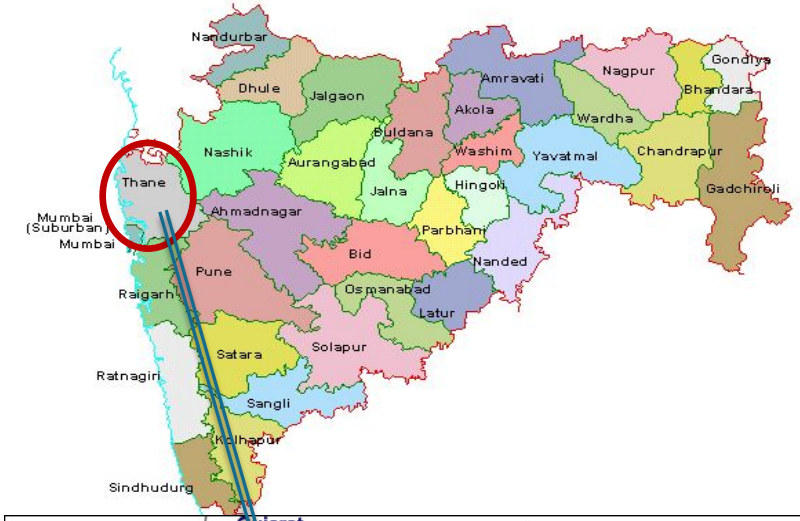
FIELD ASSESSMENT FOR PERFORMANCE IMPROVEMENT PLAN

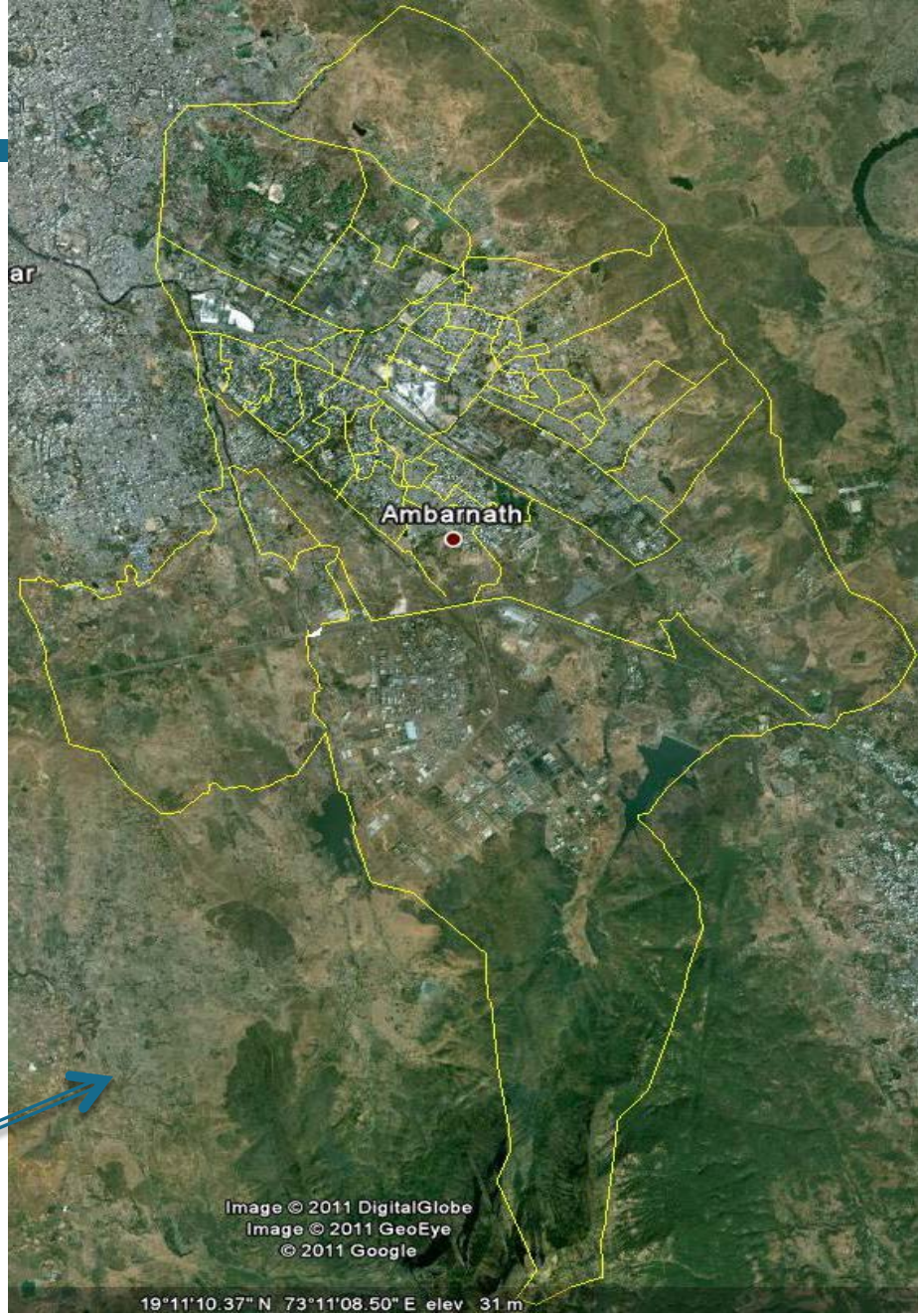
pas performance assessment system

AMBARNATH MUNICIPAL COUNCIL

City Profile

Maharashtra





The city is located in MMR on Kalyan- Badlapur highway.

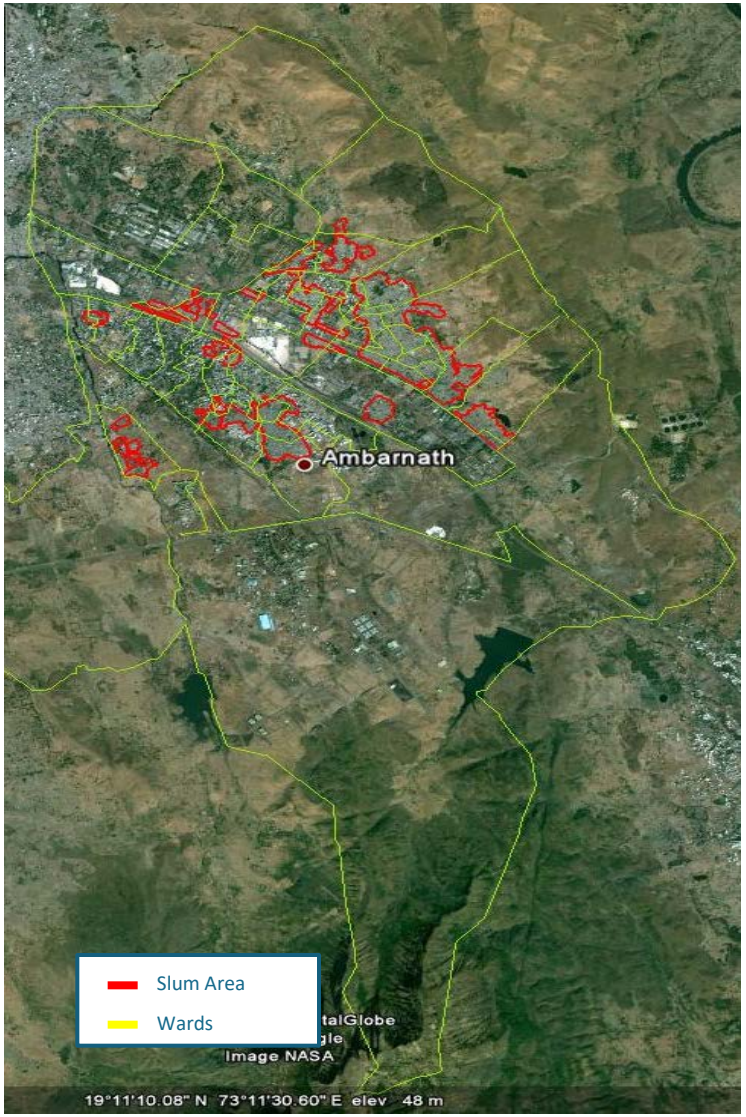
City Profile

Demographics		
	2001	2011 (Estimated)
Population	2,03,804	2,56,000
Household	44,348	55,705

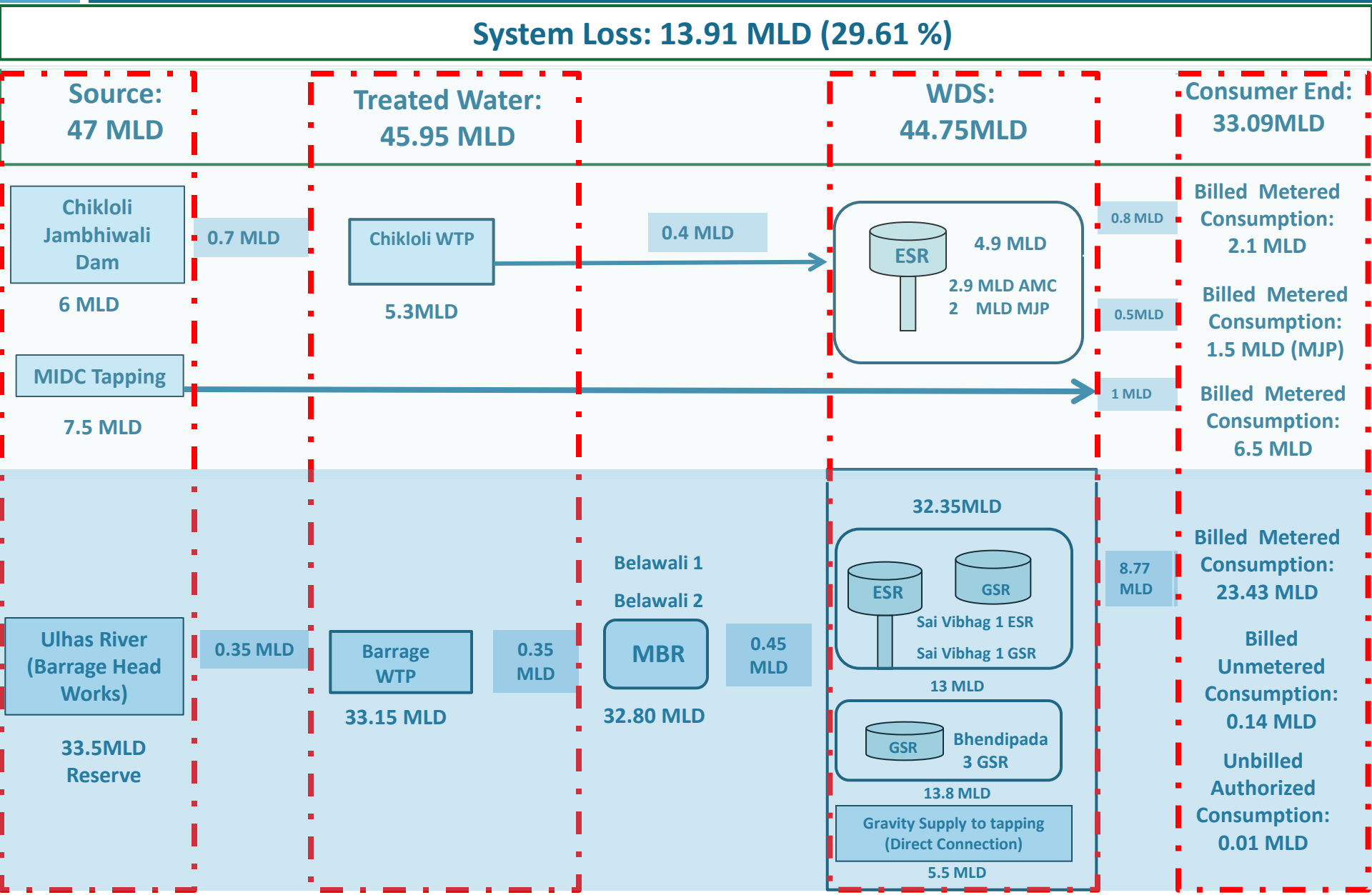
	Slum Population		
Year	No of Settlements	Household	Population
2001 (City Record)	52	26,504	1,30,373 (64%)
2011 (Estimate)	52	29,761	1,46,395 (57%)

Property Detail	
No of Property (2001)	25,449
No of Property (2010-11)	34,972

Area	38 Sq Km



Water Supply Diagnostics



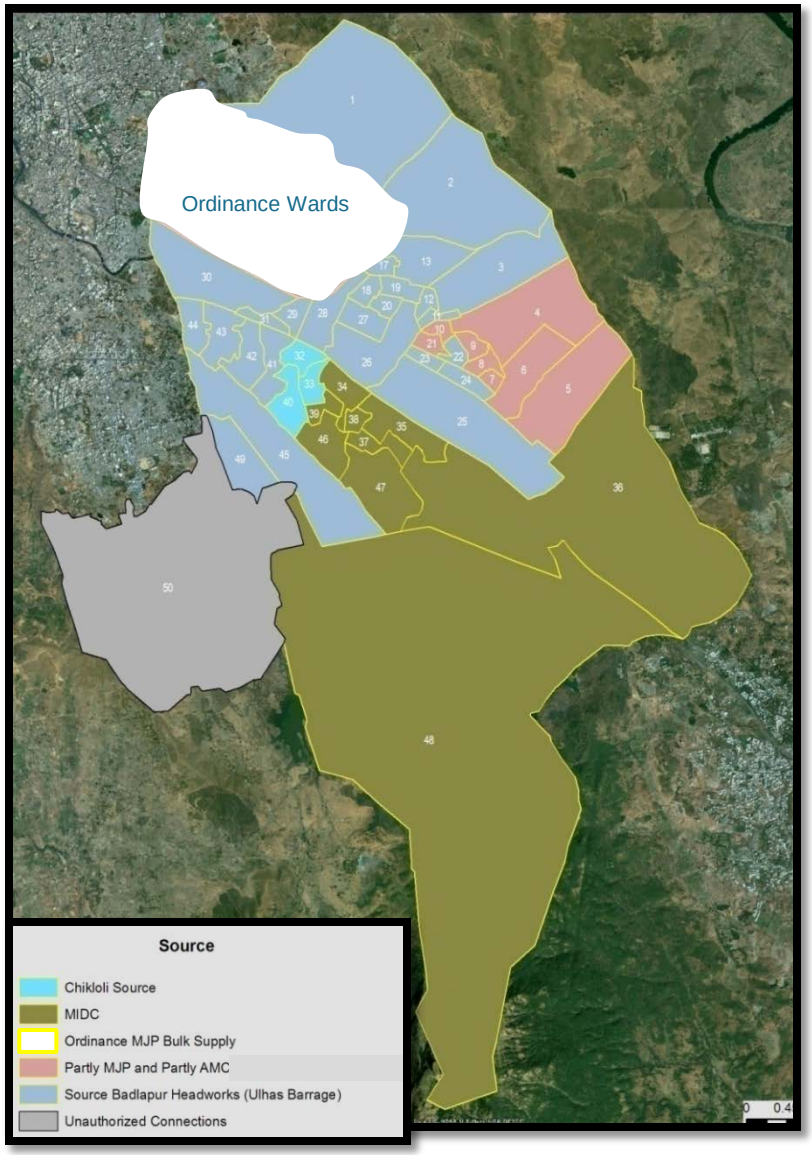
Water Supply Diagnostics

Water Supply Indicators

S.No	WATER SUPPLY INDICATOR VALUES	Unit	2008-09	2009-10	2010-11
1	Coverage of water supply connections #	%	92	92	92
2	Per capita available of water at consumer end	Lpcd	153	123	128
3	Extent of metering of water connections	%	73.7	76.7	98.6
4	Extent of Non Revenue Water	%	28.4	28.4	29.61
5	Continuity of water supply	Hours/Day	4.00	4.00	3.5
6	Efficiency in redressal of customer complaints	%	100	99	99
7	Quality of water supplied	%	96	97	96
8	Cost recovery in water supply services *	%	88.8	92.9	94.4
9	Efficiency in collection of water supply related charges	%	90	90	90

 # Coverage was showing low in 2008-09 & 2009-10 due to method of data recording.

Water Supply Zones



Water Supply Diagnostics

Water Supply MJP

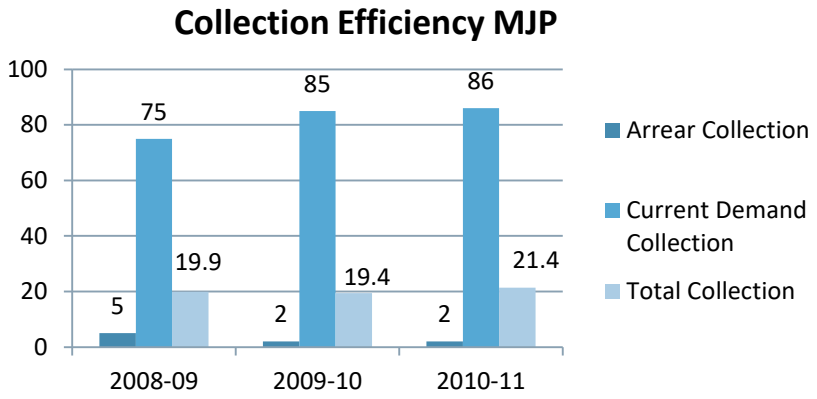
Sub Divisional Engineer (Ambarnath Division)	Posts 1
Section Engineer	Posts 7
Class III Staff	Posts 49
Class IV Staff	Posts 89

Total Number Of MJP Connections	17690
Number Of Connections Buildings	2538 (HH:22,497)
Number Of Individual Connections	15152

- Large Concentration Of Class III And IV Staff.
- Presently In House Billing Is Undertaken.
- Administrative Expenditure Very High ,6th Pay Commission
- 40-50% Class IV To Retire. More Activities Likely To Be Outsourced.

Year	Water Tariff Structure – Metered (Rs per 1000 litre)		
	Domestic	Non-Domestic	Institutional
2005-07	6.6	27.25	16.2
2007-10	7.6	34.65	16.2
2010-11	< 15,000 litre- 8.35 > 15,000 litre – 9.6 <20,000-12.5 >25,000-16.7	38.10	18.15
2011-2012	< 15,000 litre- 8.35 > 15,000 litre – 9.6 <20,000-12.5 <20,000-16.7	39.00	20.00

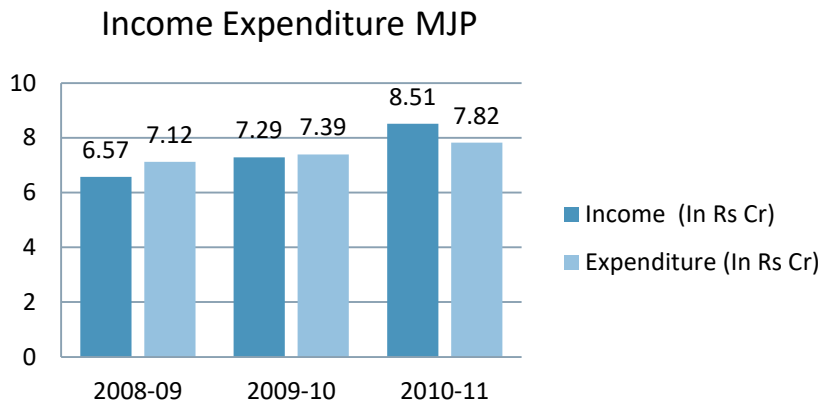
Telescopic Tariffs have been introduced since 2010



- Total Arrears Of Rs 31.69 Cr Has Been Accumulated Since 1942.
- 40% Is Principal And 60% Is Interest .
- Introduced 'Nirbhay Yojna' To Increase Collection Efficiency wrt Arrears.

Water Supply Diagnostics

Water Supply MJP

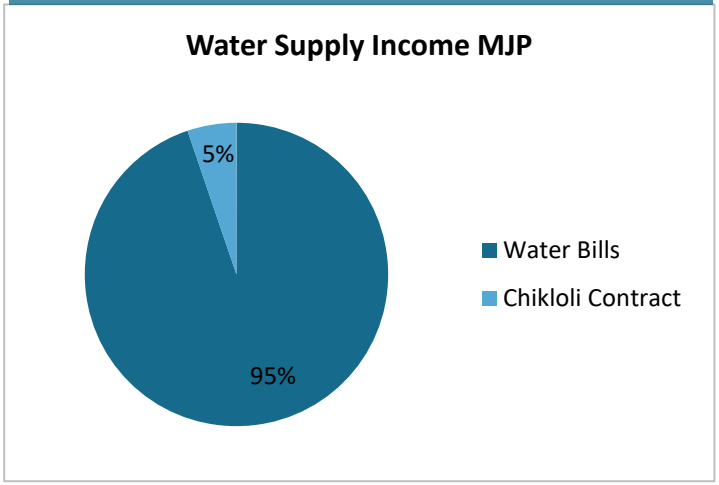


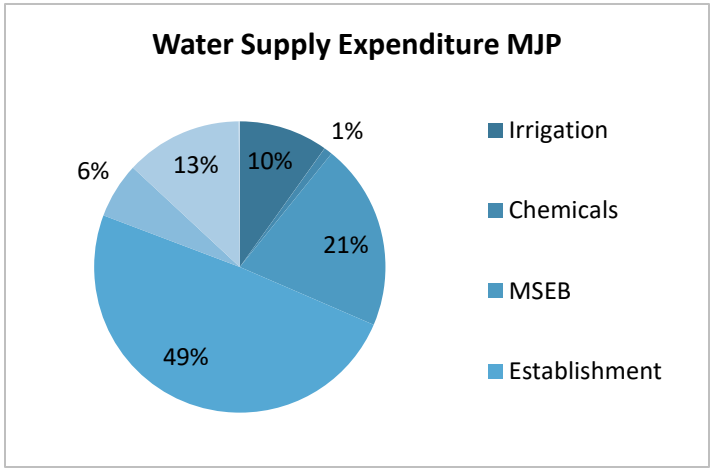
Cost Recovery	Ulhas Barrage/ Chikloli Scheme
At Source (MLD)	33.5
Rate per 1000 lit At Source	8.5
Payment To Irrigation Department	0.77
MSEB	1.61
Administrative Expenditure	3.84
Maintainance & Repairs	1.01
Payment To AMC For Purchase Of Water	0.5
Testing	0.01
Total Expenditure	7.74 Cr
System Losses (MLD)	10.4
Billed Consumption (MLD)	23.1
Rate per 1000 lit At Consumer End	8.5
Billed Demand (Rs Cr)	9.6
Total Income	8.51 cr
Excess Profit	0.77
Excess Profit (%)	9%

System losses 31%

Recovery Profit 9%

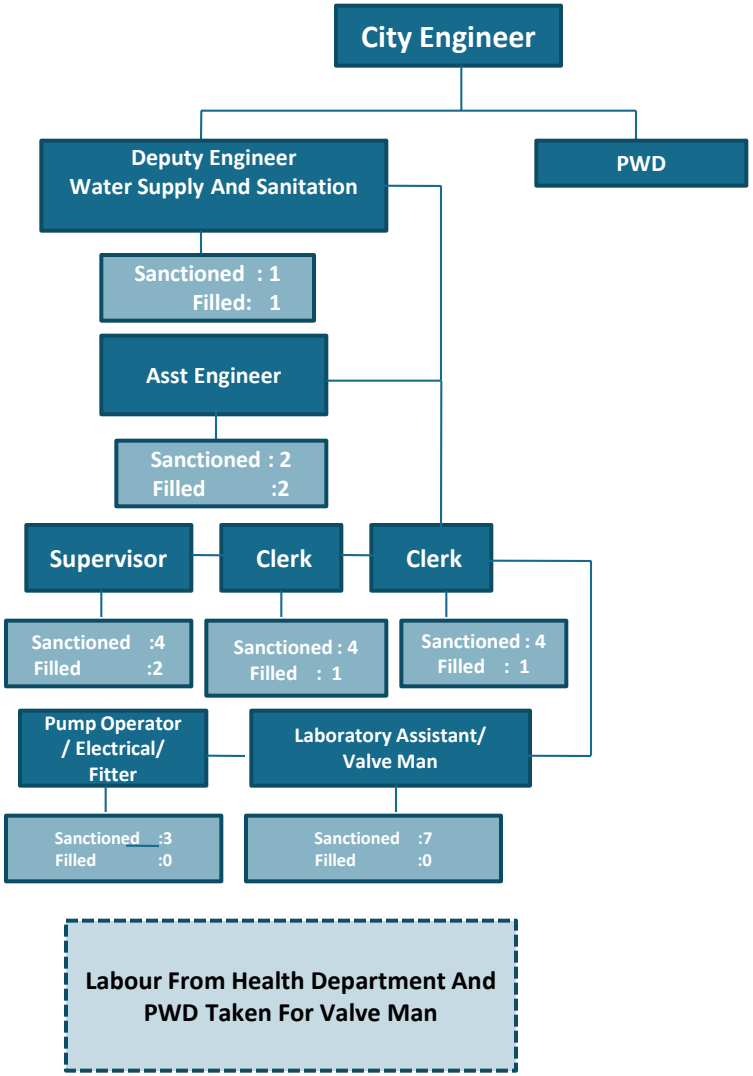
All MJP data has been validated with Meter Readings And Electronic Recorded Data





Water Supply Diagnostics

Water Supply AMC



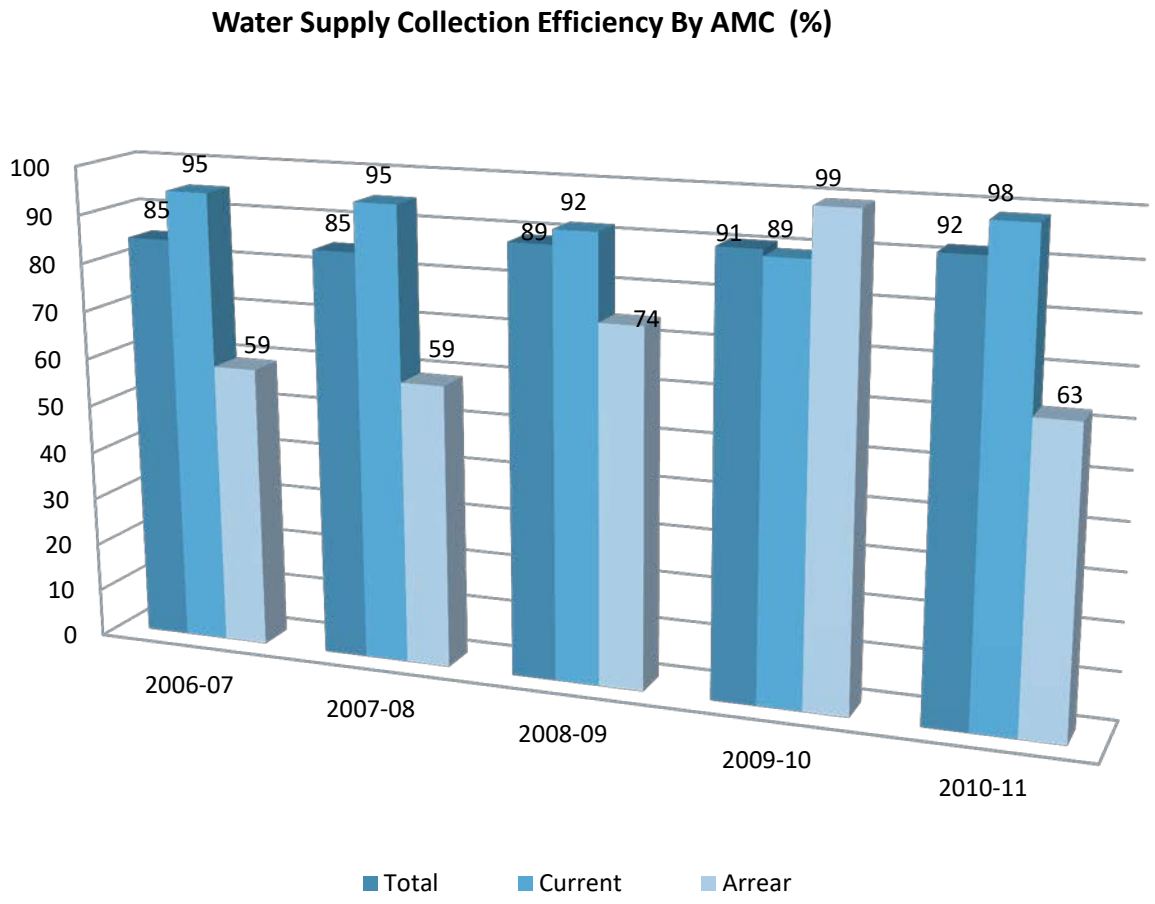
Total Number Of AMC Connections	7149
Number Of Connections Buildings	860 (HH Served:7310)
Number Of Individual Connections	6289

Year	Water Tariff Structure – Metered (Rs per 1000 litre)		
	Domestic	Non-Domestic	Institutional
2005-07	6.6	27.25	16.2
2007-10	7.6	34.65	16.2
2010-11	< 10,500 litre- 8.50 > 10,500 litre - 12.50	< 10,500 litre- 38.10 > 10,500 litre - 57.15	< 10,500 litre- 18.15 > 10,500 litre - 27.15
2011-2012	< 20,000 litre- 8.50 > 20,000 litre - 13.00	< 20,000 litre- 39.00 > 20,000 litre - 59.00	< 20,000 litre- 20 > 20,000 litre - 30

- **Collection Efficiency is vey high . Total Collection Efficiency has increased further after metering drive in 2010**

Water Supply Diagnostics

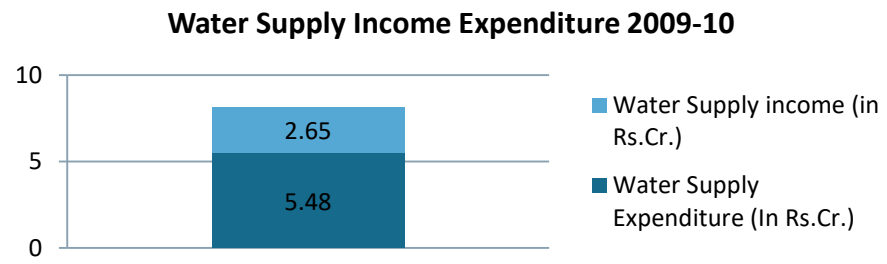
Water Supply AMC

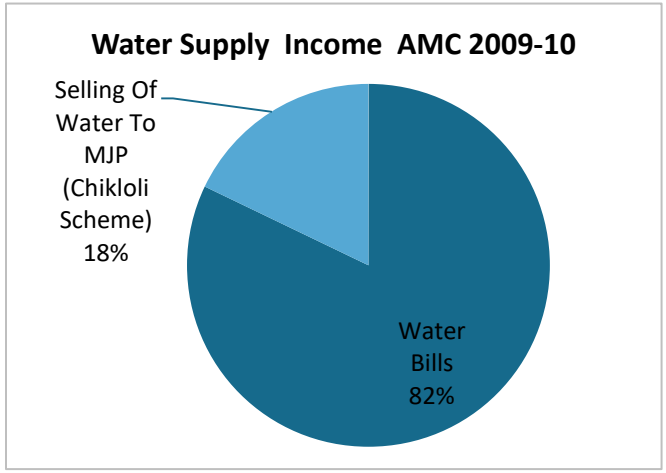


•**Collection Efficiency is vey high . Total Collection Efficiency has increased further after metering drive in 2010**

Water Supply Diagnostics

Water Supply AMC





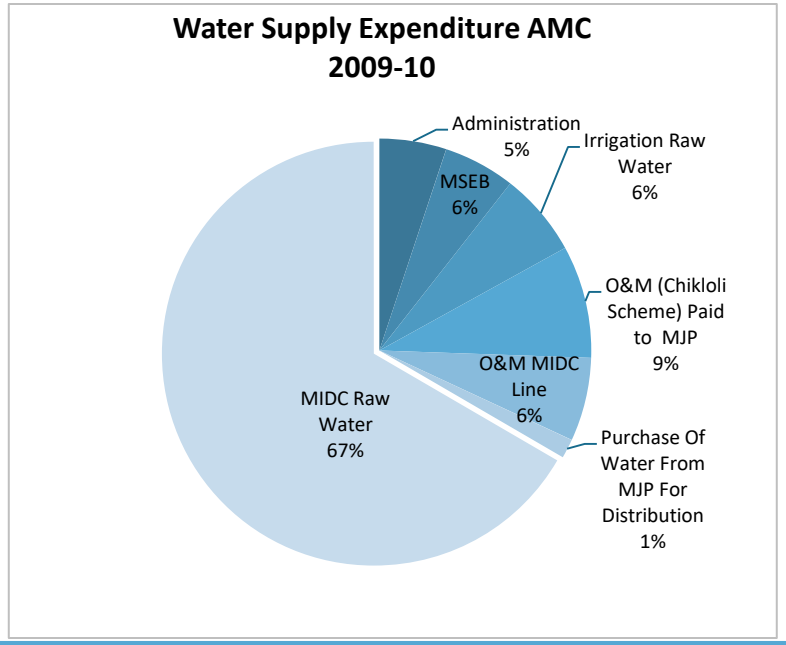
System losses 15%

System losses 13.3%

Cost Recovery	Chikloli	MIDC
At Source (MLD)	6 (4+2)	7.5*
Rate per 1000 lit At Source	4.5	10
Expenditure At Source (Rs Cr)	0.65	3.65*
Administrative Expenditure (Rs Cr)	0.14	0.14
MJP For O&M Source to ESR Chikloli Scheme/ O&M MIDC Line (Rs Cr)	0.47	0.15
Purchase Of Water From MJP For Distribution (Rs Cr)	0.08	-
Total Expenditure (Rs Cr)	1.34	4.14
System Losses (MLD)	1.9	1
Billed Consumption (MLD)	2.1	6.5
Rate per 1000 lit At Consumer End	8.5	8.5
Gross Income /Demand (Rs Cr)	0.65	2.01
Net Income/ Collection (Rs Cr)	0.63	1.97
Other Income (Sale Of Water To MJP -2 MLD)	0.5	-
Total Income (Rs Cr)	0.68	2.68

Recovery Losses 36.6.%

Recovery Losses 36%



AMC is allowed to draw only 5 MLD from MIDC source, but it is currently drawing 7.5 MLD. AMC is paying a penalty of 50% extra cost on excess water drawn.

Water Supply Diagnostics

24 x 7 Pilot Basis

Discussion Point: (MJP Official, AMC Official, CEPT & AIILSG Team)

- MJP-AMC Has Already In Process In Preparing 24X7 Water Supply Scheme
- Need Assured Source Of Water @ Rate Of 225 Lpcd.
- Approx. 40% Distribution Network Were Laid By The Year In 1935 Need To Be Replaced.
- Ideal Condition For 24x7 Is To Achieve Nrw In The Range Of 17-20%.
- Connection Cost Will Increase From 3000 To 10000 For 24x7 System.
- Substantial Capital Investment Is Require. (Approx. Cost : 77 Cr For 24 X 7)

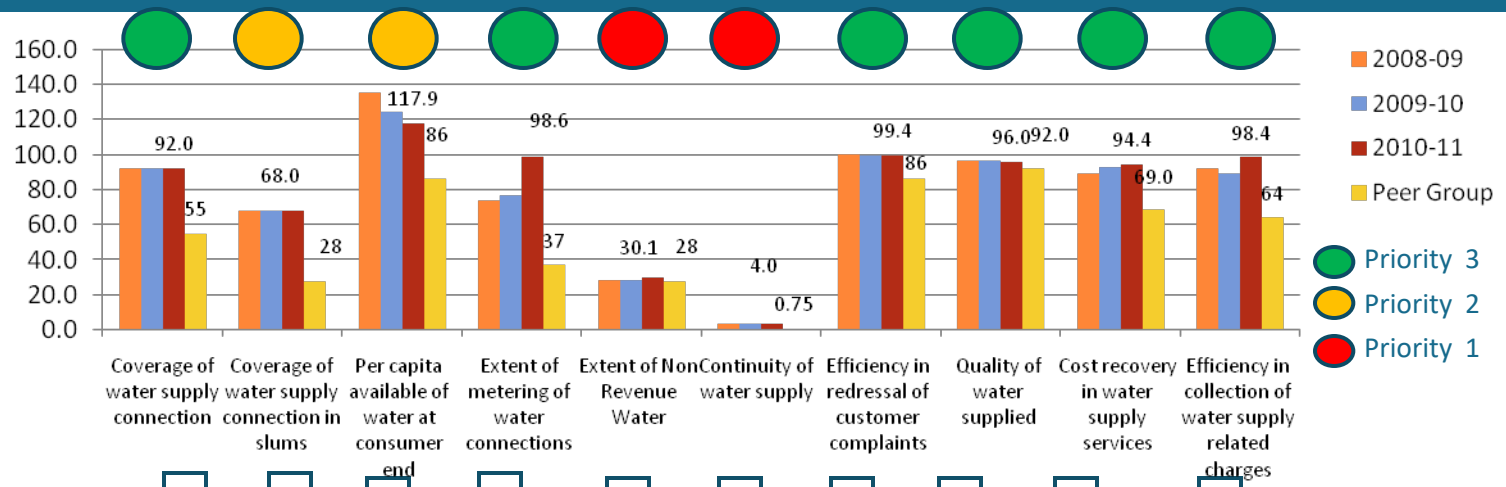
Pipe Replacement-	6.0 lakhs
Consumer Meter Replacement-	0.6 lakhs
Service Pipeline Replacement-	0.4 lakhs
Cross Connections-	2.5 lakhs
Total Cost Incurred –	9.5 lakhs

Per Capita Supply: 300 lpcd

Hours Of Supply: 24 hours

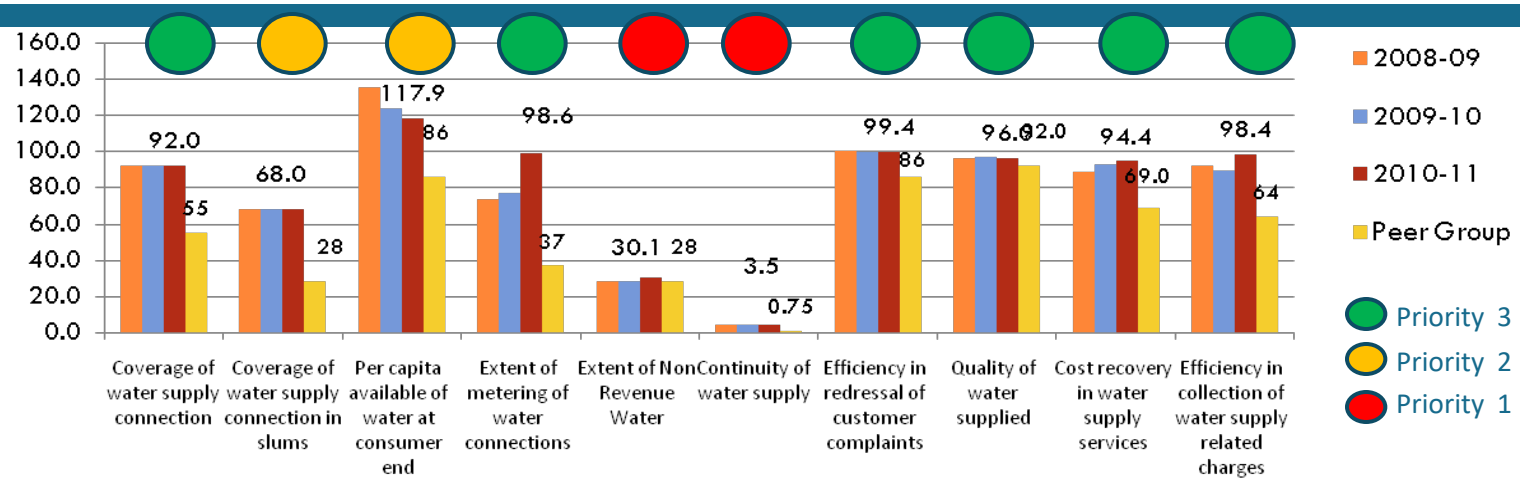
NRW= 27%

Water Supply Diagnostics - Prioritization Of Actions



INTERVENTIONS WITH MINIMAL/ MODERATE CAPITAL EXPENDITURE										
Energy And Water Audit	Done for MJP and AMC Underway									
Identification And Plugging Of Leakages										
Regularising Unauthorized Connections	Drive Done In 2010,									
Reduction In Free Water/ Group Conn,	Drive Done In 2010									
Additional Connections For Slum Hhs	Policy Decision Taken. Simplification of Procedure.									
Additional Connections Using Existing Network	Present Coverage is Sufficient									
Maintenance Of WTP										
Optimization Of Power Costs										
Periodic Checking Of Water Losses And Its Repairing - Reservoir Overflows, Network Leakage & Repair Etc.										

Water Supply Diagnostics - Prioritization Of Actions



INTERVENTIONS WITH SUBSTANTIAL CAPITAL EXPENDITURE

Augmentation of source	After 2029, New Sources								
Improvement in trunk mains									
Improvement in treatment plant efficiency/ capacity									
Reduction in treated water transmission losses									
Improvement in water storage									
Additional connections by expanding distribution network									
Improvement in distribution system									
Metering									
Replacement of pumping machinery									

Water Supply Diagnostics

Water Supply Diagnostics

Action Taken For Improvement in Water Supply Sector

- Conversion Of Group Connections Into Individual Connection
- Mandatory Metering At Consumer End
- Policy Level Decision To Provide Individual Connection In Slums
- Carried Out Water Audit And Energy Audit Study In 2010 (MJP Zone)
- Water And Energy Audit For AMC Zone Underway
- Regular Checks And Plugging Of Leakages
- Bye Laws 2011
  New Tariff Structure Telescopic Tariff New Connection Fees Increased

Actions And Interventions For Improvement- Towards 24 ×7

Activity	Cost Estimate
Working Survey	0.02
Raising Height Of Existing Chikloli Dam	8.53
Providing Lowering Laying And Joining 700 Mm dia Gravity Main From Dam Outlet To Inlet Chamber	1.97
Construction Of RCC Weir Across Nall For Arresting Dam Leakage	0.98
Providing And Construction RCC Pump House At Bhendipada And Amberbath	0.23
Providing Installing Testing And Commissioning Of Pumping Machinery At Bhendipada And Ambarnath Booster Pumping Station And WTP Chikloli	4.28
Providing And Construction WTP Of Capacity 7.2 MLD At Chikloli	1.58
Providing Lowering Laying And Jointing Raising Mains Of Various Diameter In Ambarnath	5.99
Providing Lowering Laying And Jointing Leading Mains For Bhendipada And Ambarnath Booster Sump	5.03
Designing Providing And Constructing RCC ESR Of Various Sizes In Ambarnath Town	9.53
Providing Lowering Laying And Jointing DI K7 Pipe Lines For Distribution System	29.32
Land Acquisition ,Barbed Wire, Fencing	1.41
Bulk Meters PRV	3.91
Modifications In Computer Receipts & Spot Billing Meters	1.00
Special Repairs And Strengthening Of Old MBR 7 GSR	0.25
Construction Of Consumer Redresser Centre	0.30
3.77% PMC Charges	2.82
Total Estimated Expenditure	77.13

Total Investment Of **77 Cr.** Required.

Actions And Interventions For Improvement- Towards 24 ×7

Issues In Water Supply	Probable Solutions
High Revenue Losses (AMC) Due To Terms Of MIDC Contract And High Rate.	Resolve AMC-MIDC Dispute On Open Land Taxation (Rs 16.2 Cr Pending) Increase Sanctioned Quota To 10 MLD
High Establishment Expenditure. High Concentration Of Class III and IV Staff(MJP)	Reduce Size Of Class III and IV Staff Contract Out (Outsource)More Activities
Present NRW 30%	Reduce Distribution Losses Presently At 24% Implementation Of Water Audit Recommendations
Complicated Institutional Structure. MJP Is Supplying 75% Water To Ambarnath City.	Water Supply Should Be Handed Over To A Single Institution As Per 74th CAA, Water Supply Can Be Handed Over To ULB In A Phased Manner

- Additional Staff On Deputation
- Capacity Building
- Stream Lining Of Institution

Wastewater Diagnostics

- **Coverage Of Toilets**
  43% Population In Non Slum Areas , 100% Coverage Of Individual Toilets.
  ~2000 Individual Toilets In Slum (*Ongoing Survey)* And 2308 Community Toilet Seats (1438 MMR + 870 AMC).
  Average Number Of Users Per Seat 63. MoUD WSP Norm 50 users.

- **Coverage Of Waste Water Network System**
  Total Length Of Underground Sewerage Network Is 49 Kms ,Open Drains Is 47.83 Kms Against The Total Road Length Of 189 Kms.

- **Adequacy Of Waste Water Treatment**
  1 STP Of 28 MLD Capacity. ***Refurbishment Works In Progress.*** Sewer Network Project Proposed.

- **Extent Of Cost Recovery In Waste Water Management**
  Present Cost Recovery In Waste Water Management Is ***Nil***. **Sewerage Tax Levied From 1st April 2011 As Per New By Laws.**

- **Efficiency In Collection Of Sewerage Related Charges**
  Present Cost Recovery In Sanitation Is ***Nil***. **Sanitation Tax Levied From 1st April 2011 As Per New By Laws.**

- **Prevalent Problem Of Open Defecation**
  OD Along Railway Line And Open Spaces Around Slum Settlements. ***Insufficient Number Of Seats And Poor Maintenance.***

Wastewater Diagnostics -Open Drains/Nallahs

Wastewater Diagnostics -Open Drains/Nallahs

Wastewater Diagnostics -Vadalgaon STP

- Present Capacity Is 28 MLD
- STP Dysfunctional Since Deluge Of 2005
- Refurbishment Expenditure And Capacity Augmentation (43 MLD) Estimates Stand At 23.2 cr.
- 3 Phase connection Is Being For Transformer.
- Work In Progress.

Wastewater Diagnostics- Toilets

Access To Toilet In Slums

- Slum Population (2011) : 1,46,395
- No Of Slum Household (2011) : 29,761
- No Of Individual Toilets : ~2000
- Coverage Of Individual Toilet In Slums : ~6.7%
- No Of Toilet Blocks (Nirmal Abhiyan) : 72
- No Of Seats In Nirmal Abhiyan Toilet Blocks : 1438
- No Of Community Toilet Blocks (AMC) : 93
- No Of Seats In AMC Run Community Toilet : 870
- No Of Person Dependent On One Community Toilet Seat : 63 person per seat

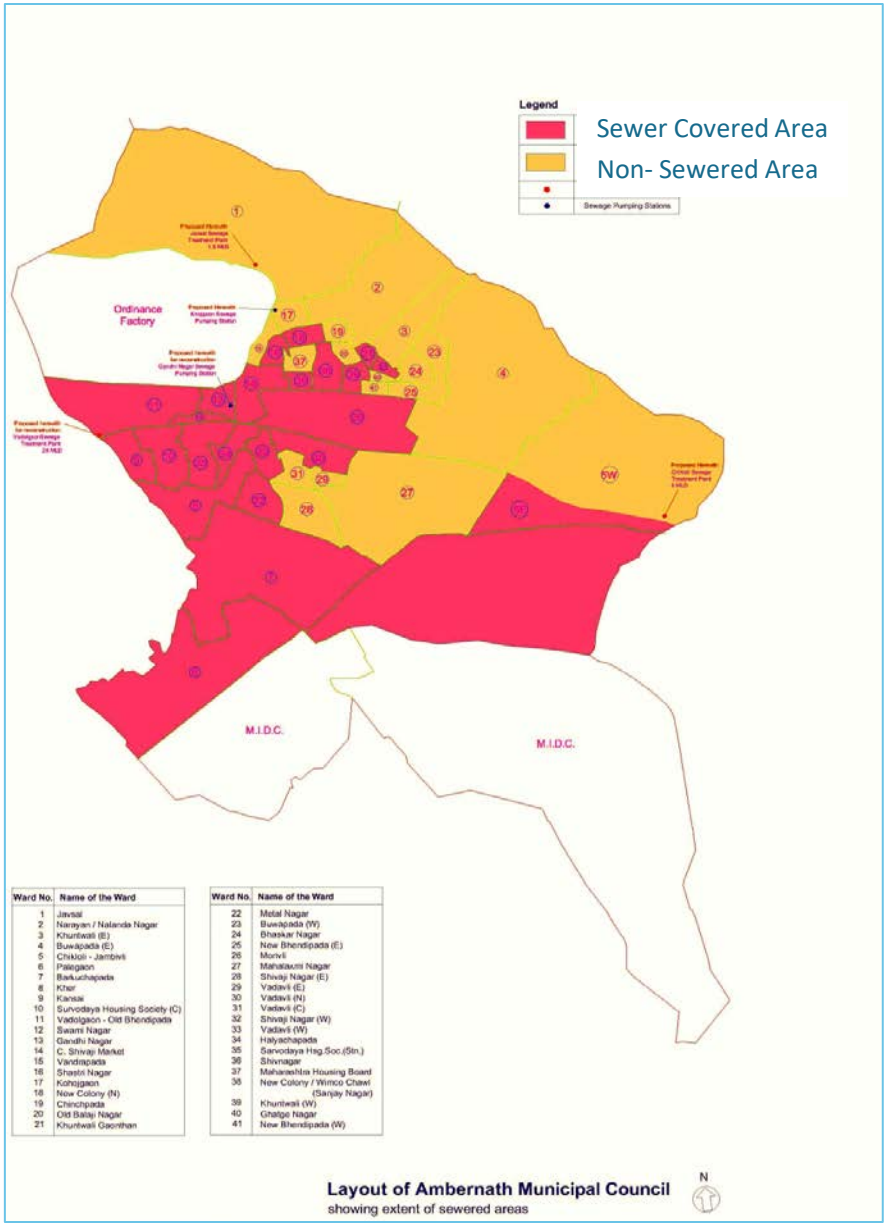
(Norm: Nirmal MMR Abhiyan 40 Users Per Seat)

- No Of Individuals Without Proper Toilet Access : 46,160 (31%)

Wastewater Diagnostics- Sewerage

- Partially Functional Sewer System
- No Of Wards Covered With Underground Sewerage System: 22
- 43% Properties Covered With Sewer Network
- Sewage Treatment And Disposal: 28 MLD Treatment Plant With One Primary Treatment Facility
- STP Became Non-functional Due To Floods In 2005.Repair Works In Progress.
- Underground Sewerage Extension And Augmentation Scheme Is Proposed Under JNNURM

Type Of Housing	Number Of Connections	Number Of Seats
Individual (Bungalows)	133	133
Building (Flats)	452	9702
Individual (Slums)	552	552
Public Toilet Seats	128	1664



Wastewater Diagnostics- Community Toilets

Nirmal Abhiyan MMR Seats: 1438

- No Of Community Toilet Blocks Constructed: 72
- No Of Seats Constructed: **1438**
- NGO/CBO Runs The Community Toilets
- Family Has To Pay Rs. 40 Every Month

Major Issues:

Presently 15blocks (300 seats) are still non operational due to delays by CBOs.

- Not Willing To Pay Rs 40 Per Month
- Every Toilet Block Has Not Connected To Bore Well
- Day To Day Cleaning Issue
- Theft, Destructive Mind Set As Ownership Not Belongs To People
- High O&M Cost Compare To Income (Electricity Cost, Manpower Cost Etc)

AMC Toilet Seats : 870

- AMC Runs Community Toilet:
- No Of Community Toilet Blocks : 93
- No Of Seats : **870**
- AMC Runs The Community Toilets
- Free Toilets

Major Issues:

- Irregular Cleaning Of Community Toilet
- Bring Water From Home (Carry Less Quantity)
- Dumping Of Solid Waste At The Community Toilet Place
- Children Used To Defecate Openly Just At The Entrance Of Such Locations

Grand Total
MMR+AMC=
1438+870=
2308

Sanitation Diagnostics- Nirmal MMR Toilets - Functional

Sanitation Diagnostics- Nirmal MMR Toilets – Non Functional

Sanitation Diagnostics - AMC Community Toilets - Functional

Wastewater Diagnostics – Open Defecation Sites

Sanitation Diagnostics – Open Defecation Sites

- Major Defecation Sites Are Found Near Community Toilet, Open Drains And Forest Land

Wastewater -Actions And Interventions For Improvement Infrastructure Gap – Scenario- 1

Bridging Infrastructure Gap Through Provision Of Public Toilets

Presently Number Of Toilet Seats	2308 (1438+870)
Total Number Of Individuals Without Proper Access To Toilets (31%)	46,160
Number Of Public Toilet Seats Required To Bridge Infrastructure Gap	1154

40 Seats Norm

Demolition Of 93 AMC Community Toilet Blocks,870 Seats

↓

Construct 2000 Nirmal MMR Seats

↓

Infrastructure Gap Bridged

↓

Improved Sanitation To Population Of 1,37,000

↓

100% Open Defecation Free

- Cost Of Per MMR Toilet Seat =Rs 1,20,000
- Number Of Seat Required To Bridge Infrastructure Gap= 1154
- Number Of Toilet Seats To be Constructed=2000
- Total Investment Required To Bridge Gap: Rs 24 Cr
- Mode Of Financing: 100% Grant From Nirmal MMR Abhiyan II (MMRDA)/ State Govt/Central Govt

Wastewater -Actions And Interventions For Improvement Infrastructure Gap – Scenario- 1

Bridging Infrastructure Through Provision Of Individual Toilets

Major Barriers

Lack of Space
Affordability
Non Ownership

Presently Number Of Toilet Seats	2308 (1438+870)
Total Number Of Individuals Without Proper Access To Toilets (31%)	46,160
Presently Number Of Individual Toilets Required To Bridge Infrastructure	9232

Need To Construct 9232 Seats

↓

Detailed Slum Survey
Assessing Socio Economic Status, Slum Layout . Demand .

↓

Slum Surveys under Dalit basti etc

↓

No O&M Expenditure ULB

↓

Lasting Solution

- Cost Of Per Individual Toilet Seat =Rs 12,000 (without septic tanks)
- Cost Of Per Individual Toilet Seat =Rs 15,000 (with Group Septic Tanks)
- Number Of Seat Required To Bridge Infrastructure Gap= 9232
- Total Investment Required To Bridge Gap: **Rs 13.8 cr**
- Mode Of Financing:1:2
- 33% Cost Borne By Beneficiary (4.54 Cr)
- 66% Cost Borne By Grant/Loan (9.26 Cr)

Wastewater -Actions And Interventions For Improvement Infrastructure Gap – Scenario- 3 (2021)

Bridging Infrastructure Through The Provision Of Public Toilets And Individual Toilets

	Population 2011	Population 2021
City Population	2,56,000	3,01,536
Slum Population	1,46,395	1,68,000
With Present Infrastructure (1438+870)		
Number Of Individuals With Proper Access To Sanitation	92,320	92,320
Number Of Individuals Without Proper Access To Sanitation (31%)	54,075	84,525
With Provision Of Individual Toilets In Slums (~40% HHs)		
Number Of Individuals With Access To Individual Toilets	NA	20772 (4154 HHs)
Number Of Seats	-	4,154
With Increased Seats (1438+2000)		
Additional Number Of Individuals With Proper Access To Improved Sanitation	45,200	45,200
Total Number Of Individuals With Access To Improved Sanitation	1,37,520	158,292

SNA Survey 'Bheem Nagar'

- Cost For Construction Of 2000 Seats **24 Cr**
- Cost For Construction Of 4154 Individual Seats **6.2 Cr**

Funding Of 30.5 Cr Required

Wastewater –Way Forward

Slum Wise Situation Analysis And Prioritization

Done

No Infrastructure Gap – Zero Investment Required	No Overloading Per Seat
Minimum Infrastructure Gap – Low Investment Required	Minimum Overloading Per Seat 50-70 users per seat
Moderate Infrastructure Gap –Medium Investment Required	Moderate Overloading Per Seat 70-100 users per seat
Large Infrastructure Gap – High Investment Required	High Overloading Per Seat More than 100 users per seat
No Infrastructure – Very High Investment Required	No Infrastructure

On Going

Slum Surveys

Household Survey

Availability Of Infrastructure
Availability Of Space
Affordability
Willingness
Identification Of Beneficiaries
Slum Layout

Identification Of Slum Pockets For Pilot Execution

DPR and Design

Wastewater –Way Forward

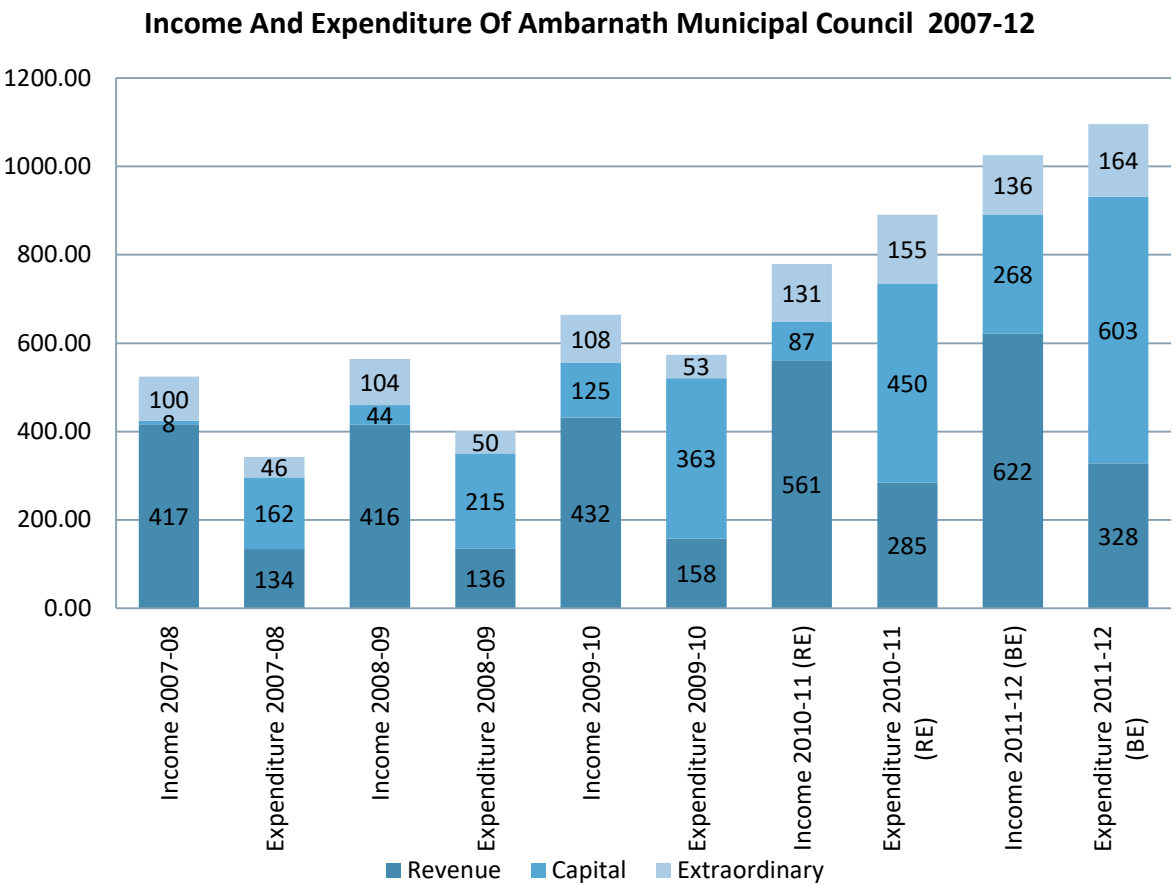
Issues In Sanitation	Probable Solutions
Inadequate Sanitation Facilities In Slums	Construction Of Additional Seats Provision Of Individual Toilets Based On Need And Feasibility Analysis
High Average Number Of Users Per Seat 63 Some Slums Average number Of Users Per Seats More Than 200 Community Toilets Require Severe Refurbishment	Outsource O&M single large scale party And Competitive
Open Defecation And Poor Maintainace Of Community Toilets	Refurbishment Of Community Toilets IEC Campaign
Presently No Treatment Of Waste Water, Directly Into Nallahs	Reconstruction Works At Vadalgaon (43 MLD) Chikloli STP (8 MLD) Buy Septic Tank Emptiers
Inadequate Sewerage Network	Increase Sewerage Network Construction Of New Pumping station

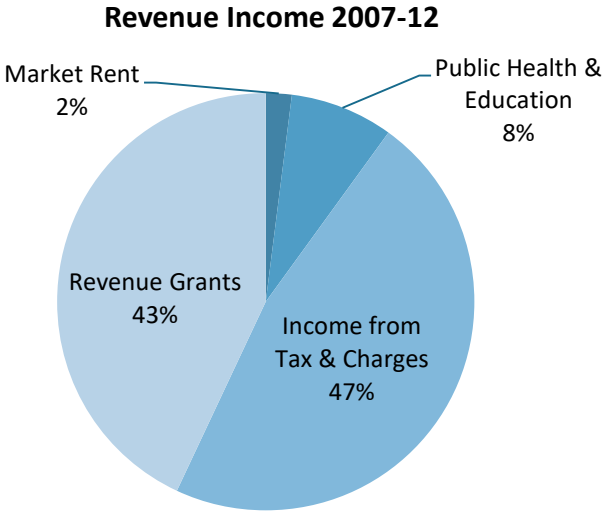
Municipal Finance- Area of Intervention in UWSS for Ambarnath

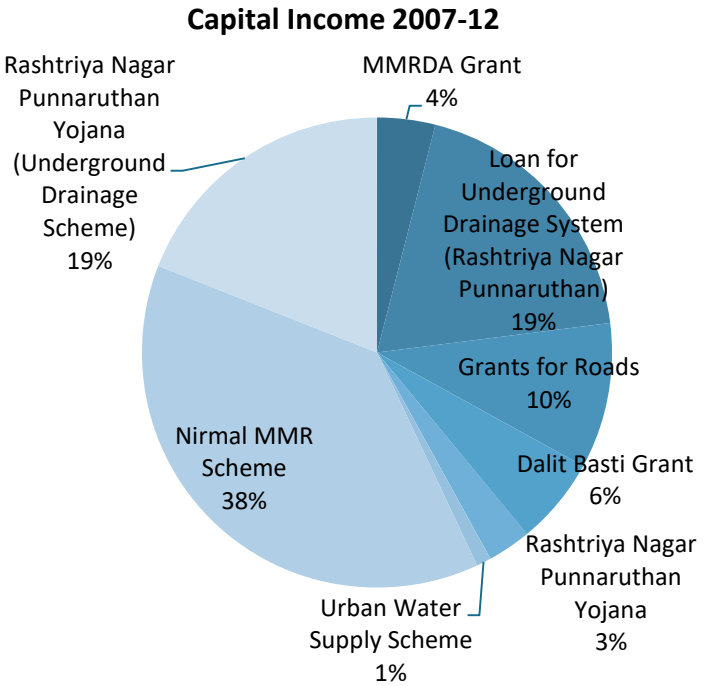
Sector	Activity	Cost (In Rs Cr)	Number Of Years
Medium Term Investment			
Sanitation	Service Level Survey In Slums (Toilet Survey)	0.25	1 Year
Sanitation	Option 1: Construction Of Community Toilet Seats (MMR)	24	5 Year
	Option 2: Construction Of Individual Toilet Seats	13.8	5 Year
	Option 3: Construction Of Individual Toilet (As Per Demand) Construction Of Community Toilet (MMR)	30	10 Years
	Option 3 and SLB Toilet Survey	30.25	
Long Term Investment			
Water Supply	24x7	77 .44	30 years
Sanitation	Under Ground Sewerage Network	114	30 years

Maximum Investment Required For 24 x7 and ODF is 113.29 (0.15 Cr 35.6 Cr + 77.44 Cr)

Municipal Finance- Income and Expenditure







Finance- Ambarnath

Rs in Millions

Year	2007-08	2008-09	2009-10	2010-11 (Revised Estimate)	2011-12 (Budget Estimate)
Revenue Income	424	462	555	648	789
Revenue Expenditure	134	136	158	285	328
Surplus/Deficit	290	326	397	363	461
Capital Income	8	44	125	87	268
Capital Expenditre	162	215	363	450	603
Surplus/Deficit	-155	-170	-238	-364	-335

Year	2007-08	2008-09	2009-10	2010-11 (Revised Estimate)	2011-12 (Budget Estimate)
Income (Including Opening Balance)	524	567	663	779	1025
Expenditure (Including Closing Balance)	343	401	574	891	1096
Surplus/Deficit	182	166	89	-112	-70

Revenue budget is showing surplus and transfer to capital budget

Solid Waste Management Diagnostic

MSWM Department – Organogram

Chief Officer

Head of the Department (Health Officer)

Sanctioned : 1
Filled: 1

Sanitary Inspector

Sanctioned : 8
Filled: 6

Supervisor

Sanctioned : 10
Filled: 5

Safai Kamgar

Sanctioned : 650
Filled: 545

Road Sweeping
Nallah Sweeping
Market Sweeping
Offices Sweeping
Municipal Hospital Cleaning
Pest control

Before 2010

Ambarnath East,19 wards:

- Door-to door 'Mahila Bachat Gats' local rag-pickers.
- Deposited at a predetermined location.
- Transported to dumping site through trucks.

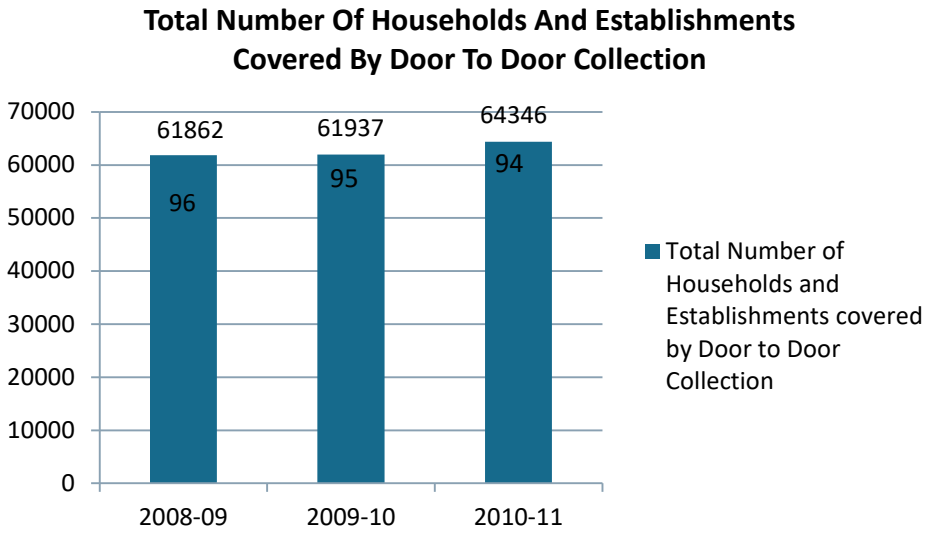
Ambarnath West, 28 wards:

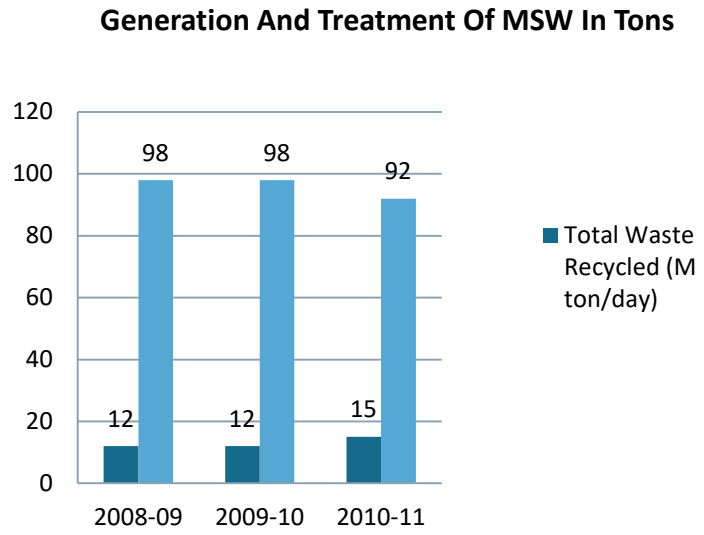
- No door-to-door collection system.
- Disposal near location/ bins in their locality by households.
- Picked up and ttransported to dumping site through trucks.

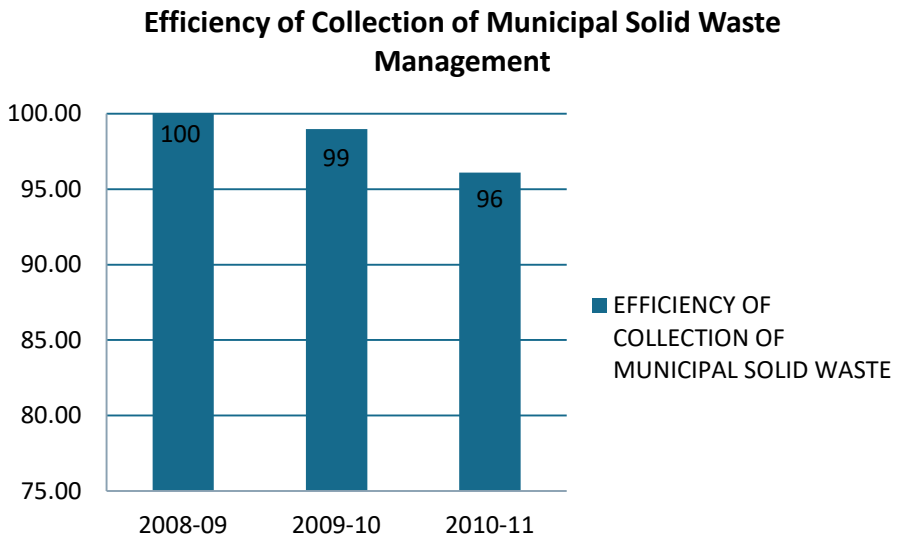
2010 Onwards

Outsourced to Private Contractor

Solid Waste Management Diagnostic

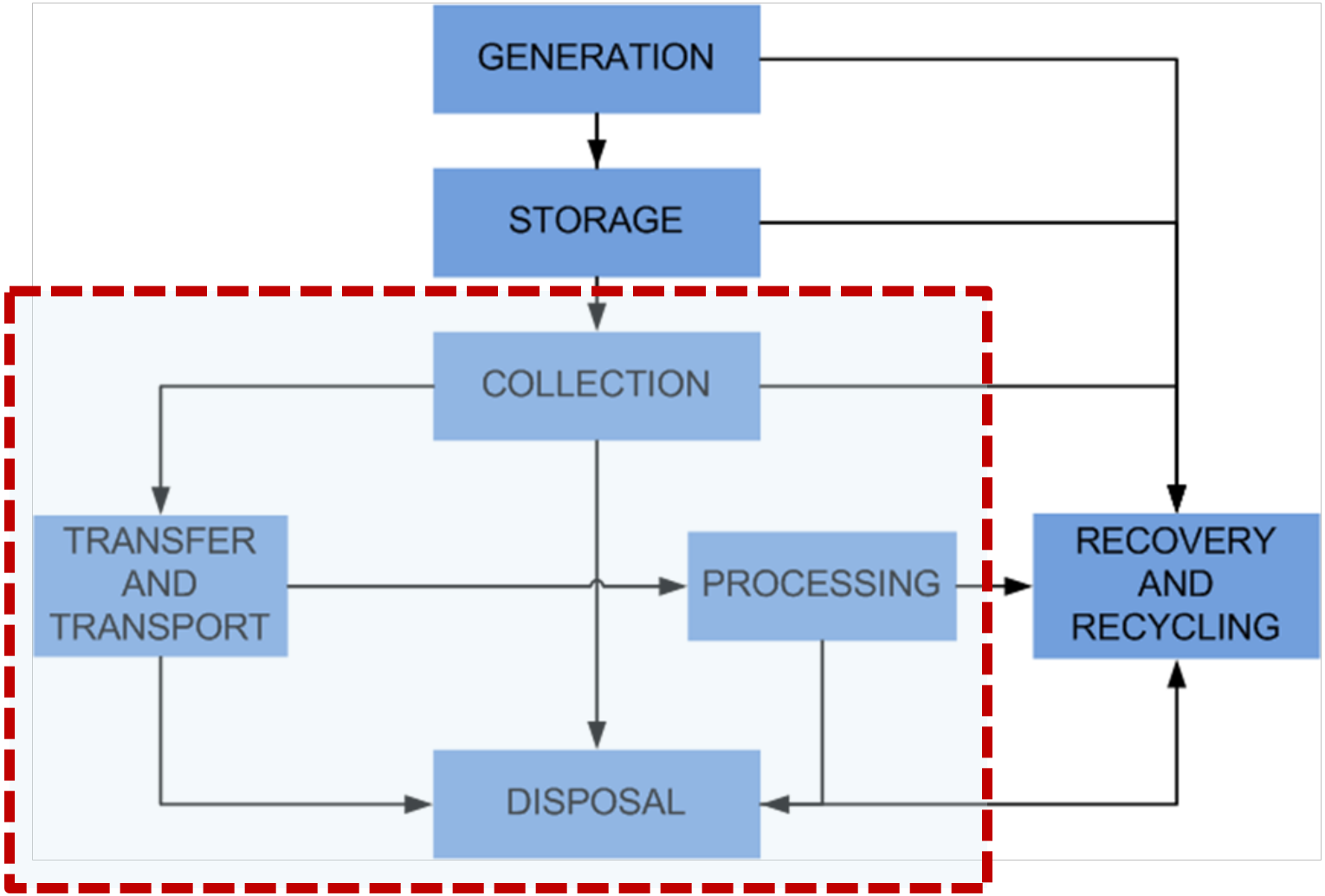




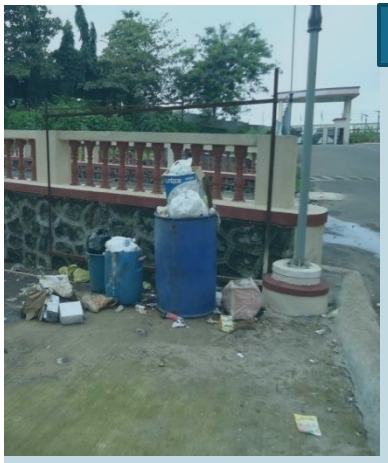


Solid Waste Management Diagnostic

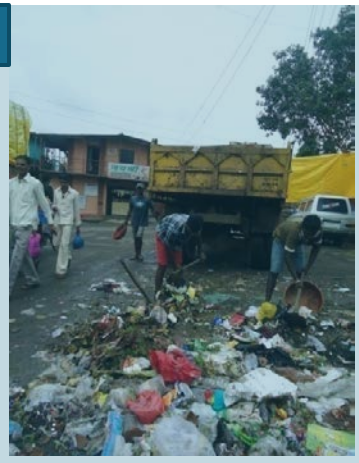
Value Chain



SWM- Value Chain



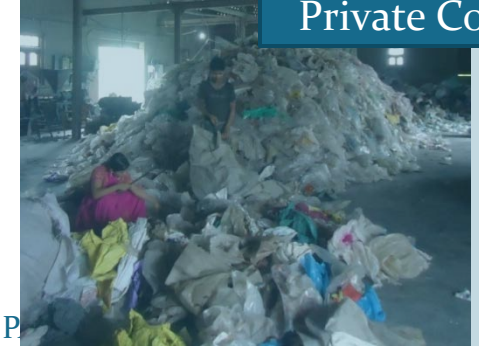
Contract



AMC

Contract

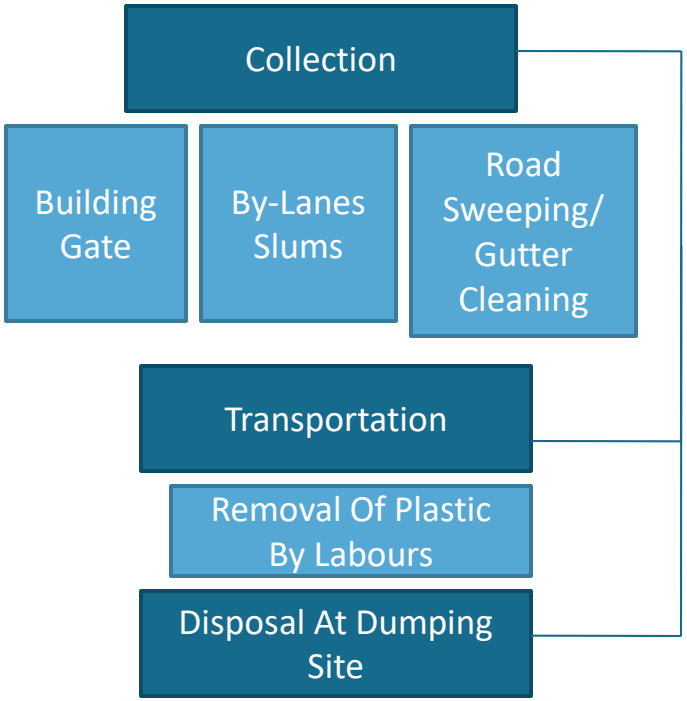
Private Company



Private Land (Disputed)

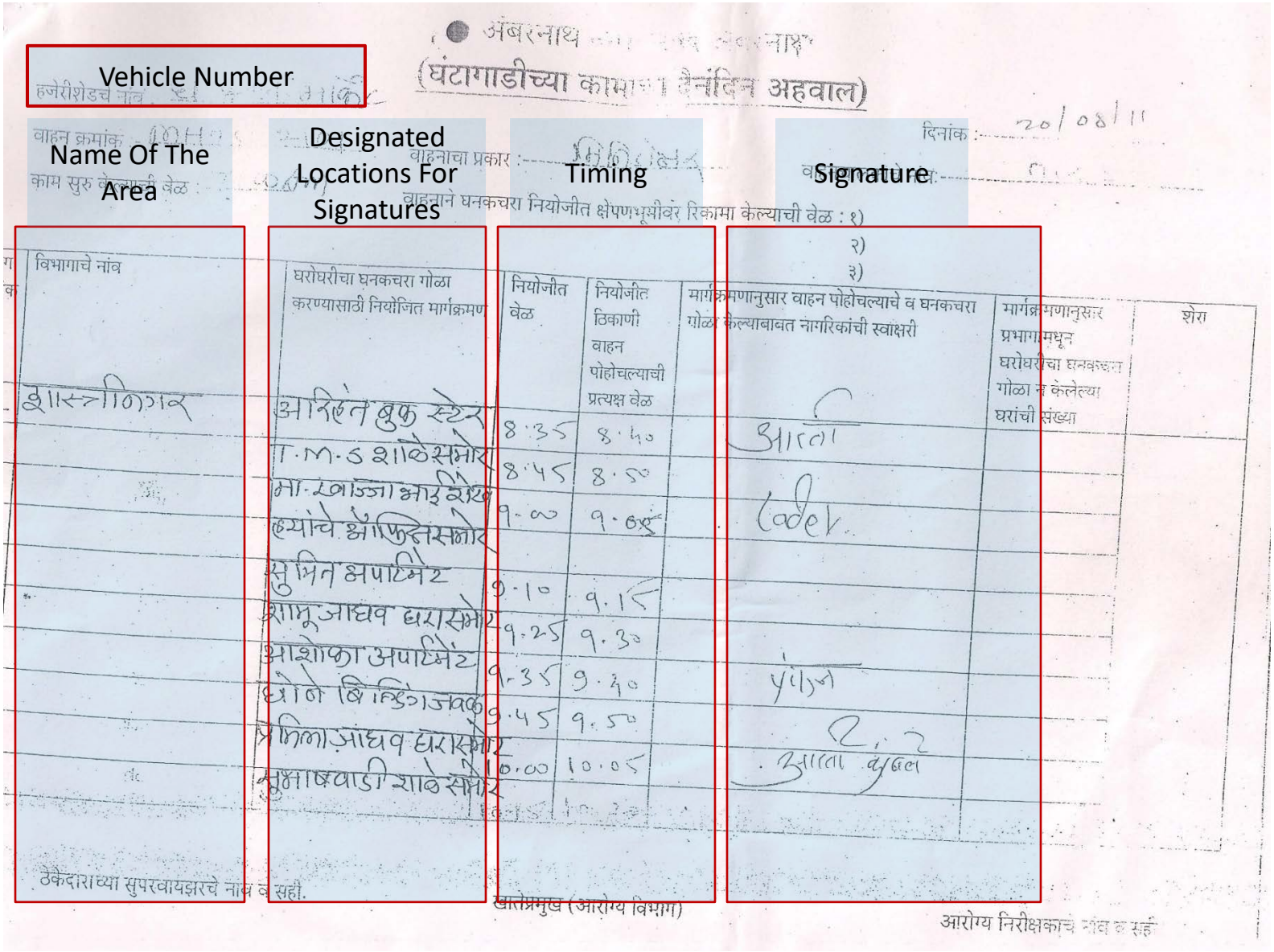
SWM- Contract

Details Of Private Contracts	T & C	Value Of Contract
M/S Panvelkar & Co From Source To Dumping Site (January 2010 to December 2015)	Door to door collection, transportation to dumping site	55,000 per day
	Use Of Dumper, Minidor, Trolleys provided by AMC	Rs 100 per trolley per day
	Providing 25 labours to work at Vermi-composting site	Rs 3300 per labour per month
	Transport Of excess Solid Waste from common landfill site (MMR)	Rs 700 per ton



Type Of Vehicle	Number Of Vehicles	Number Of Trips
Truck/Dumper	7	5
Tractor/Trolley	10	3-4
Minidor	13	3-4
Packed Dumper	1	3-4

SWM – Contract Monitoring



अंबरनाथ

(घंटागाडीच्या कामाचा दैनंदिन अहवाल)

Vehicle Number

Name Of The Area

Designated Locations For Signatures

Timing

Signature

दिनांक : 20/08/11

वाहनाचा प्रकार :

वाहनाने घनकचरा नियोजीत क्षेपणभूमीवर रिकामा केल्याची वेळ : १)
२)
३)

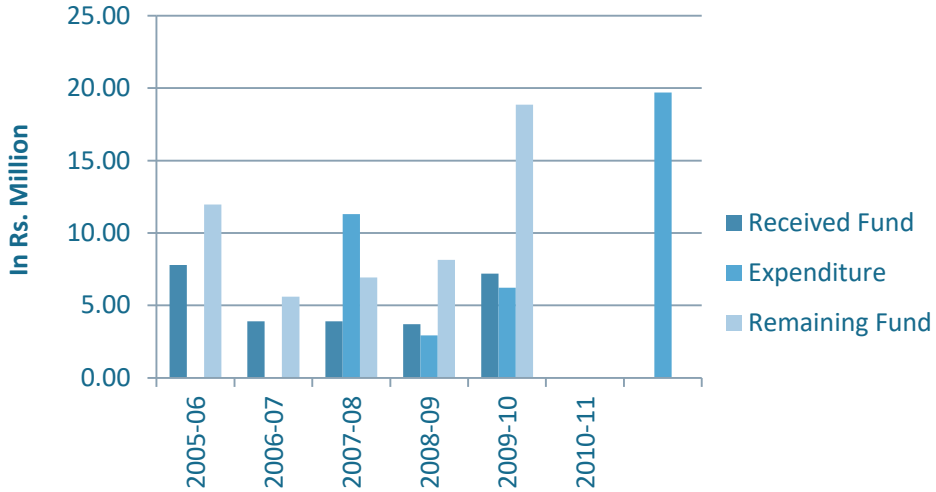
विभागाचे नांव	घरोघरीचा घनकचरा गोळा करण्यासाठी नियोजित मार्गक्रमण	नियोजीत वेळ	नियोजीत ठिकाणी वाहन पोहोचल्याची प्रत्यक्ष वेळ	मार्गक्रमणानुसार वाहन पोहोचल्याचे व घनकचरा गोळा केल्याबाबत नागरिकांची स्वाक्षरी	मार्गक्रमणानुसार प्रभागामधून घरोघरीचा घनकचरा गोळा न केलेल्या घरांची संख्या	शेरा
शास्त्रीनगर	आदिनाथ बुक स्टोर	8:35	8:40	आरती		
	T.M.S शाळेसमोर	8:45	8:50			
	मा. खाज्जा भाईशेख	9:00	9:05	Cader		
	त्यांचे ऑफिससमोर					
	सुमित अपार्टमेंट	9:10	9:15			
	शामू जाधव घरासमोर	9:25	9:30			
	आशोका अपार्टमेंट	9:35	9:40	पांडुरंग		
	धोबी बिल्डिंगजवळ	9:45	9:50			
	प्रमिला जाधव घरासमोर					
	सुभाषवाडी शाळेसमोर	10:00	10:05	आरती बुधल		

ठेकेदाराच्या सुपरवायझरचे नांव व सही.

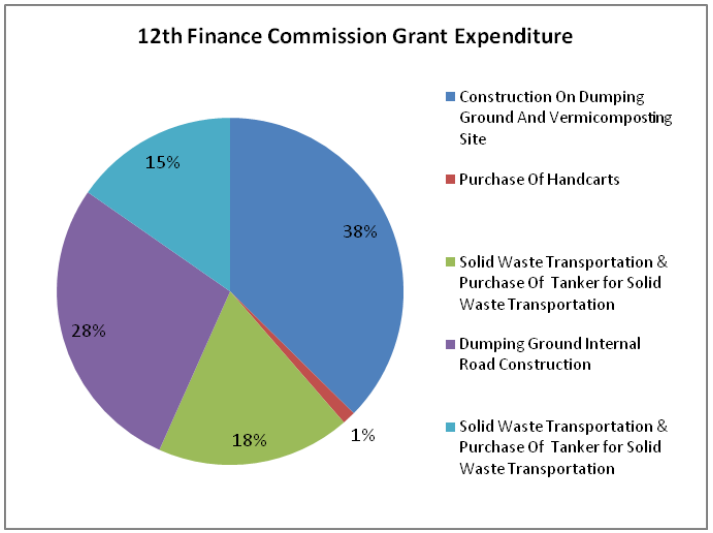
खातेप्रमुख (आरोग्य विभाग)

आरोग्य निरीक्षकाचे नांव व सही

12th Finance Commission Grant SWM



Rs 70.9 million received as grant., Rs 50.5 million is unused. It proposed to use funds to pay private contractor.



More than 38% , 15.19 million spent on Construction of landfill site and Vermi composting site. Opposition from neighbouring villagers , the site is abandoned.

SWM Processing Site

Vermi composting

Internal Roads

Land Fill Site

SWM - Recycling

- Capacity 15-20 tons per day
- Reduces pressure on dumping site
- Income for Rag- Pickers

SWM Bylaws 2011

User charges on following services:

- Collection of solid waste
- Transportation of MSW
- Segregation of wastes
- Promoting recycling or reuse of
- segregated materials
- Scientific Disposal of un reusable solid waste

Penalty has been imposed since June 2011 for anyone disposing waste in the open. The following rates are charged:

	Minimum In Rs	Maximum In Rs
Residential charges per House per month (50 % discount for BPL families)	30	100
Shops (General Stores, Hair cutting salons etc)	100	500
Hotels, Mess, Milk dairy etc	300	1000
Mangalkaryalaya, Movie Theatres, Hotels	500	5000
Industrial and commercial Institute	1000	10000

Rs1,50,000 has been collected in the last 2 months

	Minimum In Rs	Maximum In Rs
Open Defecation	50	200
Road Vendors	100	1000
Dumping Debris or Construction Materials On Road	1000	10000
Industrial Waste	10000	100000

SWM : Actions and Interventions for Improvement

Issues In Solid Waste Management	Probable Solutions
Door to door collection not happening in 100% areas	Organizing CBO's In Slums Incentivizing Contractor Strategic IEC Campaign (Funds Available) Unbundling Of Activities
57% Population Lives In Slum Areas.	
Proximity Issues	
Non Co-operation By Citizens	
Dumping In Open Areas And Nallahs	
SWM Contract Monitoring Insufficient	Performance Based Contracts Periodic Monitoring Of Performance
Dumping Ground Capacity Exhausted Land Ownership Disputed	Settle Ownership Dispute Create SLF Site On Present Dumping
Demarcated ____ Hectares Of Land For SWM Unused Currently Unusable	Revive Site For Other Purposes

Thank You