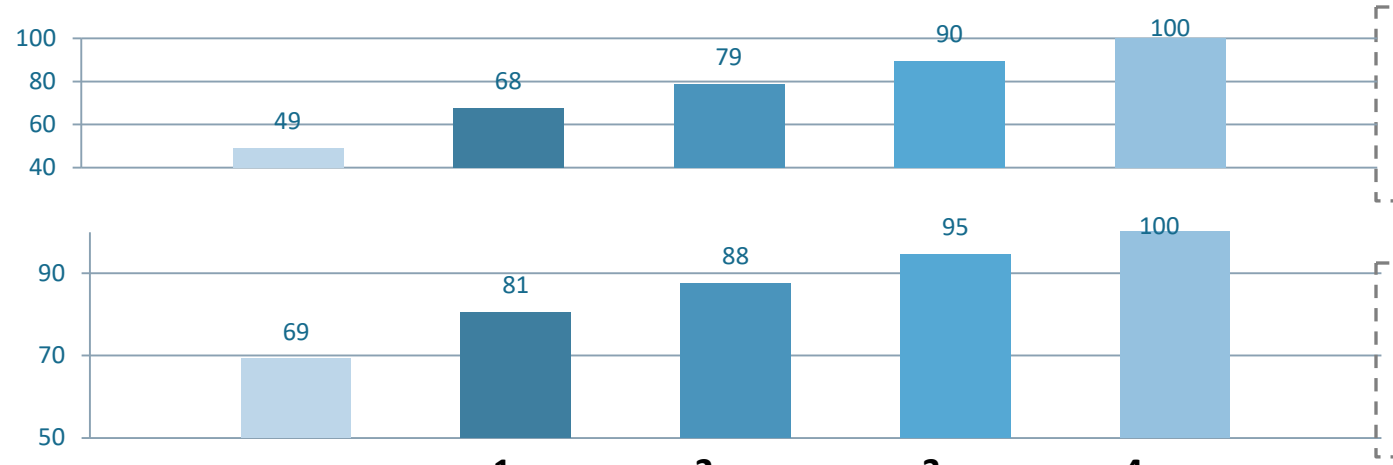
**Total cost- 9.1 Cr**

## OPTION 2 – COMMUNITY TOILETS

| | CURRENT STATUS | REQUIRED | EXISTING PROPOSAL | COST | IMPACT |
|---|---|---|---|---|---|
| SLUMS | 46% coverage in slums | 12 CT to be refurbished | _ | 0.02 Cr | Toilet Coverage (SLUMS) increase |
| SLUMS | 46% coverage in slums | New CT to be built | _ | 7.1 Cr | Toilet Coverage (SLUMS) increase |

**Total cost- 7.1 Cr**

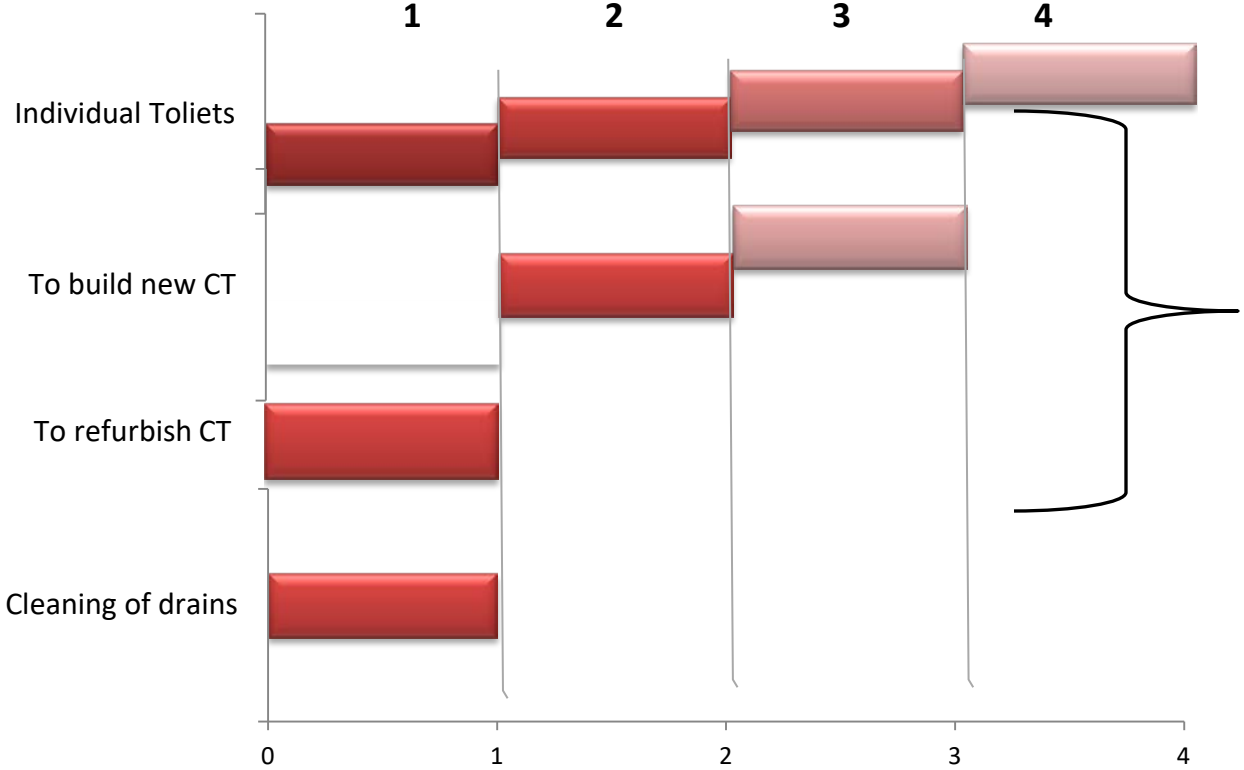
# Sanitation – Phasing of Actions




Impact
Increase in Coverage of Toilets in slums




Impact
Increase in HH Coverage of Toilets




**Total cost- 9.1 Cr**

**Total cost- 7.12 Cr**

# Solid Waste Management

**COLLECTION**
Only 90 % of waste is collected out of 27 MT generated

DD collection in slums does not take place on a daily basis

No segregation

**TRANSPORTATION**
The waste is transported with tipper trucks and 3 wheeler auto tippers

**TREATMENT**
Currently no treatment of any kind takes place

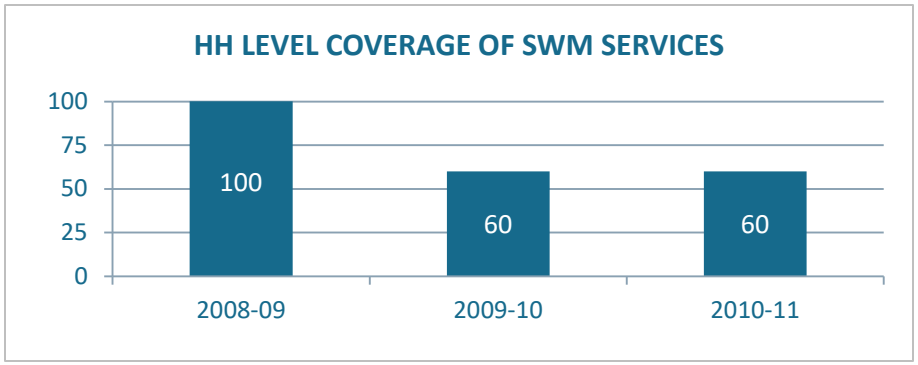
Waste collected does not undergo any treatment.

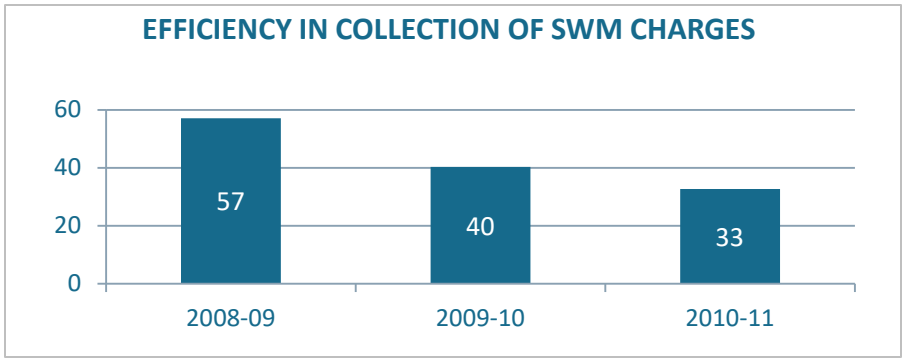
**DISPOSAL**
Waste is disposed in open dumps

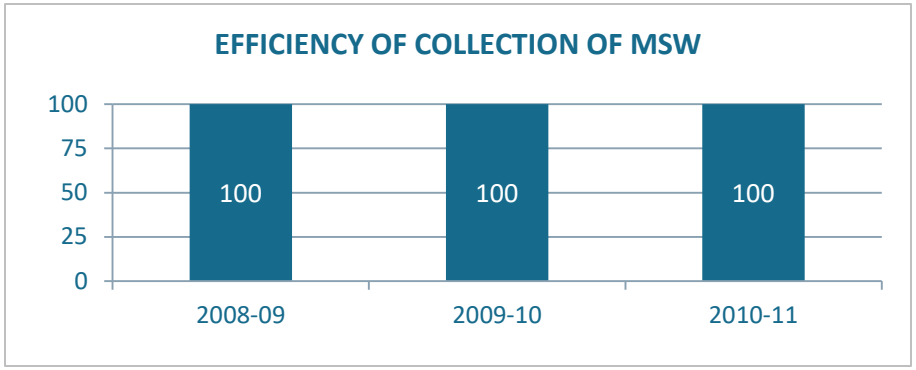


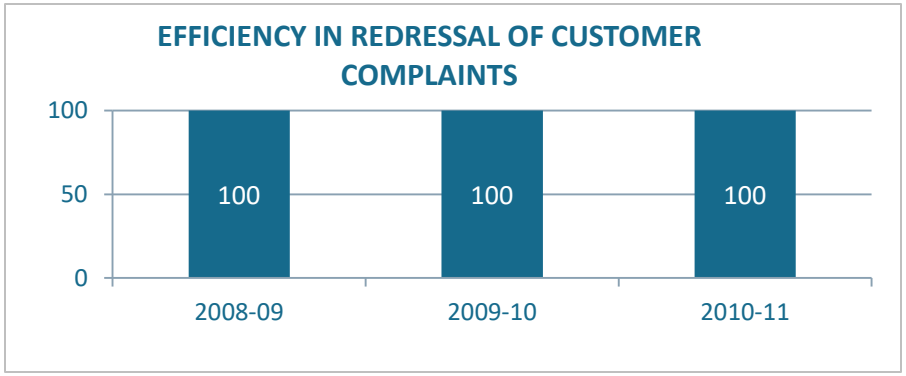


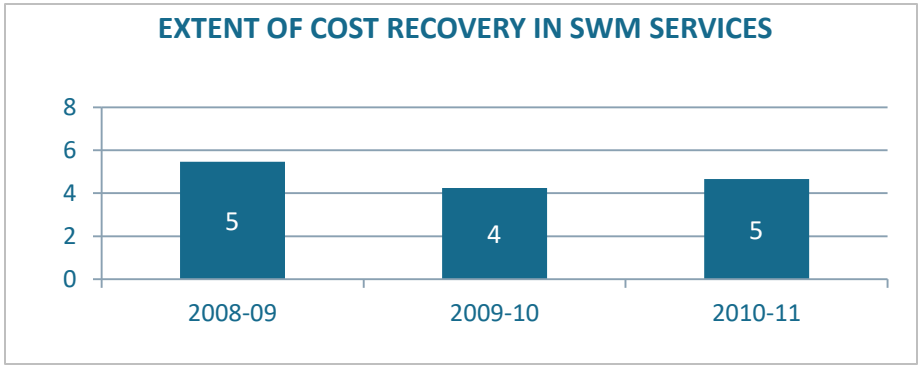
# Solid Waste Management KPIs



# SWM –Action Plans

| ISSUE / REQUIREMENT | POSSIBLE ACTIONS | COST |
|---|---|---|
| No Regular DD collection in slums | ➢ Monitor daily DD collection in slums | Low Cost |
| No segregation | ➢ Segregation at source | Medium Cost |
| Waste currently does not undergo any treatment | ➢Processing of biodegradable waste | Medium Cost |


# Thank You