

Moving AKOT towards ODF+ through FSSM

Prepared for

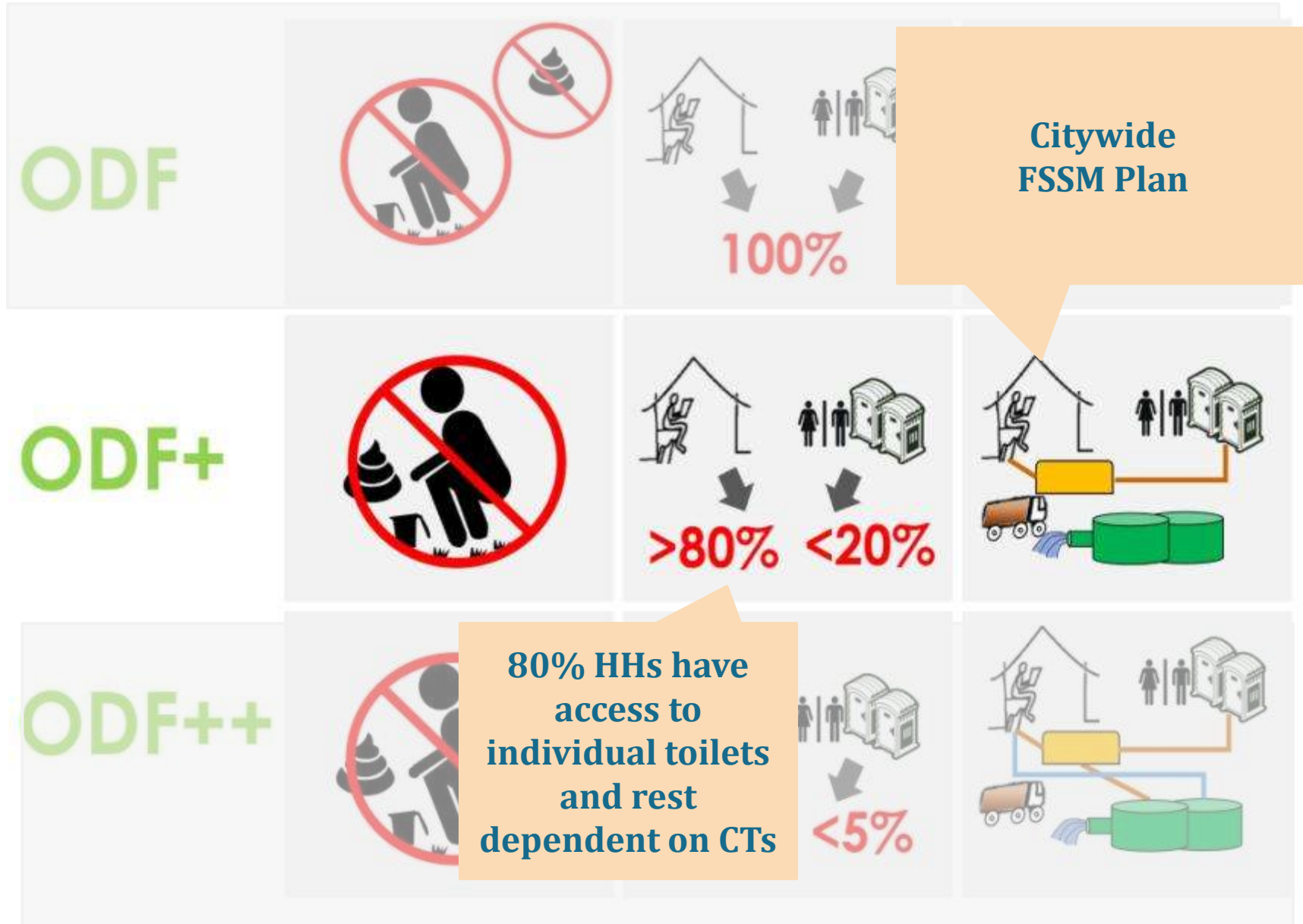
Akot Municipal Council

April 2018

Support Akot Municipal Council
for moving towards ODF+
through Faecal Sludge and Septage Management
(FSSM) Plans

Timeline of support – August 2017 to December 2018

Concept of ODF , ODF +, ODF ++ by GoM



Content

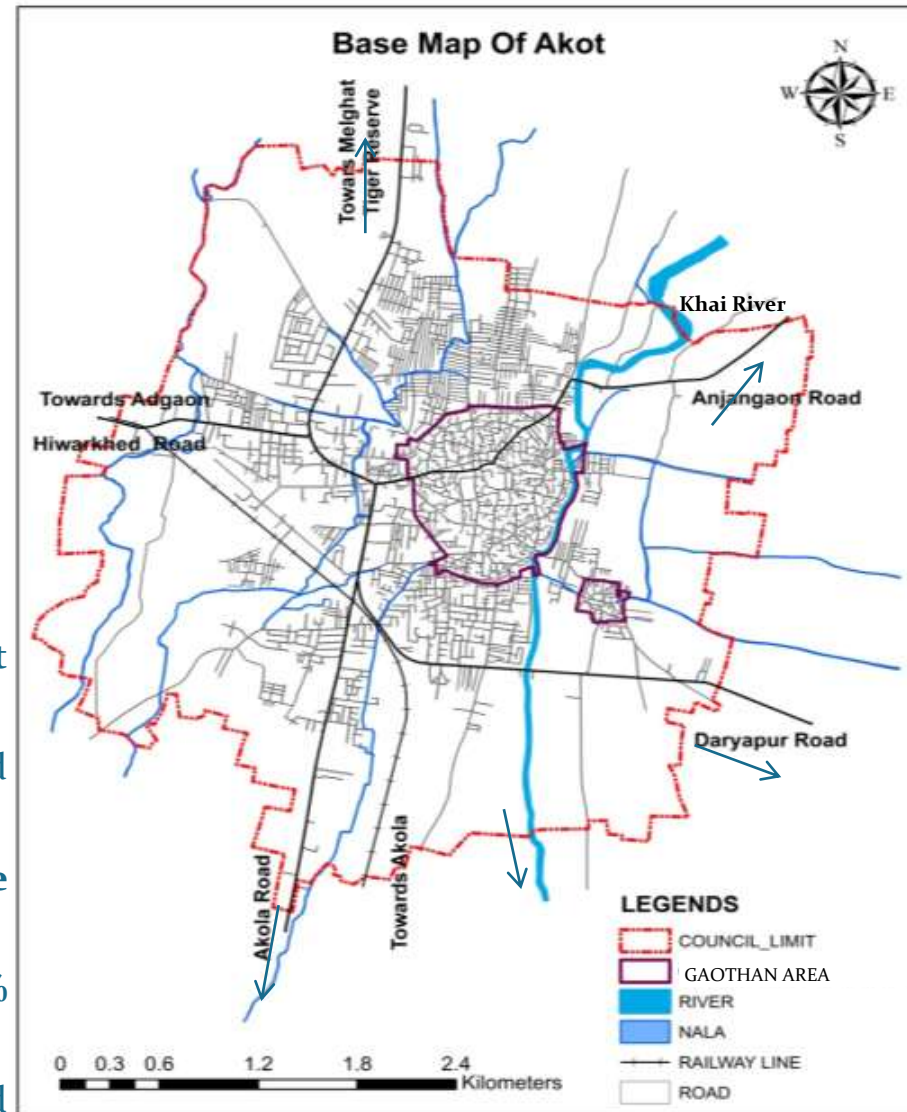
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1. Introduction

Introduction



- Akot is a class B council located **38 km north of the district headquarter, Akola.**
- Akot is the taluka headquarter having **population 1,00,000** and geographical area is **14.73 sq.km**
- Most of the **population engaged in Commercial , Agriculture and education** sector.
- Economy of the city depends on Commercial activities as **52% population is engaged in Tertiary sector.**
- City well connected to the Akola, Anjangaon, Hiwarkhed and Paratwada .
- **Akot declared as ODF in July 2017 by QCI**



Sources: mapsofindia, Akot DP

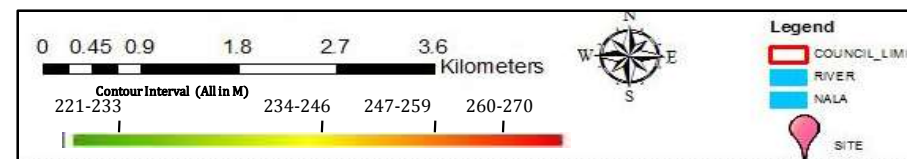
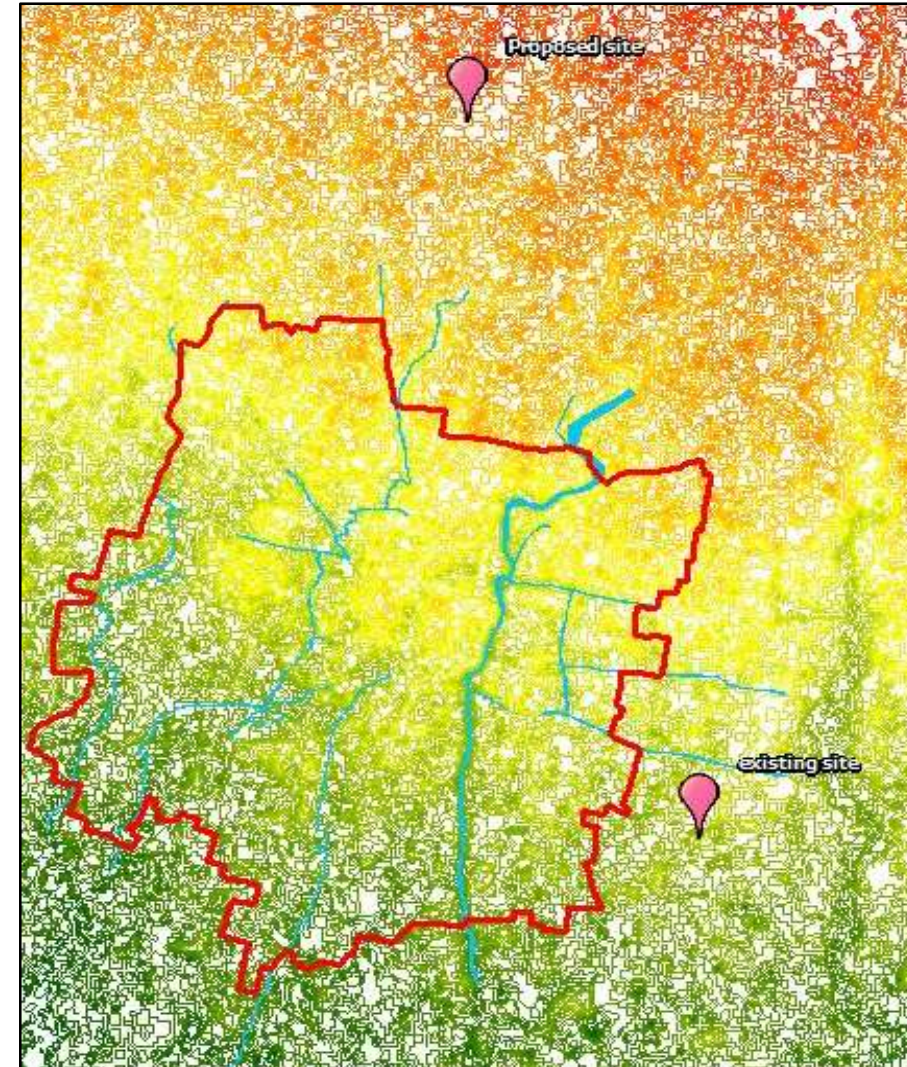
Introduction: Demographics & Topography

Demographic Details

Details	2011	2017
Population	92,637	1,00,000
Number of HH	18,061	19,692
Slum population	26%	27%
Average HH size	5.12	5.06
Sex Ratio	1000:960	-
Literacy Rate	70.08%	-

	2001-2011	2011-2017
Growth Rate	15%	7.94%

Sources: Census 2011, PAS SLB Data 2016-17, M.C Akot



Topography

- Akot town is situated in Tapi -Purna river basin.
- Purna river and 5 to 6 nalas flows towards the south of the city as terrain has a slope from north to south .
- Maximum average rainfall of town is 422 mm.
- City has black cotton soil
- Average Ground Water Level – 30 M

Introduction: Slum Details

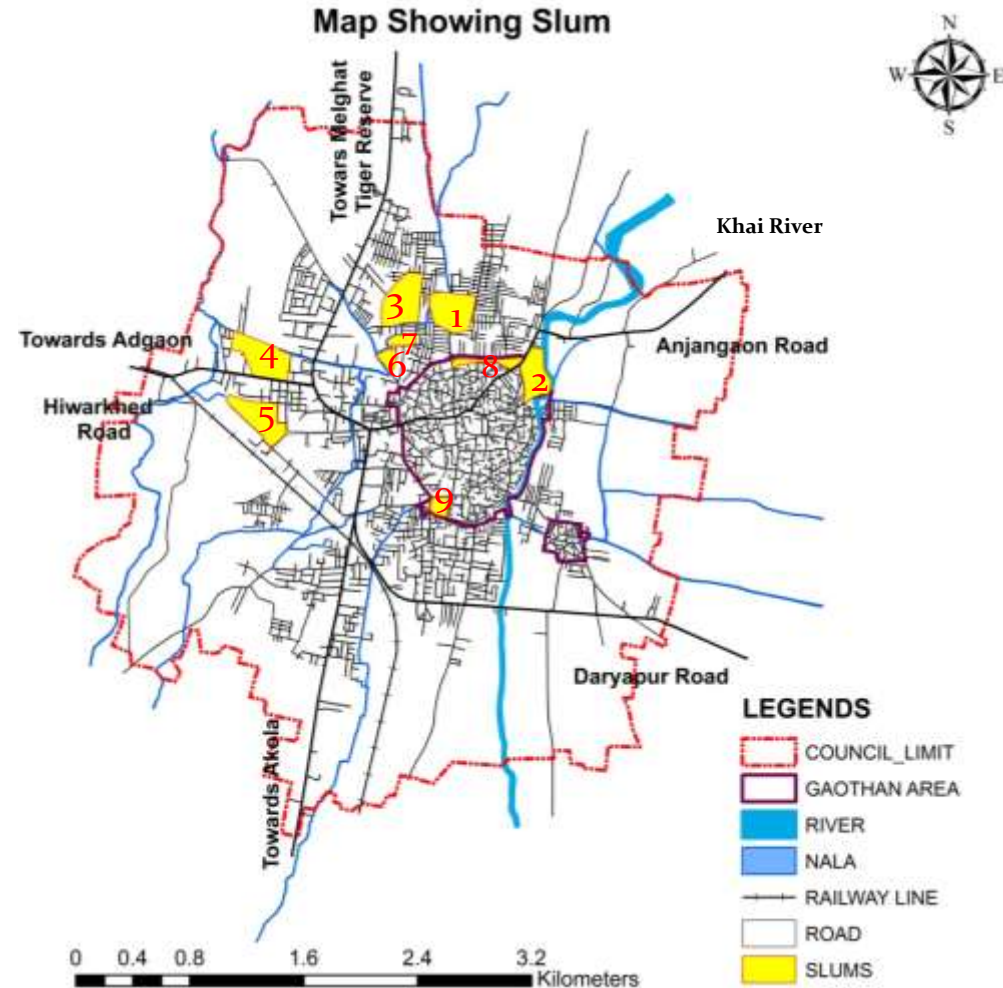
Slum Profile

Entity	2011	2017
% of Slum Population	23.66%	27.03%
No. of Slum HHs	4,394	4,842
Population in Slums	21,975	25,687
No. of Slums Notified by State	15	9

Source: Census (2011), Field visit (2017)

List of Slums

Sr. No.	Slum Name	Ward No.	Population
1	Iftekar plot	1	9,318
2	Dohar pura	2	2,162
3	Aminpura	4	3,326
4	Gazi plot	6	1,852
5	Indira nagar	7	2,088
6	Pathardi jin	9	190
7	Hanuman nagar	10	2443,
8	Navbudhha pura	12	208
9	Mehatar pura	26	4,100
Total			25,687



Ongoing and implemented programs in Slums

- **Ramai Awas Yojana** (Started- 2014, Beneficier-SC category HH under Poverty line ,Subsidy- (1.5 Lakh): target was construction of 1027 houses with toilet facility out of which 927 are constructed and 100 are remaining.
- **PMAY:** 7,164 applications are received so far but construction is yet to start.

Wardwise Application

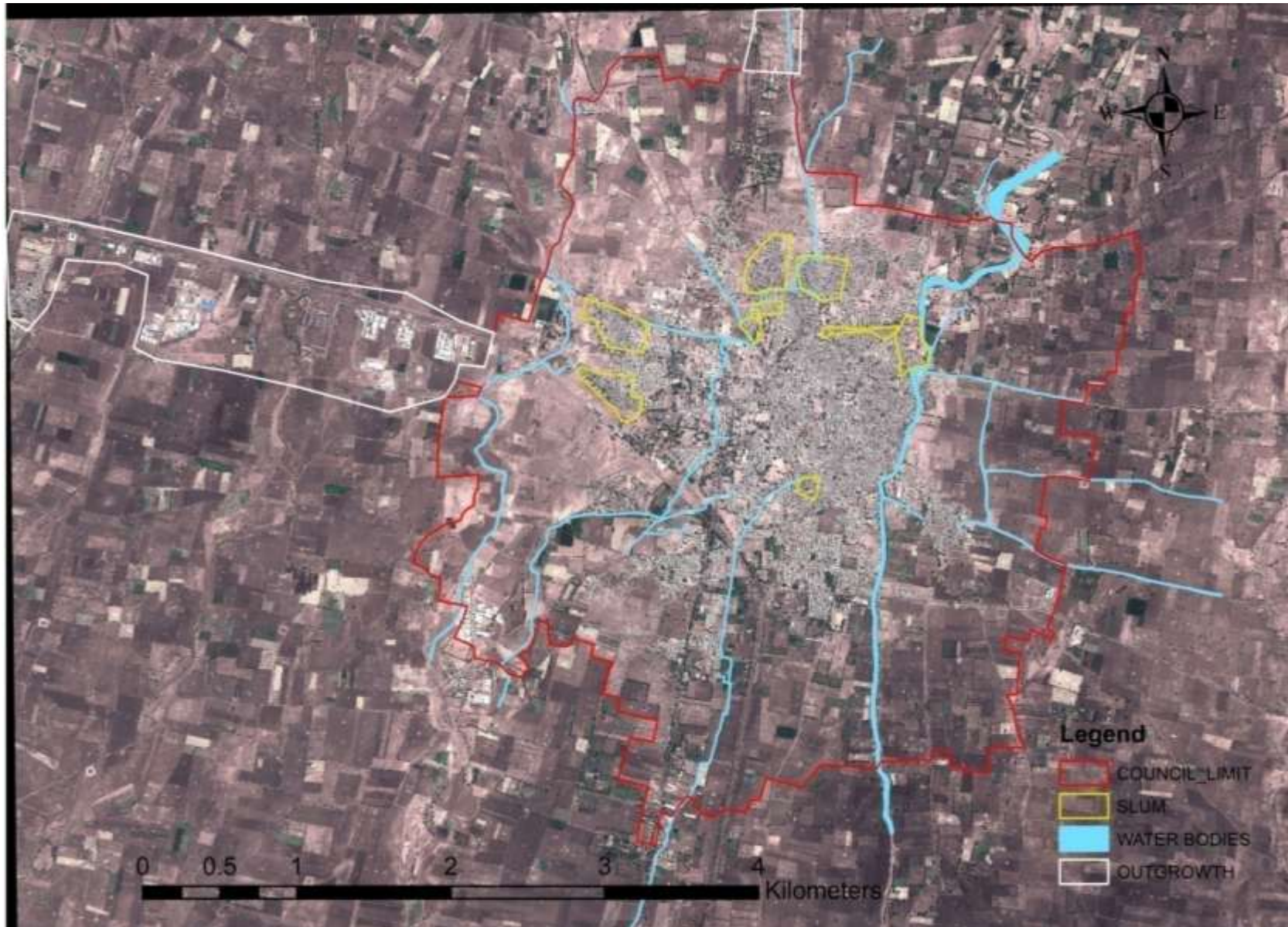
Wards	Application
1	249
2	281
3	844
4	483
5	243
6	176
7	122
8	215
9	261
10	293
11	338
12	260
13	307
14	504
15	427
16	281
Total	5,284

Slum wise Application

Slum	Ward No.	Application
Hanuman Nagar	10	177
Pathardi Jin	9	107
Aminpura	4	359
Iftekar Plot	1	353
Navbudhha pura	12	10
Doharpura	2	164
Gazi Plot	6	180
Indira Ngar	7	272
Mehatar Pura	26	144
Guzar Plot		114
Total		1,880

* Guzzar plot is a slum like area.

Settlement pattern and natural features

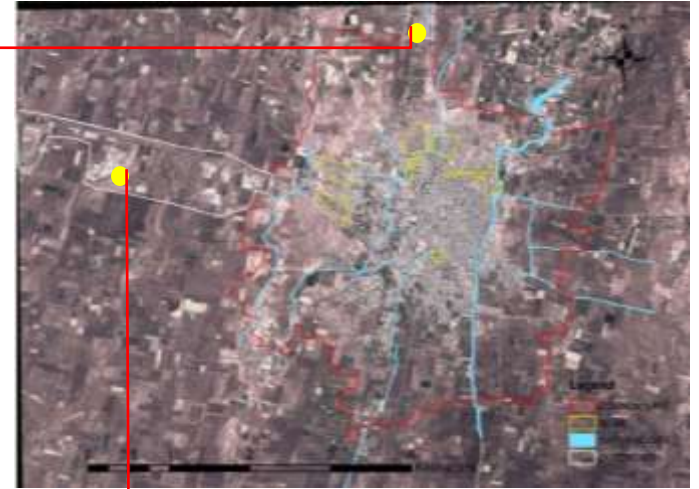


Outgrowth Areas



ITI college beyond the municipal limit towards the north along road to Melghat

Currently major growth of the city is within the municipal council limits only. Some outgrowth is observed along the road in the North (towards Melghat) and West (towards Hiwarkhed) part of the city.



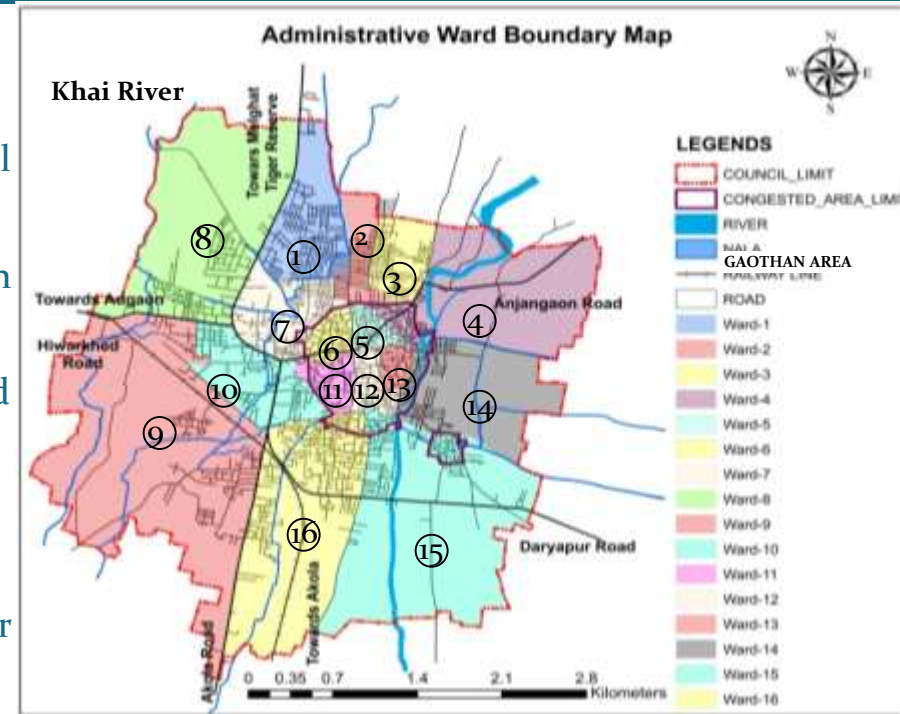
Village and industries beyond the municipal limit towards west along the Hiwarkhed road

- Village named Wadali Satwai is located to the west
- Population of the village is 2062 with 424 households

Introduction: Administrative Boundary

Administrative wards

- ❑ The city has 16 administrative wards
- ❑ Ward no 5,6,11,12,13 comes under Gaothan area limit and small area covered by Ward no.1,4,15,16 of Gaothan area.
- ❑ Wards within Gaothan area limit has high density and involves high commercial and public semi-public land use.
- ❑ Those wards outside the Gaothan area limit has low density and mostly covered by agricultural land .
- ❑ Khai river flows through 4,14 and 15 no. wards.
- ❑ MIDC area is recently developed in ward no.9.
- ❑ The new spatial development is going along Akola and Daryapur road which comes under ward no.9,15 and 16 i.e. Sothern side of city.



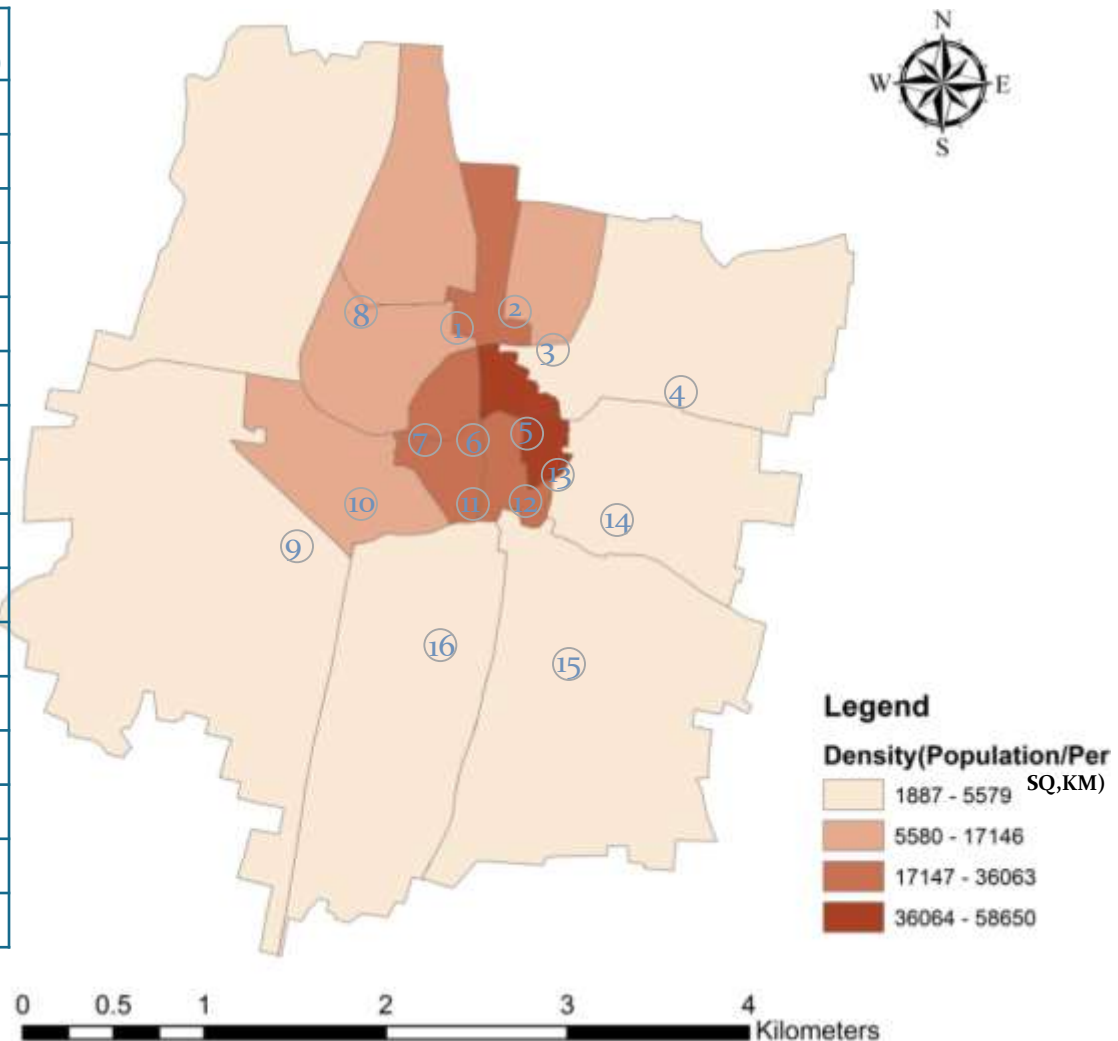
Source: M.C. Akot

Ward No.	Population	Ward No.	Population
1	5,941	9	6,028
2	6,148	10	5,071
3	5,746	11	5,063
4	5,928	12	5,313
5	6,143	13	5,282
6	5,311	14	5,455
7	5,430	15	5,351
8	5,224	16	9,198
Total			92,632

Akot Density Map

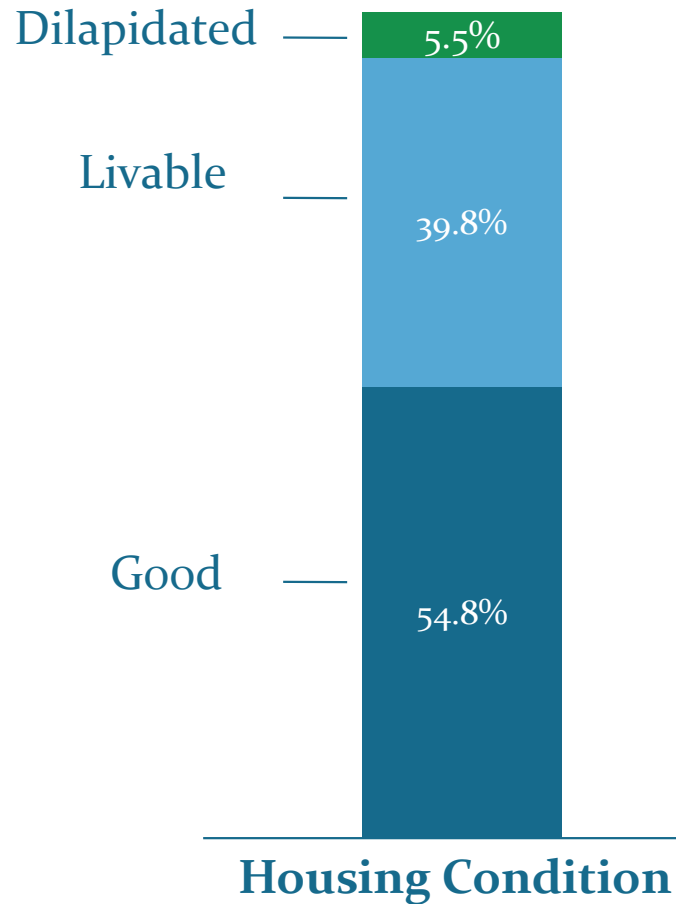
Ward no	Area(Sq.m)	Area(Sq.km)	Population	Density(P/Sq .km)
1	668674	0.67	5,941	8867.16
2	263531	0.26	6,148	23646.15
3	335112	0.34	5,746	16900
4	1458770	1.46	5,928	4060.27
5	113837	0.11	6,143	55845.45
6	147268	0.15	5,311	35406.66
7	503840	0.50	5,430	10860
8	1913300	1.91	5,224	2735.07
9	3194930	3.19	6,028	1889.65
10	580854	0.58	5,071	8743.10
11	173321	0.17	5,063	29782.35
12	159296	0.16	5,313	33206.25
13	90059.9	0.09	5,282	58688.88
14	977769	0.98	5,455	5566.32
15	2321600	2.32	5,351	2306.46
16	1745790	1.75	9,198	5256

Source- M.C.Akot (2011)

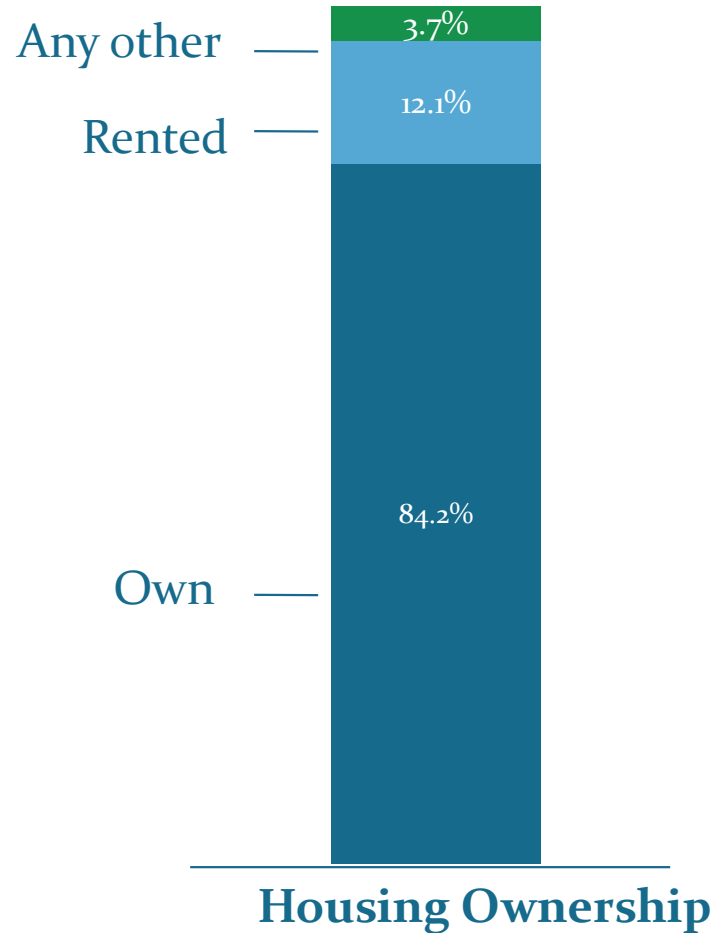


- ❑ The maximum population of city lives in core part of city means Gaothan area.
- ❑ Sothern part of city has very low density because it is newly developed area.

Housing Condition



Source - Census 2011



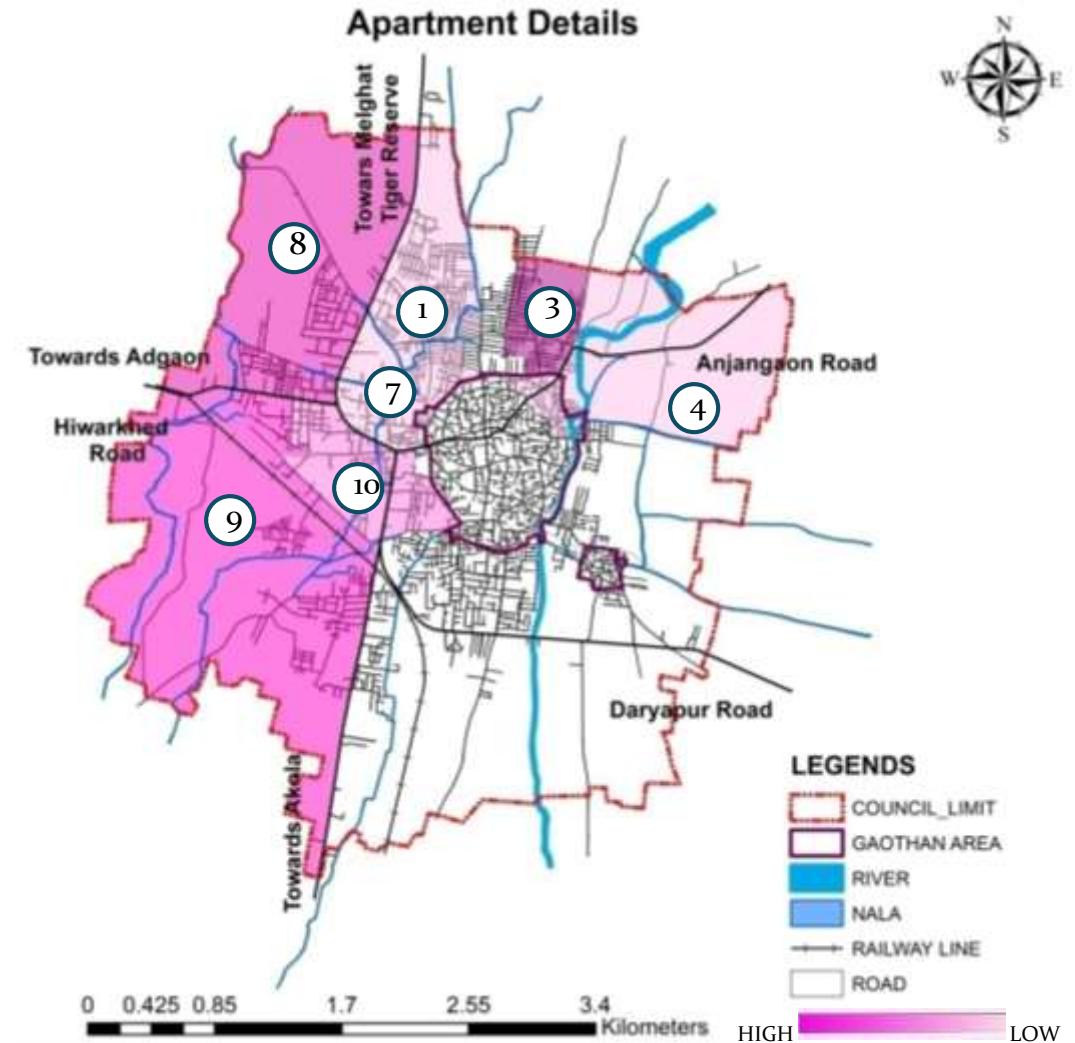
Source - Census 2011

- ❑ Good means those houses which do not require any repairs and are in good condition.
- ❑ Livable means those houses which requires minor repairs.
- ❑ Dilapidated means those houses which are showing sign of decay and require major repairs.

Apartments in Akot

Ward No.	Apartments	Flats
1	2	30
3-1	13	138
3-2	14	98
4	5	60
7	1	15
8	14	95
9	11	145
10	10	165
Total	70	746

- Out of total residential HHs 6% are lives in apartments.
- Above figure shows that there is no apartments in the gaothan area.



Number of apartments per ward

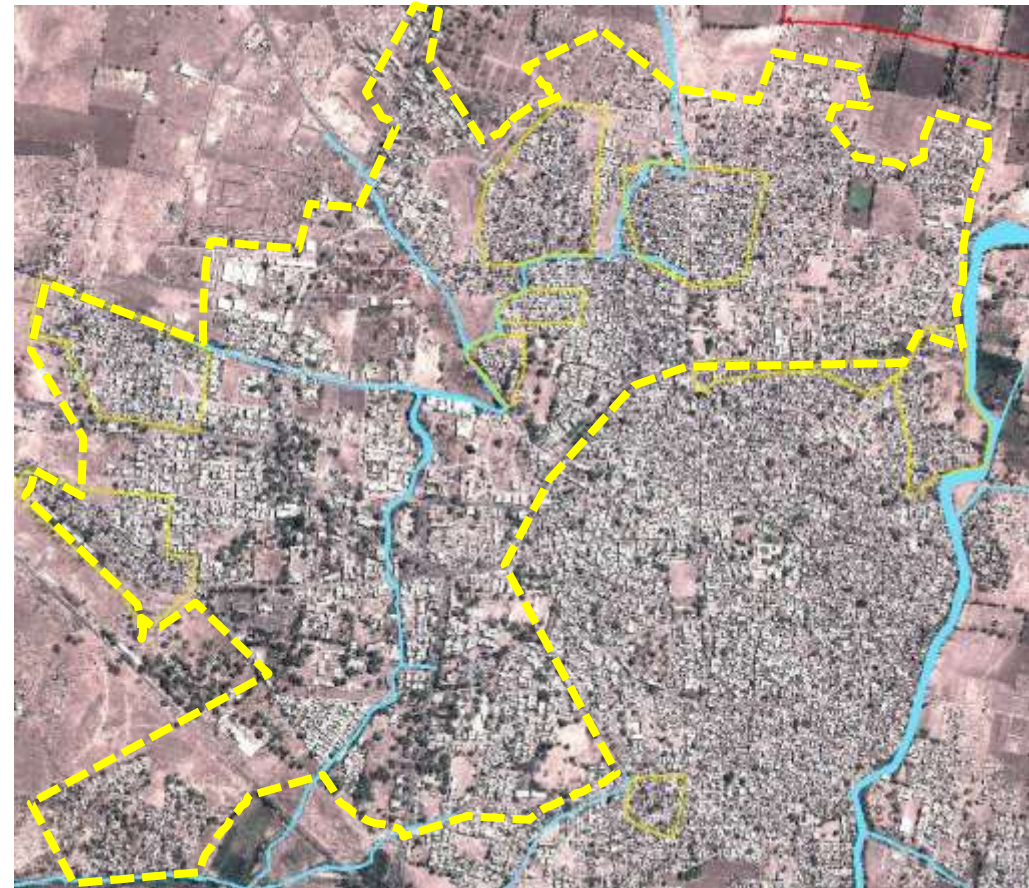
Source: M.C. Akot

Housing Typology

Gajanan Nagar, Hanuman Nagar and Sindhi Colony



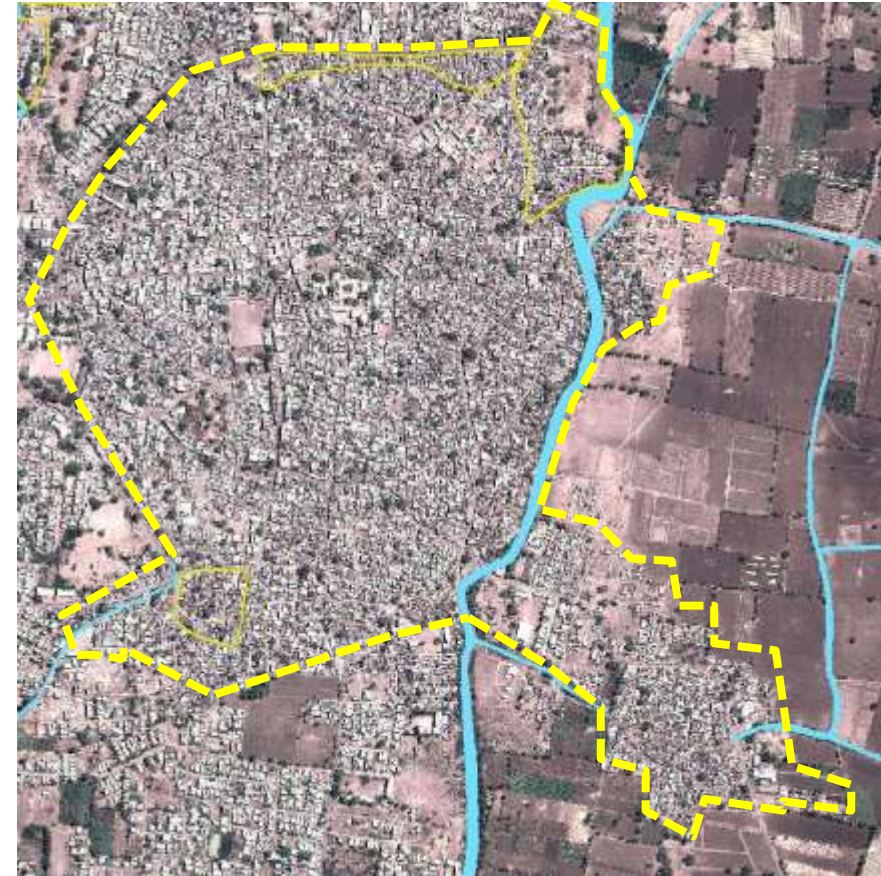
- ❑ These houses are single storied and double storied building with moderate density.
- ❑ Most of the slums are located in this part of the city
- ❑ The width of the road is vary 2M to 5M.
- ❑ Drains are available.



Housing Typology-

Asara, Pawar Colony, Tekadi Pura, Keshraj and Nandipeth

- ❑ Majorly 'Gaathan' (old town) part of the city with single storied and double storied building
- ❑ The width of the road varies from 3 m to 5 m.
- ❑ Road side open drains available along most of the roads.



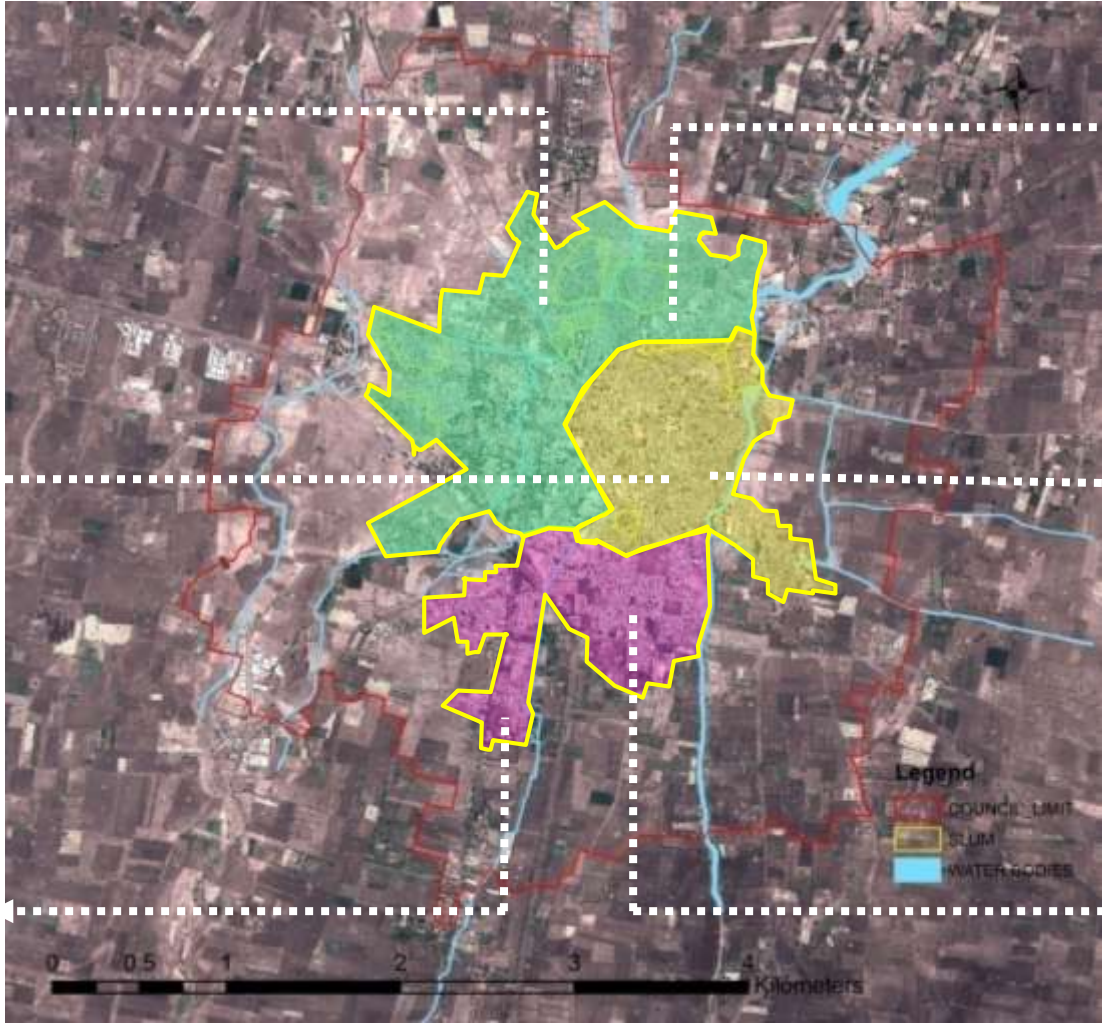
Housing Typology



Sparsely developed area with mostly bungalows
The width of the road is 6 m.
Road side drain are available only along the major roads



Housing Typology Assessment



Slum Housing Typology

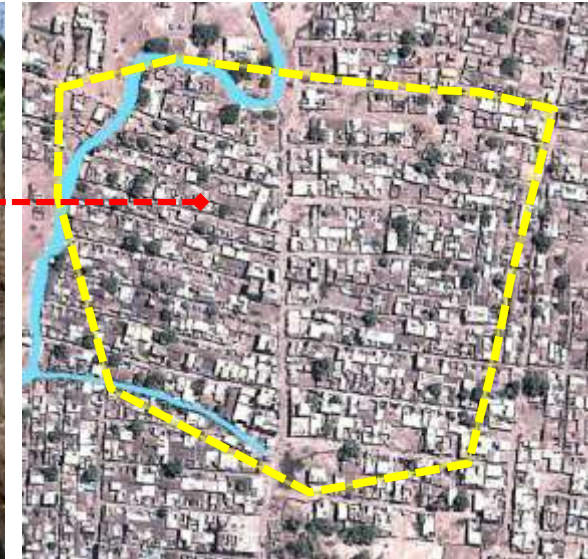


Housing typology-Kachha + Pucca, Single + double storied
The width of the road is varied from 2 M to 3.5M.
Drains are partially available



Pathradi Jin

Housing typology- Kachha + Pucca, Single+double storied
The width of the road is varied from 2.5 M to 3.5M.
Drains are partially available



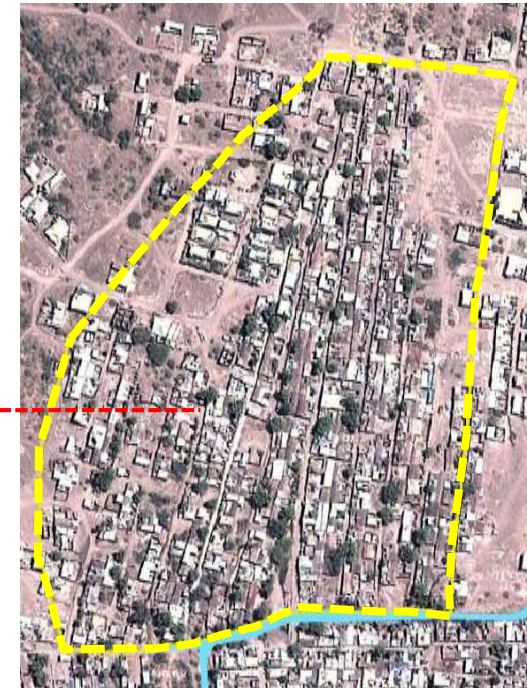
Iftekar Plot

Slum Housing Typology



Housing types are Kachha + Pucca, Single storied
The width of the road is 3M.
Drains are available.

Indira Nagar



Housing types are Kachha +
Pucca, Single storied
The width of the road is 4M.
Drains are available.

Aminpura

Slum Housing Typology



Housing typology: Kachha + Pucca, Single and double storied building.
The width of the road is varied from 2M to 4 M.
Drains are available.

Gaji Plot

Housing typology: Kachha + Pucca, Single storied building.
The width of the road is varied from 3M to 4.5M.
Drains are available.



Dohar Pura

Slum Housing Typology



Housing typology: Kachha, Single storied building.
The width of the road is varied from 4M to 6 M.
Drains are available.



Mehatar Pura

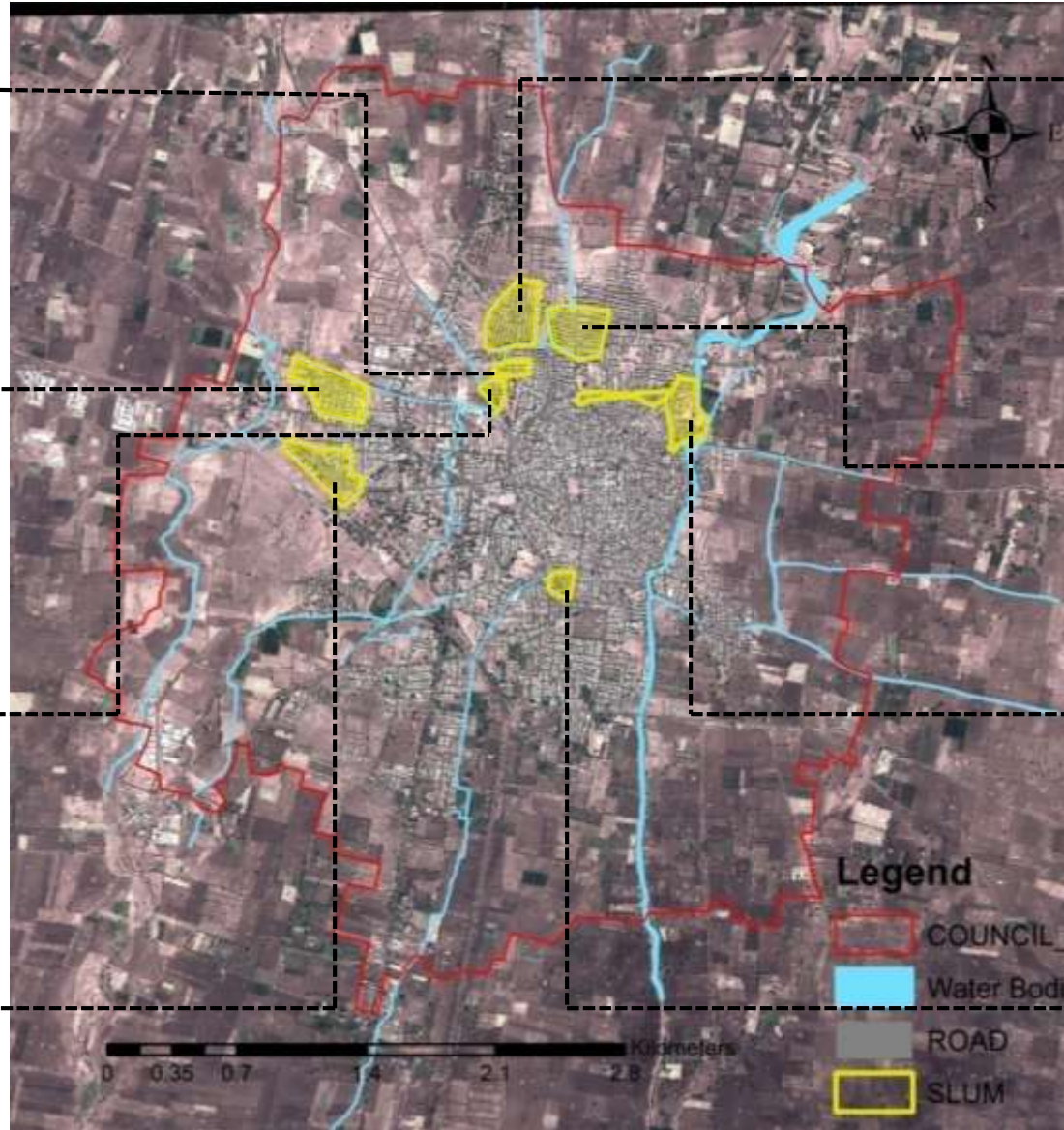


Housing typology-Kachha + Pucca, Single storied building.
The width of the road is varied from 3M to 5 M.
Drains are available.



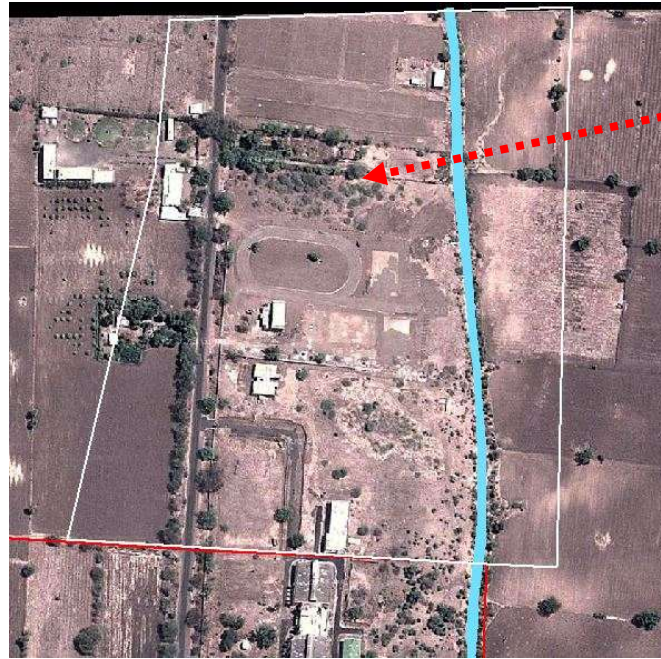
Hanuman Nagar

Slum Housing Typology



Outgrowth Areas - North

ITI college is located towards the north of the city beyond the city limit.



Outgrowth Areas : Wadali Satwai

Few industries (oil mill) and village Wadali Satwai located at the west of the city



Detail of Wadali Satwai village

Authority	Gram Panchayat
Population	2062
Household	434

- Kaccha, Pakka or semipakka houses observed with single or double storied structures
- The width of the road ranges from 2-5 m.



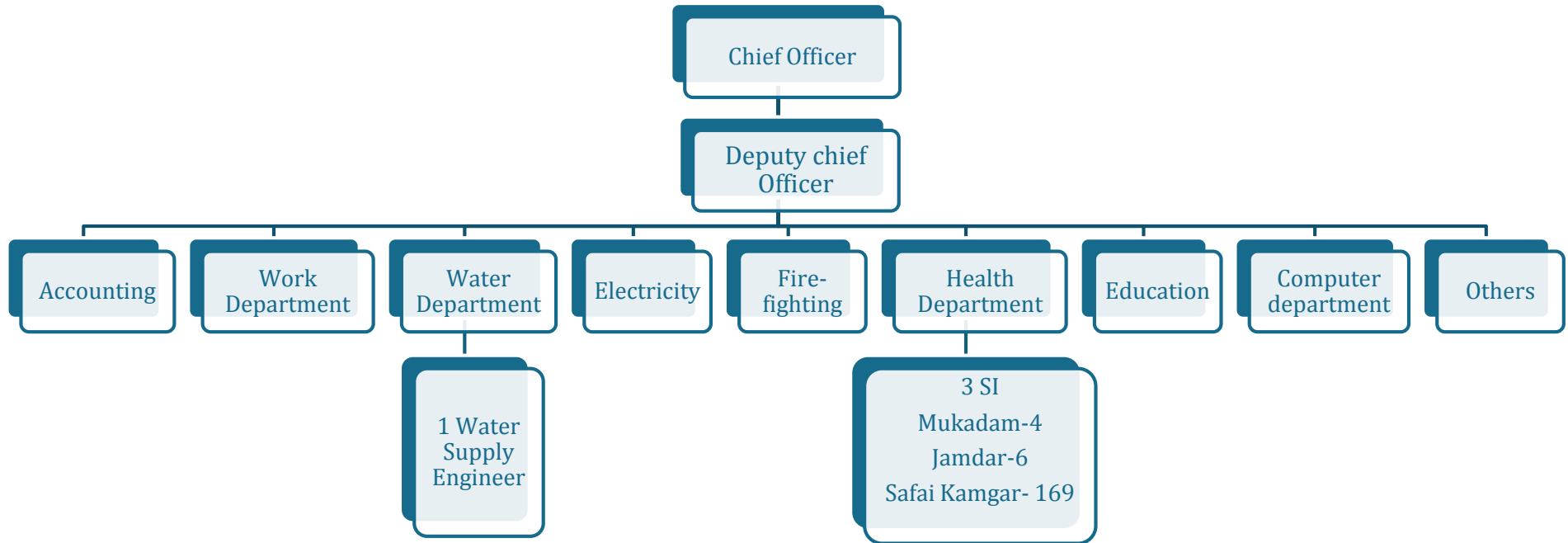
Introduction: Organogram

Local government structure

President	Mr. Makode
Chief Officer	Mrs. Geeta Thakare

Number of Electoral Wards	33
Number of Administrative Wards	16

Organogram of Administrative Wing of Council and Departments Concerned with Sanitation



Water Supply

AKOT: WATER SUPPLY



- The major source of water supply is **WAN Dam** which is 50 Km away from the Akot comes in Telhara M.C.
- Water Supply Coverage-**40.63%**- (Source-MJP).
- Water is supplied alternate days for 6 hours. (SLB Data)
- **59 %** HHs have domestic connections (Source-MJP).
- Out of which **82% are installed with Water meters at HH level-** (Source-MJP).
- At present **DPR - (for 100% coverage water supply distribution system) has been sent to MJP to technical sanction.**

Revenue water-78.17%
Non Revenue Water-21.83%
SLB Data-(2016-17)

AKOT: WATER SUPPLY

Proposals

- Under UIDSSMT scheme ULB is planning for **WTP**.
- A new source of water is also planned at **Popatkhed DAM-11 Km away from Akot**.

Volumetric charges (Rates Per 1000L)

Purpose	Upto 15000 L	5001 to 25000	Above 25000
Domestic	15.70	24.20	33
Commercial	72.60		
Institutions	30		

New Connection Charges

Mini. charges (HH with meter connection)				Mini. charges (HH with no meter connection)		
Dia. Of pipe	Domestic	institution	Non-Domestic	Domestic	institution	Non-Domestic
15 mm	154	325	757	463	711	1783
20 mm	317	652	1497	711	1414	3566
25 mm	595	1274	3003	1374	3566	7163

New connection Charges = 770 Rs for 15 mm diameter pipe connection



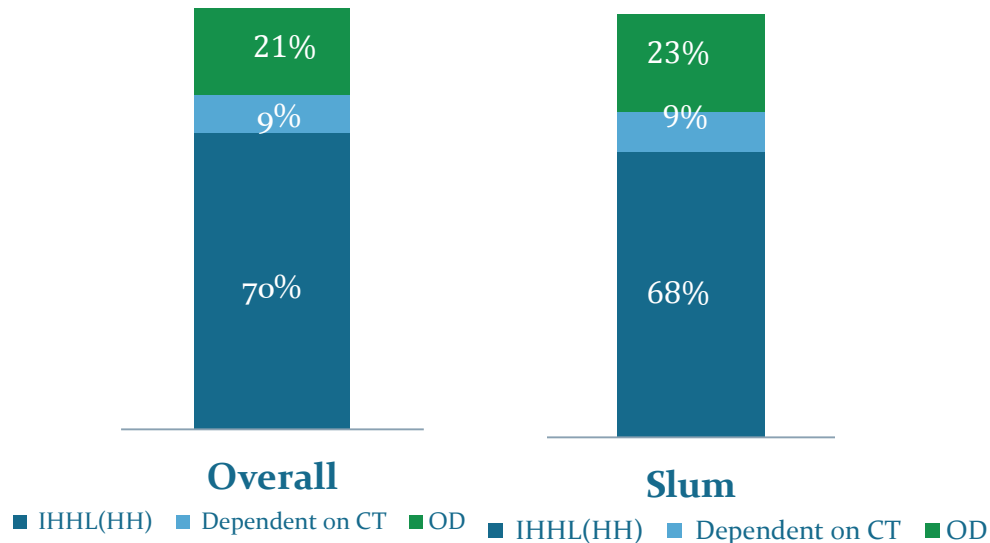
2. Current Sanitation Situation:

a. Access to Toilet



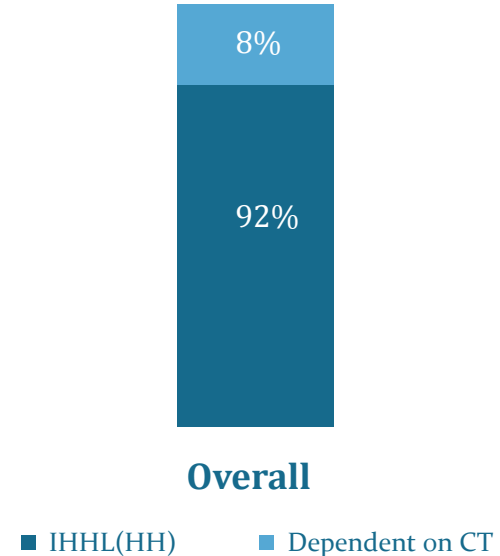
Access to Toilets

Access to types of sanitation facility (2011) Access to types of sanitation facility (2017)



Source- Census 2011

	Total HH	IHHL(HH)	Dependent on CT	OD
Overall	18,061	12,732	1621	3708
Slum	4805	3246	447	1112



Source- Field visit (2017)

	Total HH	IHHL(HH)	Dependent on CT
Overall	19,692	18,192	1500

- Current IHHL toilet coverage: **18192(92%) of 19692HHs.**
- Out of which many are constructed under various schemes like SBM(3414) and Ramai Awas Yojana (927).
- SBM **target of the city was 4411 and 4455 have been received and approved**
- Of the SBM target of 4411 IHHL construction, **77.39% toilets have been constructed.**

Source: Census-2011, M.C. Akot

Swachh Bharat Mission (SBM) Status

SBM Status for IHHL

Target - 4411

	Received	Verified	Approved	Rejected	Constructed toilet	Commenced toilet
On site/offline	4455	4455	4455	0	3414	-
Online- (1-3-18)	4105	4024	3892	27	2357	93

- All applications of **4455 received applications** have been approved for construction.
- Of the SBM target of 4411 IHHL construction, **77.39% toilets have been constructed.**
- Current IHHL toilet coverage: **18192(92%) of 19692HHs.**

**Central Govt -Rs.
4,000+State Govt. Rs-
8,000+Nagar Palika-Rs.
5,000
=Rs. 17,000-Total Subsidy**

Tentative cost for IHHL-30,000 Rs

Fund Utilization

Funds	Received (Rs.)	Utilized	Available	Planning to use available fund
14th Finance Commission	17.69 Crore	29 %	71%	Fecal Sludge Management & Solid Waste Management
SBM	9.91 Crore	58%	42%	Construction of Toilets
Dalit Vasti Sudhar -W.S	8.92 Crore	38%	62%	Drainage Network
Nagarothhan	9.88 Crore	73%	27%	Drainage Network

Source- SBM Portal ,M.C Akot Budget Document

- **3.6 Crore** fund utilize for **water supply and toilet construction** under **14th finance commission.**
- **0.69 Crore** fund utilize for drainage network under Nagarothhan scheme.
- In case of **Nagari Dalit vasti sudhar yojana and nagari dalitettar scheme utilize 1.12 crore out of 8.92 crore.**

Community Toilet and Public toilets

Entities	CT	PT
Total number of blocks	6	2
Total number of seats	100	18

HH per seat-12

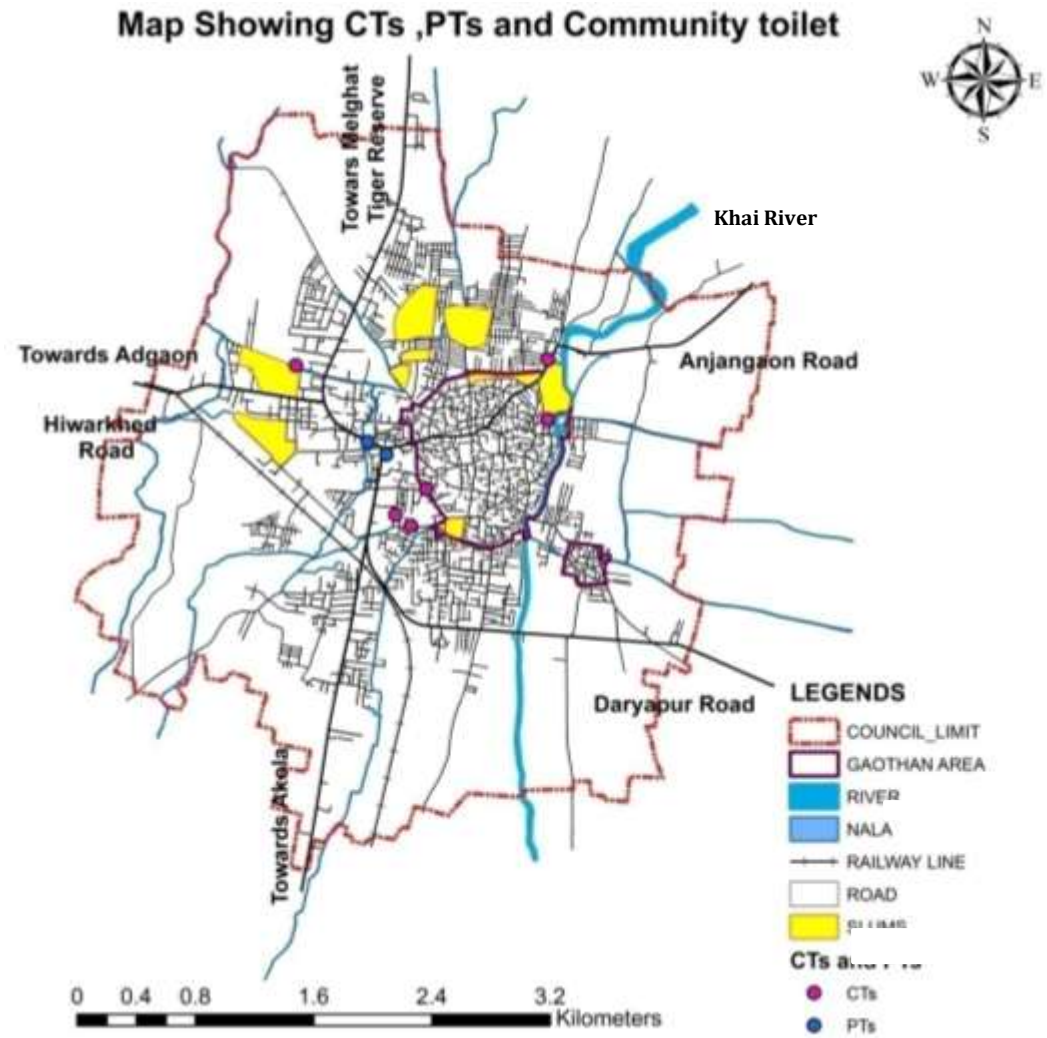
- Most of the community toilets are present near Gaothan area.
- All the **CTs and PT** are connected to **Septic tanks**. Septic tanks of the CTs and PTs are **cleaned after 6 months**.
- All Community toilets are **free to use** and maintained by ULB where they have appointed workers for CT
- O&M of 1 PT** carried out by **private contractor**.
- 90% seats are functional but majority seats were found in unhygienic condition and soiled



CT on Anjangaon Road

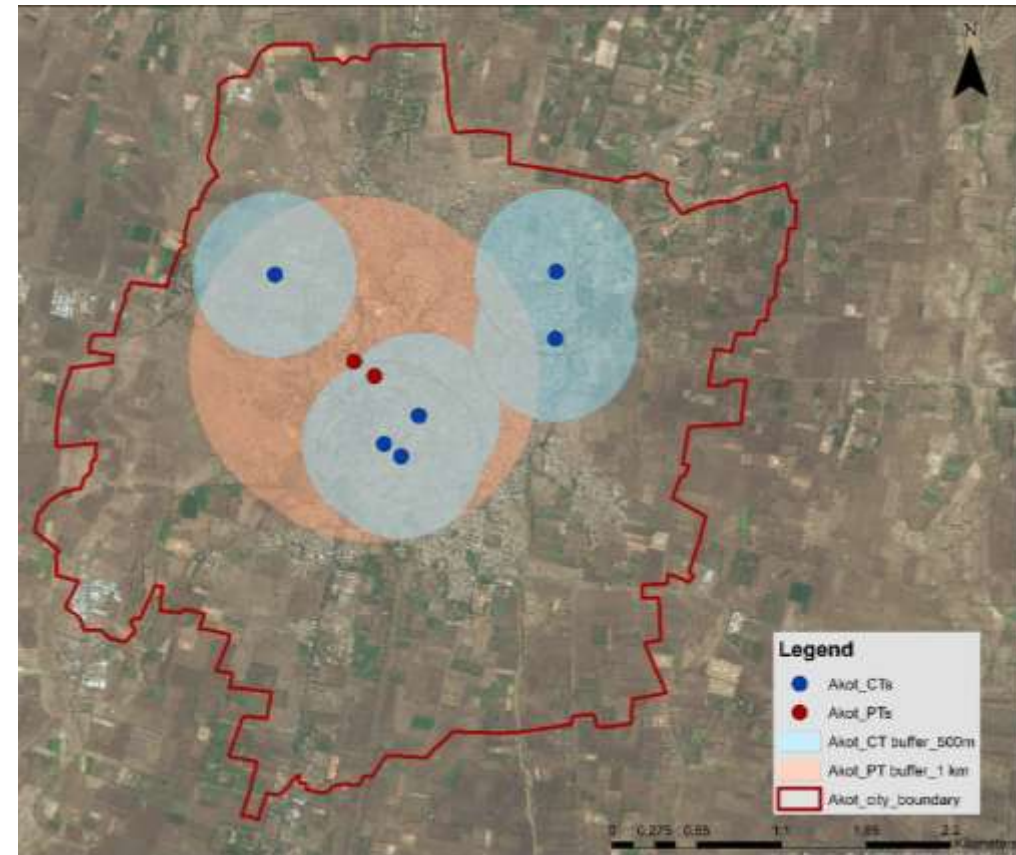


CT in Dohar Pura



Community Toilets and Public Toilets

Functionality	90% seats are functional But majority seats were found in unhygienic condition and soiled
Opening Timings	All the CTs are open for 24 hours
Water Supply-	All the blocks are provided with common water tanks outside and 1 PT has individual tap system.
Availability of Light-	<input type="checkbox"/> All the CTs facilitate with common light inside the block except 1 CT . <input type="checkbox"/> 5 blocks are available with a street lights.



A buffer of 500m around CTs and 1km around PTs shows that the facilities mostly serve the Gaothan and commercial areas of the city



Community Toilets and Public Toilets

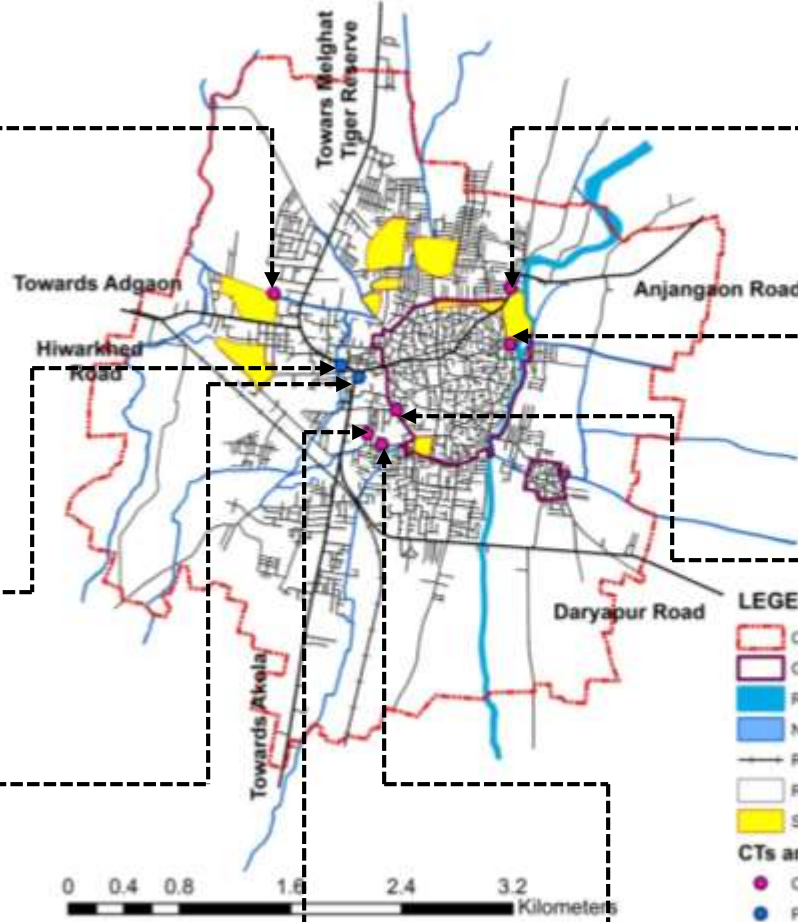
Clogging of toilet pans:	Out of total seats 12 seats were clogged.
Frequency of Toilet Cleaning:	Official stated that toilets are cleaned daily but locals informed that they are cleaned once in the week.
Wash Basins:	Wash basin available only in 2 CTs and 1PT
Doors:	Dakhani fail and godwan CTs doors were broken



ULB is planning to handover all community toilets and public toilets to private contractor for its operating and maintenance.

Community Toilets and Public Toilets

Map Showing CTs ,PTs and Community toilet



Jaltare Plot



Ambodives



Shivaji Chowk PT



Dohar Pura



N.P. School PT



Gawali Pura



Govt. Godwan

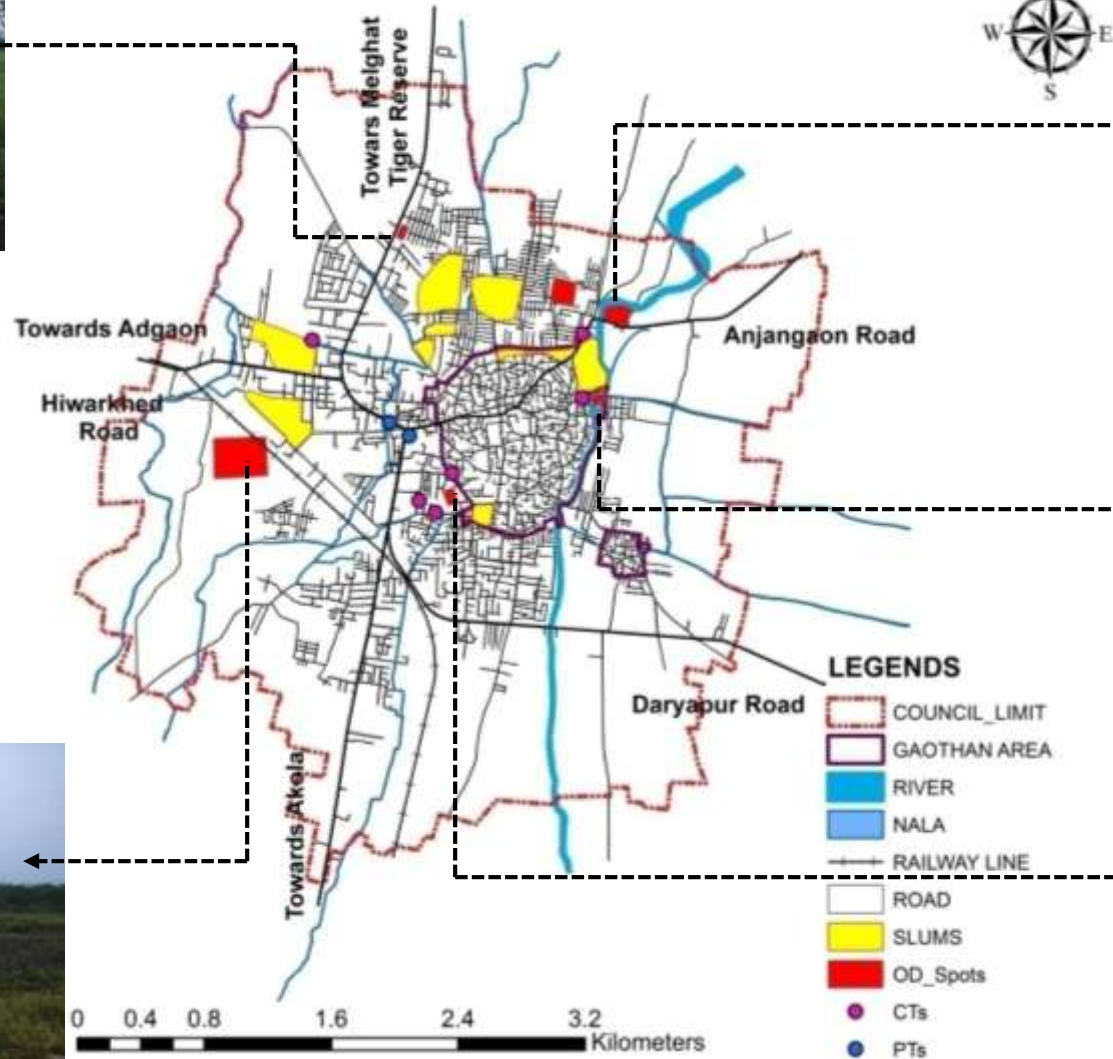


Dakhani Fail

OD spots in the Past

There are around 6 OD spots in the city

Map Showing CTs,PTs and OD spots



OD Spots and Efforts for ODF Sustainability

- There were 6 OD spots in the city. Out of them, **one was cleaned by the council and is currently used as a playground by children**. Tree plantation has been planned at another OD spot.
- Banners have been put up at various places to create awareness.
- At School level, Many activities have been conducted to generate awareness
- **Monthly meetings arranged for SHGs** to create awareness among SHGs member.
- **Mohalla meetings** conducted by council member.
- **Established 7 ALF** to spread awareness to the 302 SHGs in the city
- **200-500 Rs Penalty for open defecation**. Till the date, total fine of Rs 20,000-25,000 has been collected but not use for any work.
- **Good Morning Pathak** by ward Representatives after 3 to 4 days.
- Tree plantation on OD-spots.



Then

CT was made functional in order to improve access to toilets



Now



Then



Now

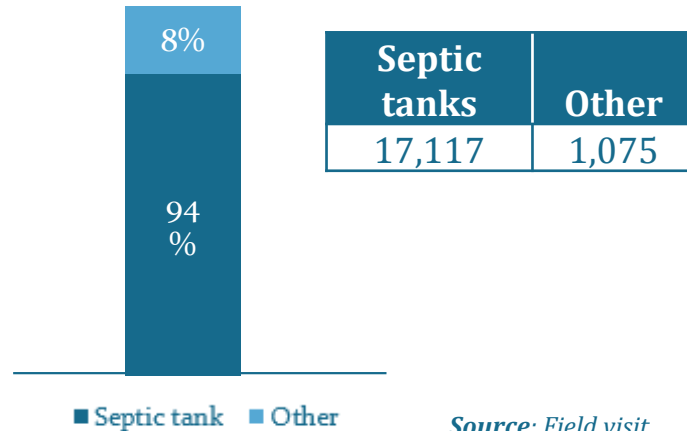
Wall of an empty plot which where people defecated in open demolished

2. Current Sanitation Situation: b. Collection



Collection of Septage

Collection systems of individual toilets



Source: Field visit (2017)

Septic Tanks

- Average size of septic tanks is **7 x 6 x 5 ft.**
- Most septic tanks are rectangular in shape having 2 chambers



2 Chamber septic tank



Septic tank in non-slum area



Few septic tanks without chambers



Some insanitary toilets found in slums

As per census 2011, only 55% of HHs having IHHL are connected to septic tanks which has increased to 94% as per the data available with AMC in 2017.

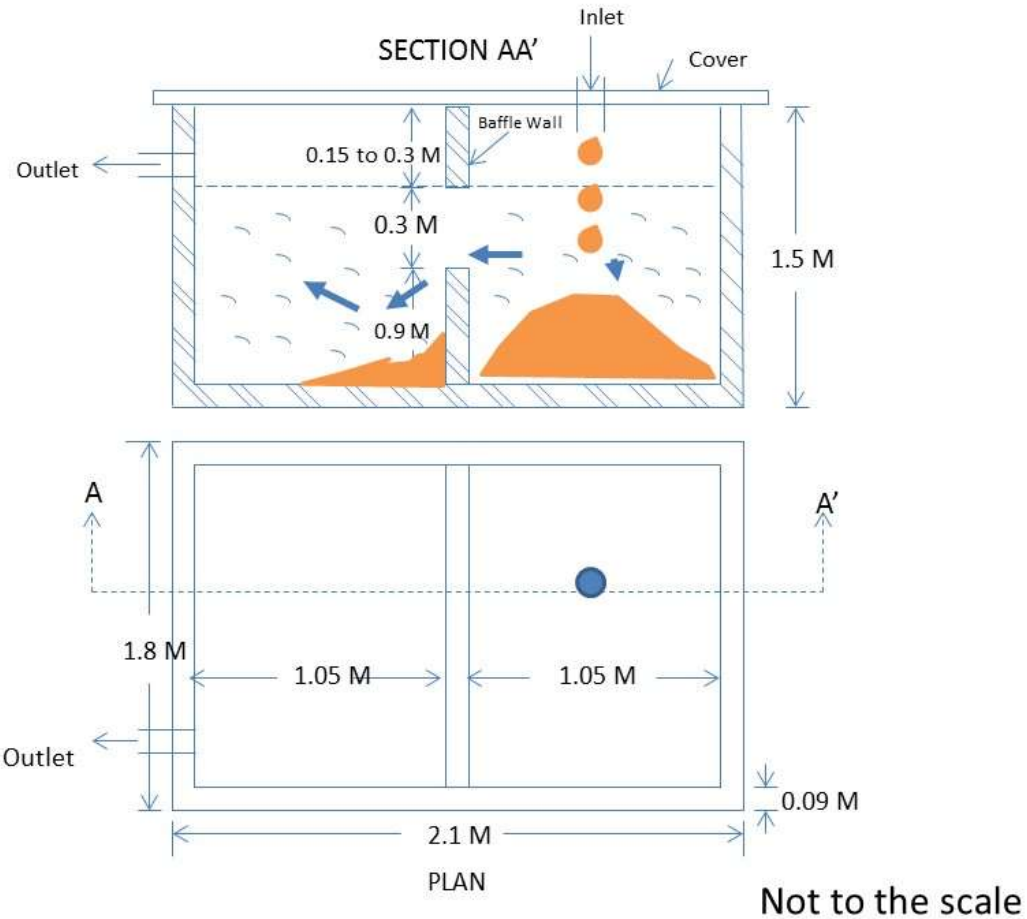
All new 3414 IHHL toilets constructed under SBM and 927 toilets constructed under Ramai Awas yojana are connected to septic tanks.

According to AMC survey in 2016, there were 1729 insanitary toilets out of which 1000 are now converted into sanitary. (this value need to be validated though an independent survey)

All the 8 CTs/ PTs are connected to the septic tanks.

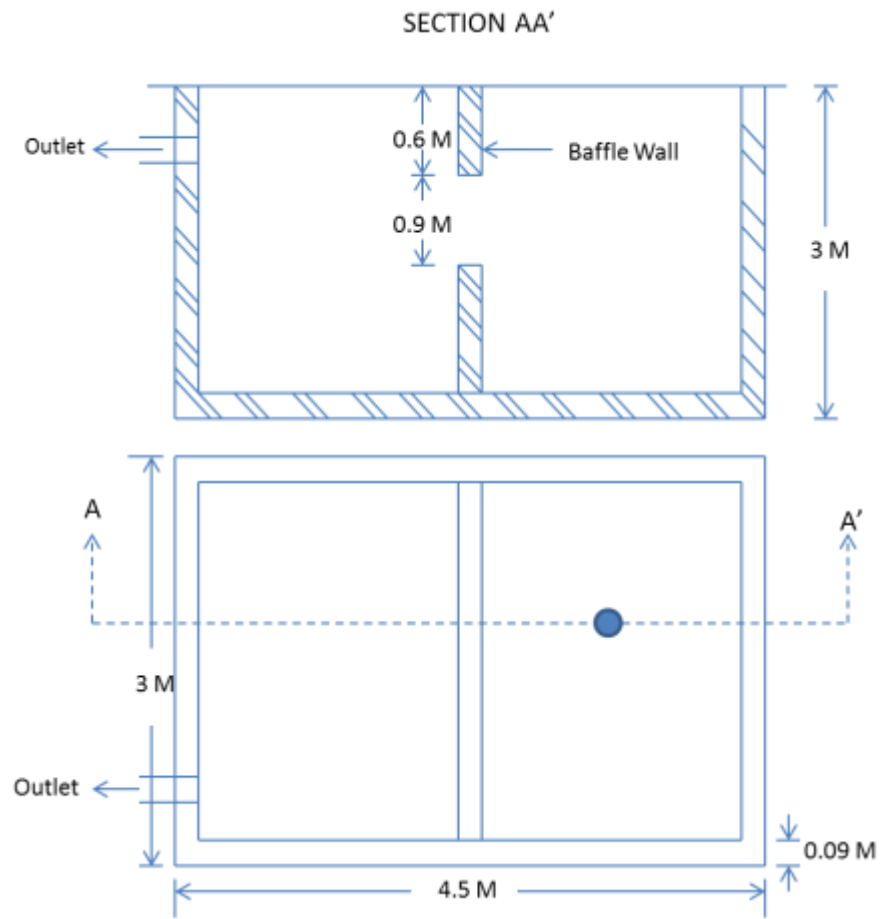
Source: M.C.Akot, Field Visit

Typical section of Septic tanks



AVG. SIZE – 2.1 X 1.8 X 1.5 M

Household septic tanks



AVG. SIZE – 4.5 X 3 X 3 M

Apartment and CT/PT septic tanks

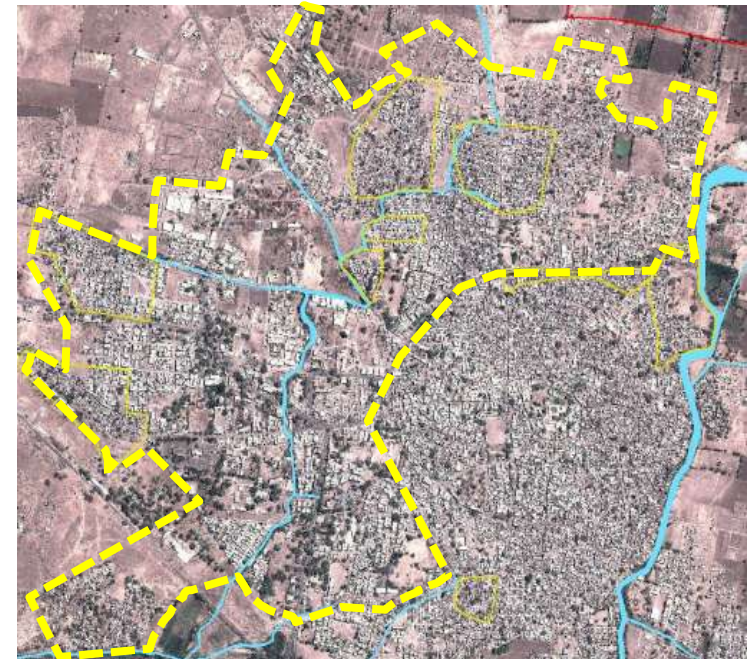
Assessment of Septic Tanks and Drains



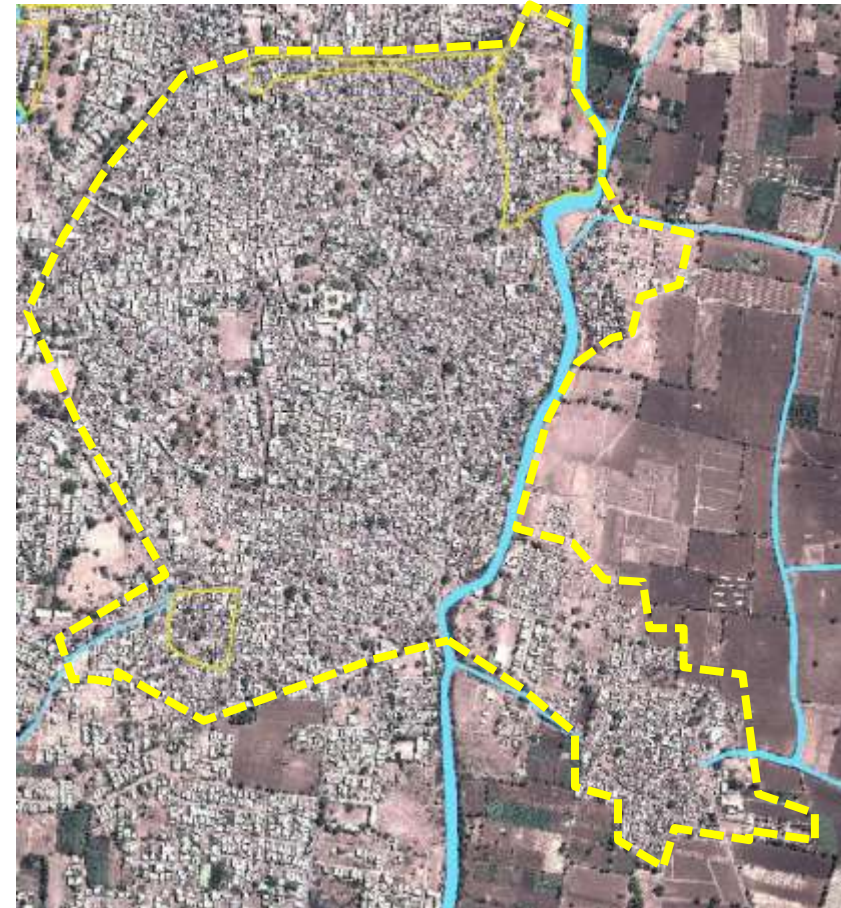
In this part of city septic tanks are **rectangular tanks with 2 chambered** having avg. size **6'x5'x5'**

Septic tanks cleaned after **10 to 15 years.**

Septic tanks are connected to the open drains, soak pits and somewhere it is on open land.



Assessment of Septic Tanks and drains



- Size and shape of septic tanks - **Rectangular tanks with 2 chamber** and on an average **size is 6'x5'x5'**.
- Septic tanks cleaned after **7/8 years**.
- At some households it is found that septic tanks are below toilets making access difficult.
- Outlet of septic tank tanks are connected to the open drains.

Assessment of Septic Tanks and drains

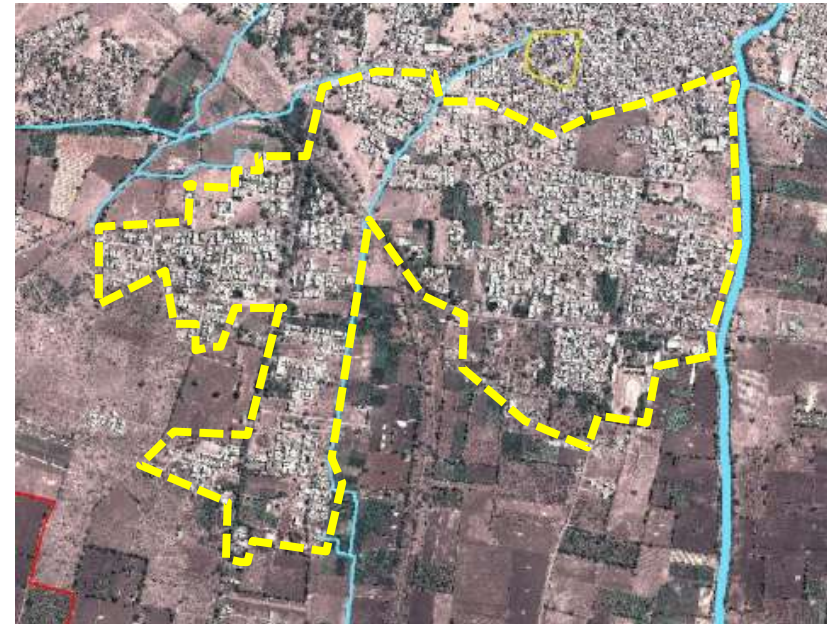


Size and shape of septic tanks -**Rectangular tanks with 2 chamber** and on an average size is 7'x6'x5'.

Septic tanks cleaned after 10 to 15 year and somewhere yet not cleaned.

Most of the households found that septic tanks are below toilets making access difficult.

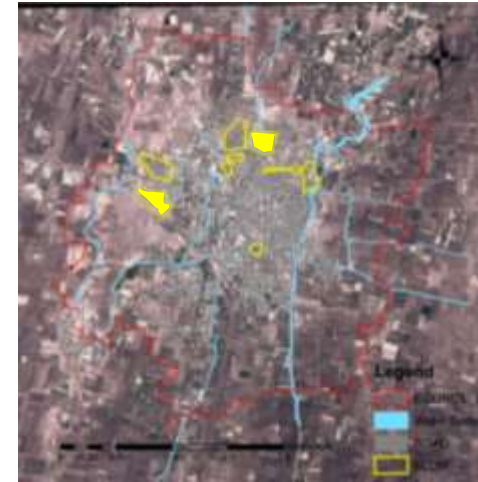
Outlet of septic tank tanks are partially connected to the open drains.



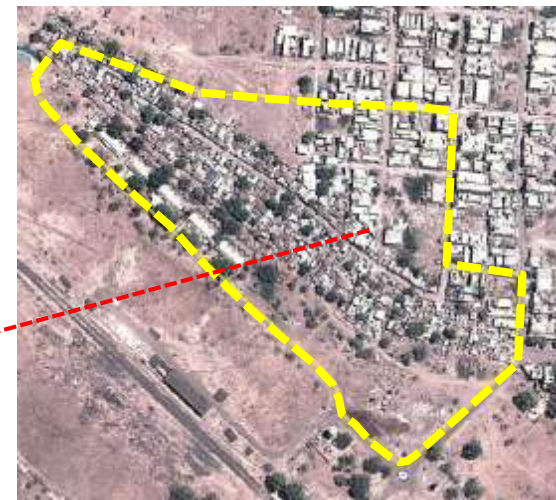
Sample Assessment of Size of Septic Tanks



Sample Assessment of Size of Septic Tanks in slums



- In Iftekar plot slum most of the toilets are insanitary but some are connected to the septic tank.
- **The avg. size of septic tanks are 8' x 7' x 6'**
- Septic tanks cleaned after **10 to 12 years**.
- Septic tanks as well as insanitary toilets are connected to the open drains.



- Septic tanks cleaned after 8 to 10 years.
- Septic tanks as well as insanitary toilets are connected to the open drains.



- In Indira nagar slum small no of the toilets are insanitary.
- The avg. size of septic tanks are 8' x 6' x 6'

Sample Assessment of Size of Septic Tanks in slum



The avg. size of septic tanks are 8' x 7' x 6'

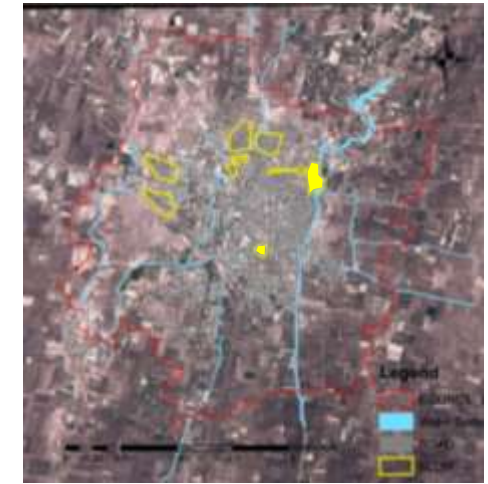
Septic tanks cleaned after 7 to 8 years.

Septic tanks are connected to the open drains.



- The avg. size of septic tanks are 8' x 6' x 6'
- Septic tanks cleaned after 7 to 8 years.
- Septic tanks are connected to the open drains.

Sample Assessment of Size of Septic Tanks in slum



- The avg. size of septic tanks are 6' x 7' x5'
- Septic tanks cleaned after 7 to 8 years.
- Septic tanks are connected to the open drains.



- The avg. size of septic tanks are 6' x 6' x5'
- Septic tanks cleaned after 7 to 8 years.
- Septic tanks are connected to the open drains.

- ◆ → □ Around 10 to 15 households has the insanitary toilets in the mehatarpura slum.

Sample Assessment of Size of Septic Tanks in slums



- The avg. size of septic tanks are 7' x 6' x5'
- Septic tanks cleaned after 7 to 8 years.
- Septic tanks are connected to the open drains.

Outgrowth area - Wadali Satwai

Sanitation situation of Wadali Satwai village

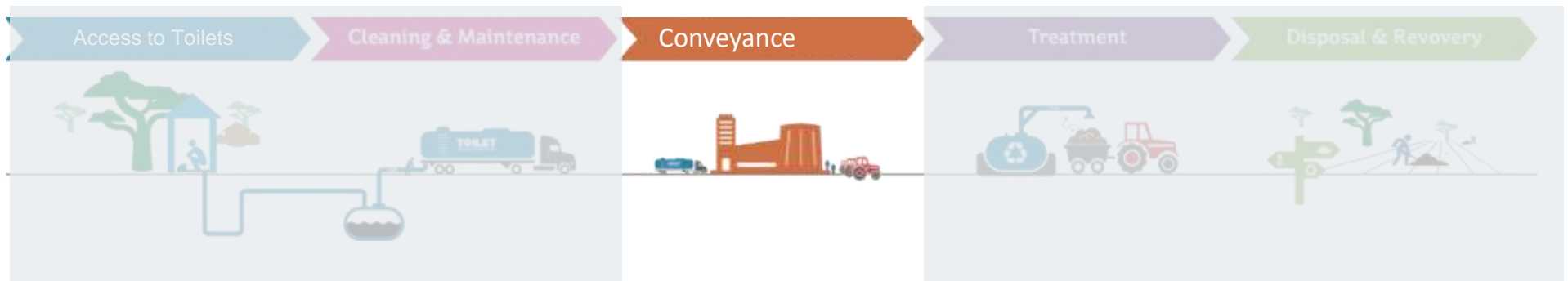
1	IHHL	382 (88%)
2	No of CTs	0
3	SBM status	Target - 72 Constructed - 42
4	IHHL connected to septic tank	150 (40%) (remaining-twin or single pit)
5	Septic tank emptying services provider	Akot ULB (Many IHHL were constructed recently. Hence not emptied)
6	Treatment of septage	Existing SWM Site without treatment
7	Charge for cleaning septic tank	Rs-1700 Per 1000 Litre

Source: Wadali Satwai Grampanchayat



2. Current Sanitation Situation:

c. Conveyance



Septage Conveyance

Septic Tank Desludging

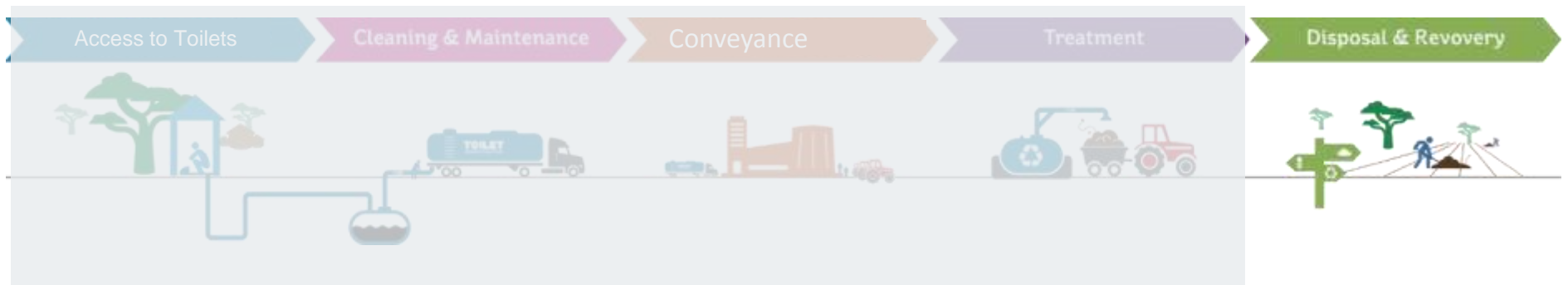
- To fulfill the current need they borrowed truck of capacity 3000L from **Anjangaon M.C** having distance 30 KM. (Charged 1000 Rs per 1000L)
- **5.25% Septic tanks** of IHHL cleaned annually (2-3 daily).
- Septic tanks of **individual toilets are emptied after 7/8 years** and septic tanks of **CTs and PTs after 6 months to 1 year.**
- **Maintenance** of all Septic tanks are carried out by **ULB for both CTs and PTs.**
- In some areas of the city private agencies are hired from **Daryapur and Akola** for cleaning septic tanks.



- Recently, ULB purchase 2 vacuum emptier truck having capacity of 3000L .

2. Current Sanitation Situation:

d. Disposal



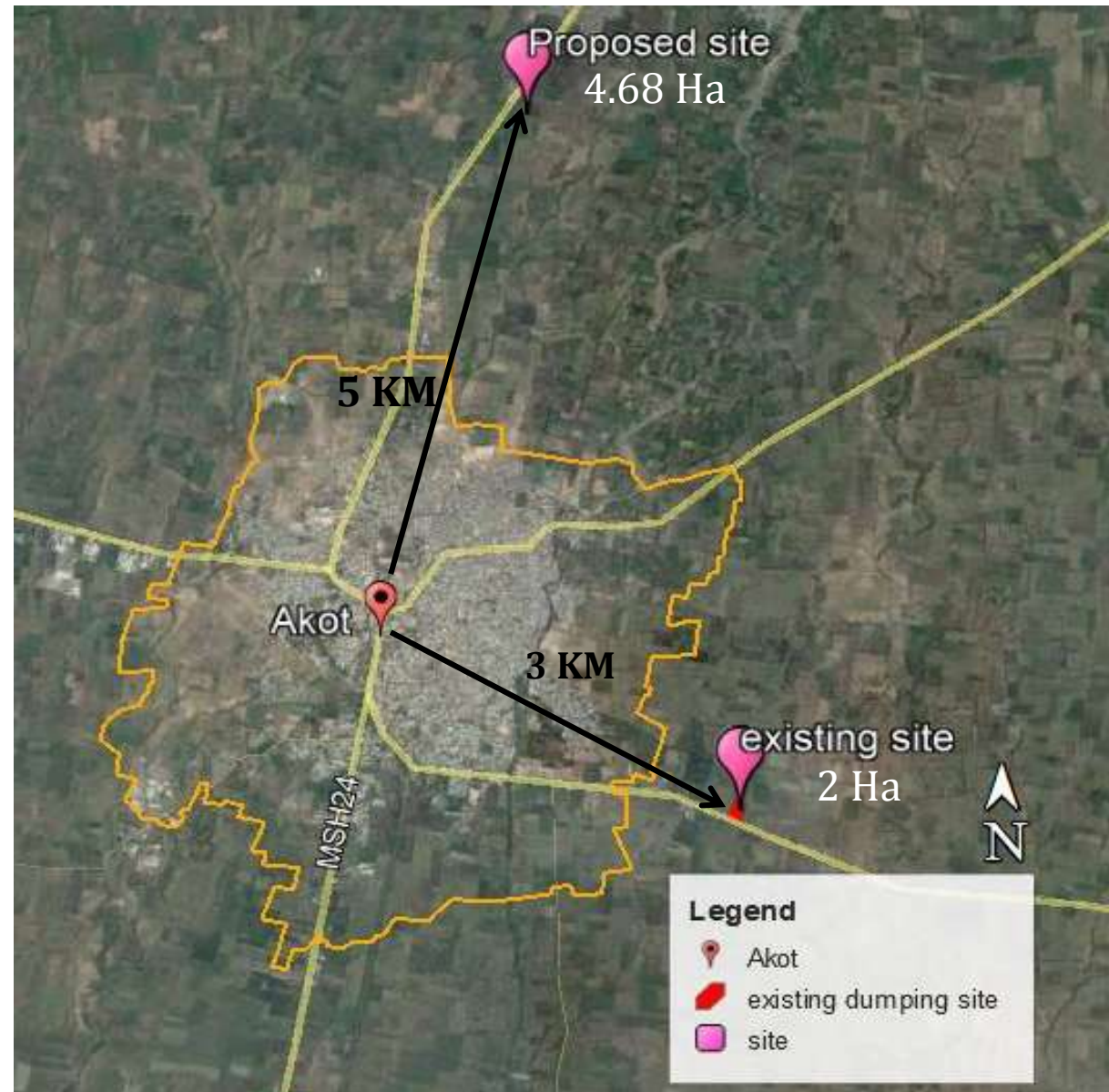
Septage Disposal

- Currently **untreated septage is disposed at Dumping site** located on Daryapur Road.
- Existing land comes in green belt zone area.



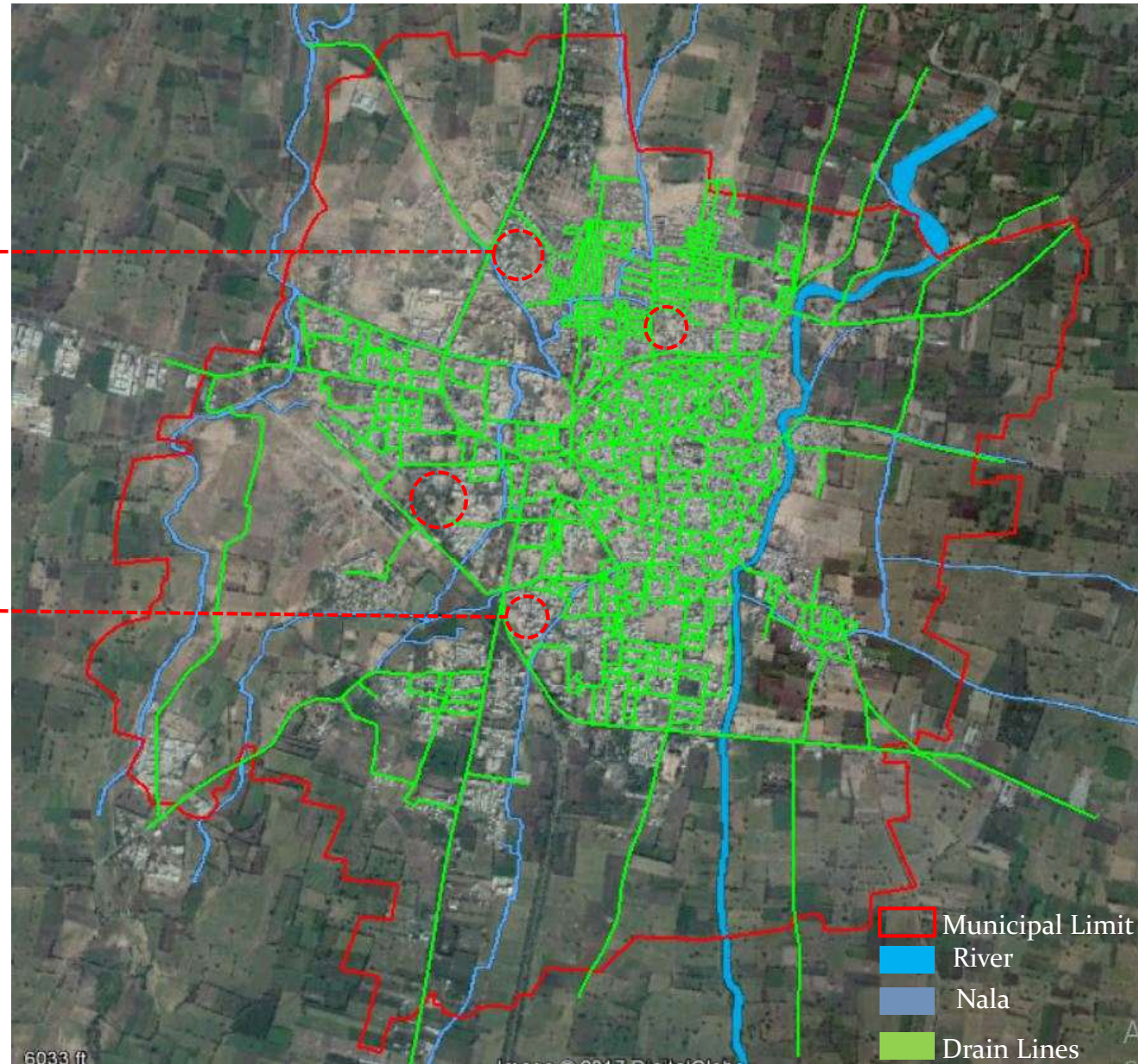
Septage Disposal Site

- ❑ To procure land of the proposed SWM site application has been sent to the MPCB
- ❑ FSTP could be either installed at existing dumping site or proposed SWM Site.



3. Greywater disposal

Drainage Map



- █ Municipal Limit
- █ River
- █ Nala
- █ Drain Lines

Coverage of sullage/greywater network (open + covered)	77%
Present Town/City Area	14.34 sq km
Area covered by open drainage network	11 sq km

Sources: PAS SLB Data 2016-17

Grey water disposal



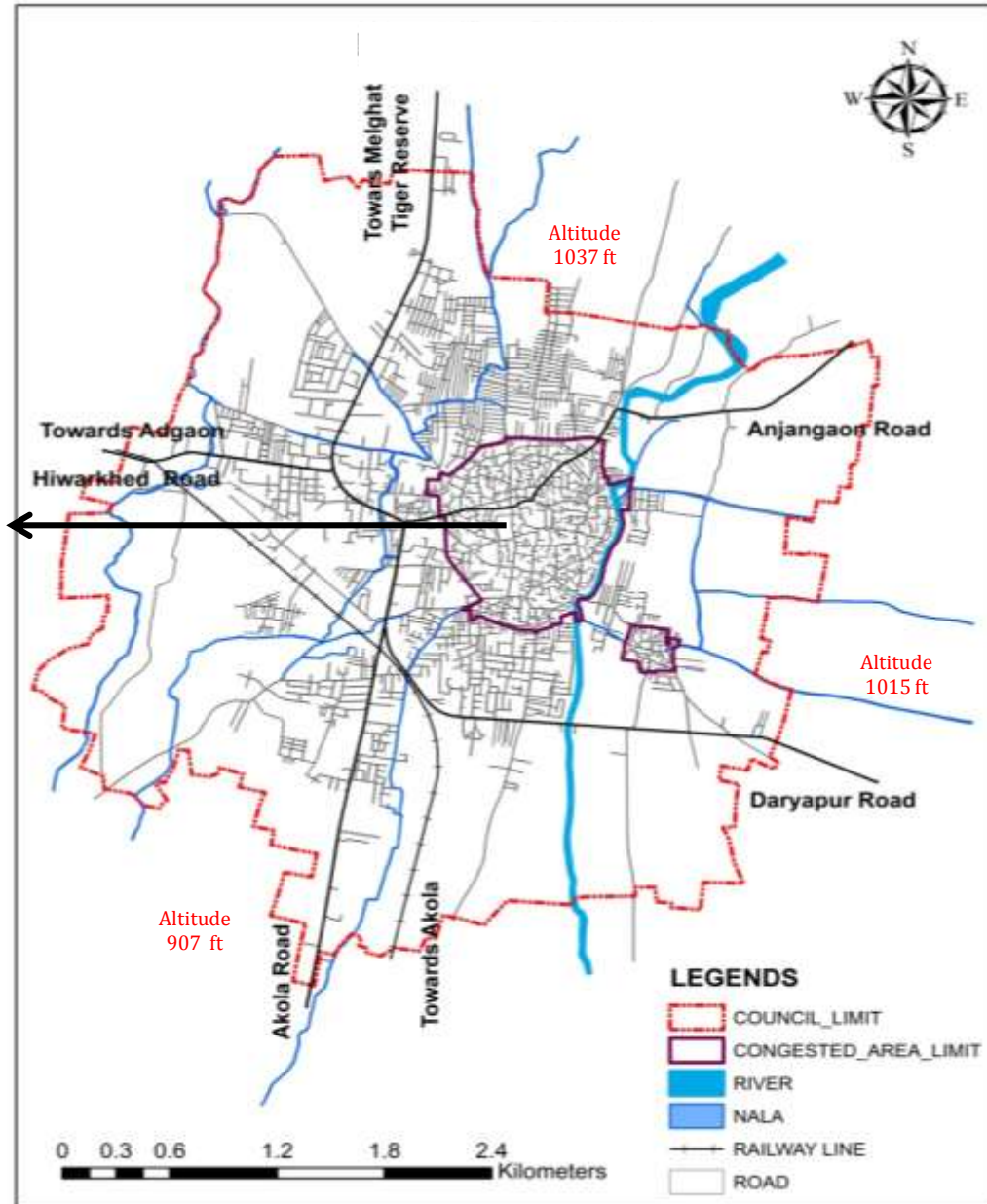
Over flow of septic tanks and kitchen enters the road side drains



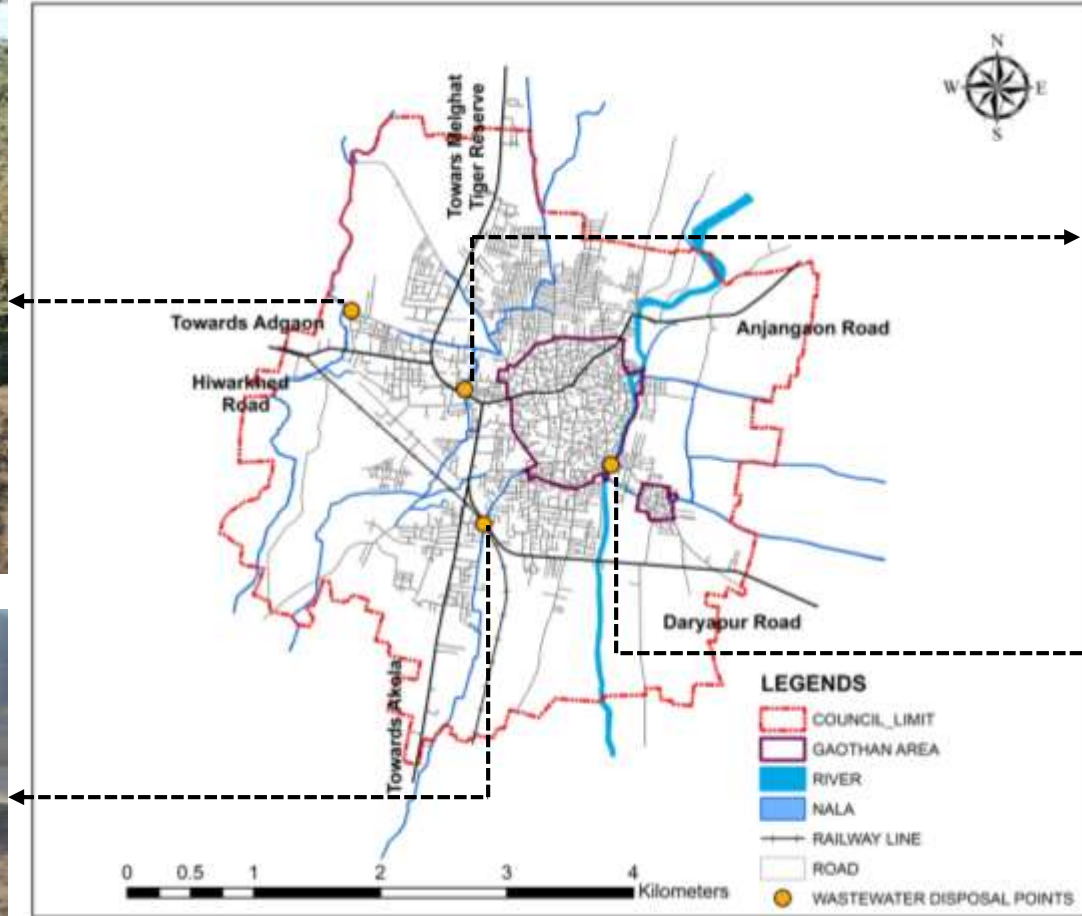
From road side drains it meets major Nalas/drains



Nala carrying greywater to outside municipal boundary



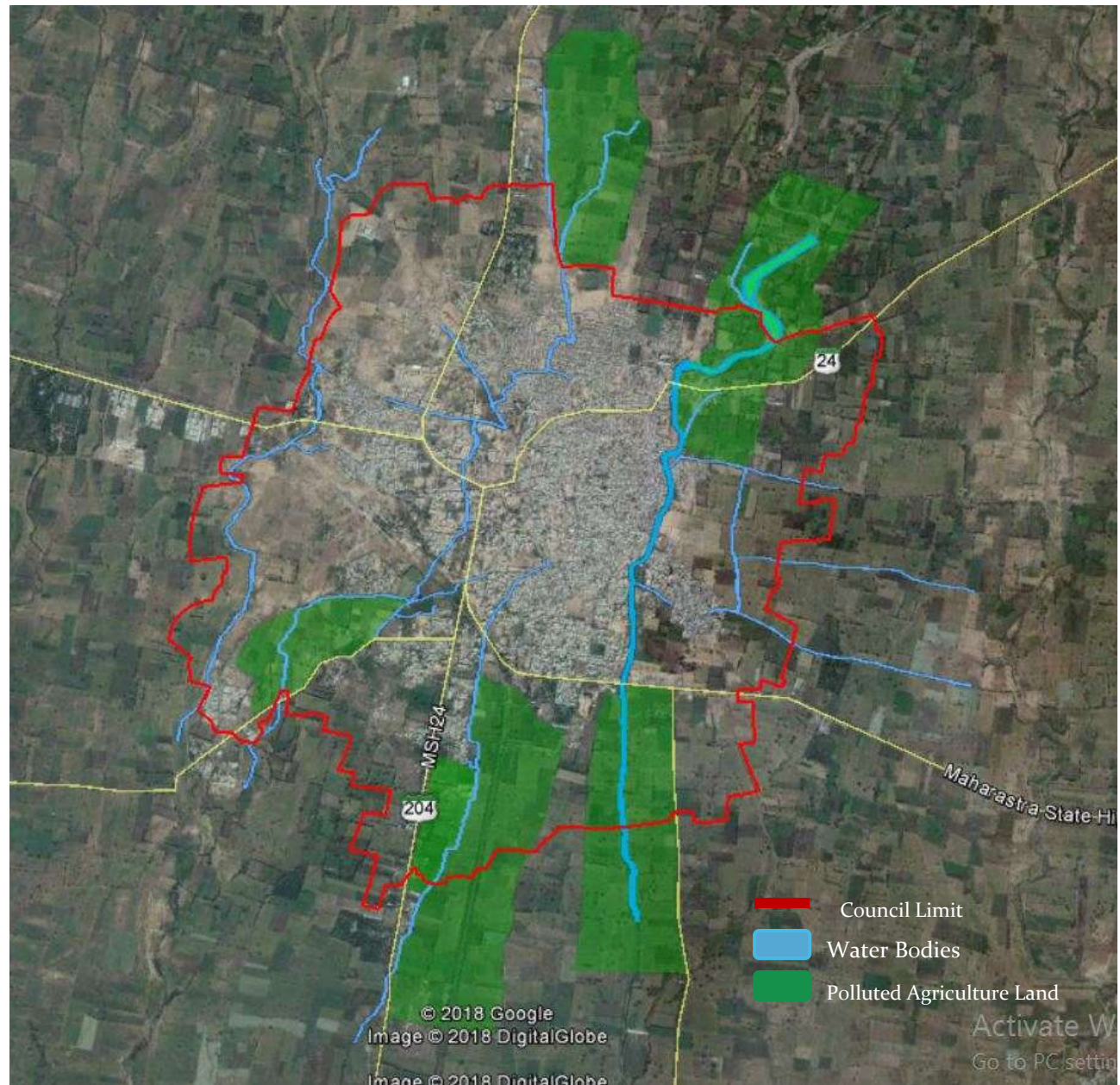
Grey water disposal Points



There are **four major** disposal points in the city

Agriculture Land Polluted due to Greywater

- In certain parts of the city water from nallahs is used for irrigating agricultural fields.
- Due to outflow of untreated grey water in these nallahs and other water bodies concerns are raised over contamination of the agricultural produce.
- Most of these agricultural fields have edible crops such as banana, orange and vegetables.



4. Solid Waste Management

Solid Waste Management

- Presently solid waste is disposed at existing Dumping site which is **2 Ha.** near 'Goshala' along **Daryapur road.**
- Collection and transport of solid waste is done by ULB

Collected in Secondary waste collection bins



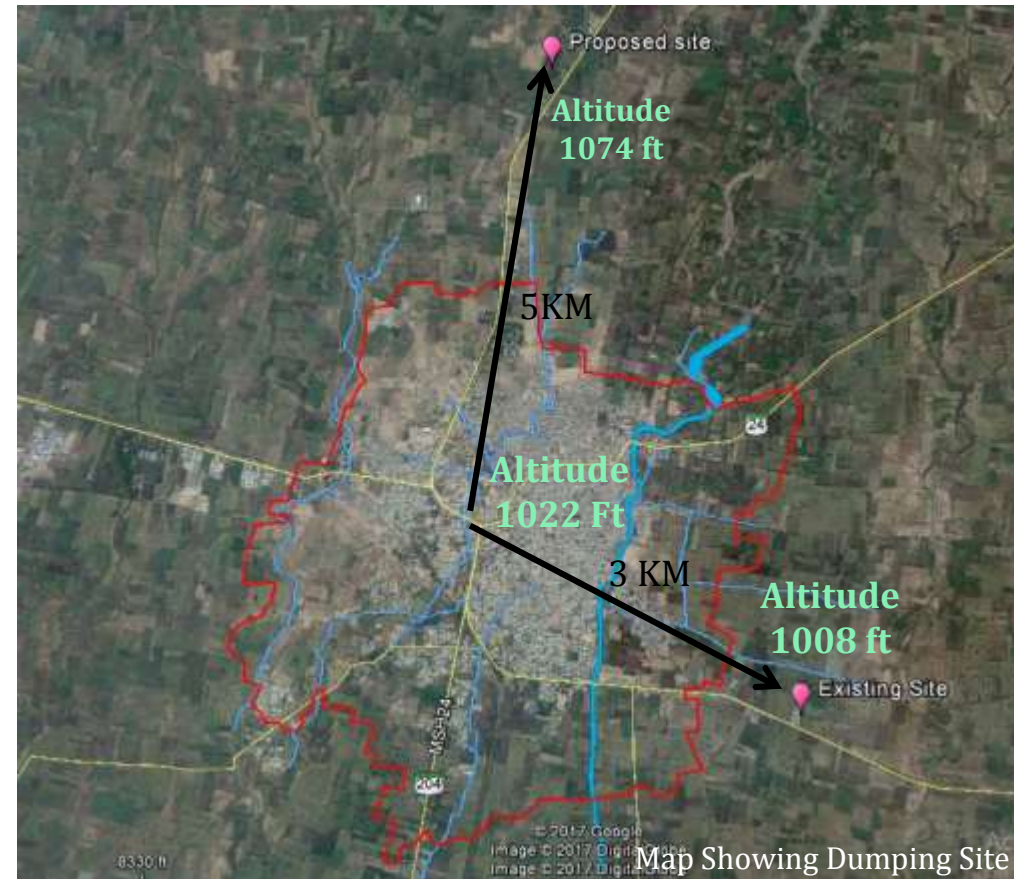
Collected Waste from secondary bins is transported to Dumping Site



Dumped on site

Infrastructure Availability

- 12 RCC circular containers and 15 RCC rectangular containers.
- For conveying, 4 tractors are available having capacity 2 tonne.



Proposed SWM Site:

- For SWM they are **preparing DPR with the help of MARS**, to implement that SWM project they have fixed the proposed land which is 4.68 Ha.
- Currently, Bidding process is going on – For segregation and solid waste management.

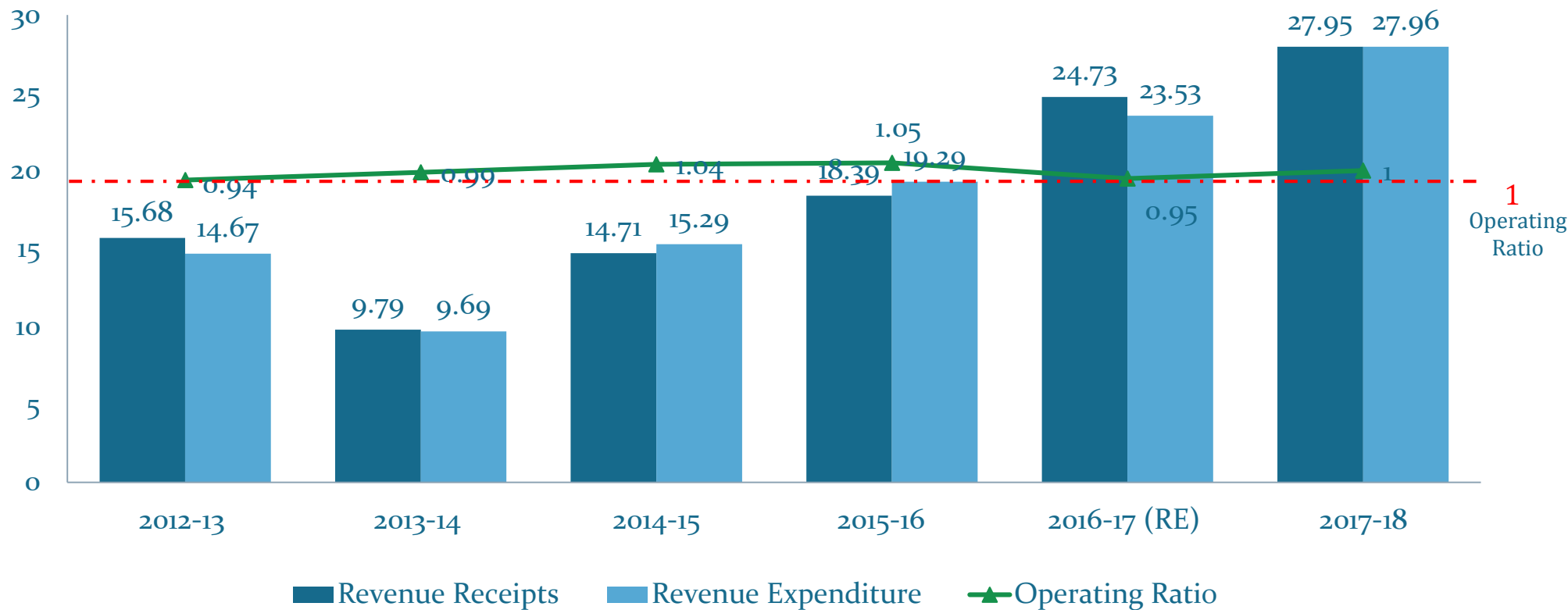


5. Finance

Akot Budget

Akot Budget						
Category	2012-13	2013-14	2014-15	2015-16	2016-17 (RE)	2017-18
	Amount in Cr.					
Opening Balance	0.14	15.83	20.33	18.36	19.27	21.86
Revenue Account						
Revenue Receipts	15.68	9.79	14.71	18.39	24.73	27.95
Revenue Expenditure	14.67	9.69	15.29	19.29	23.53	27.96
Capital Account						
Capital Receipts	27.79	16.79	8.67	10.52	21.23	30.6
Capital Expenditure	12.73	15.73	10.48	8.81	19.8	34.5
Summary						
Total Receipts	43.47	26.58	23.38	28.91	45.96	58.55
Total Expenditure	27.4	25.42	25.77	28.1	43.33	62.46
Closing Balance	16.44	20.33	18.36	19.27	20.98	17.91
Operating Ratio	0.94	0.99	1.04	1.05	0.95	1.00
Revenue Account Surplus	1.01	0.1	-0.58	-0.9	1.2	-0.01
Surplus/Deficit	16.21	16.99	17.94	19.17	21.9	17.95

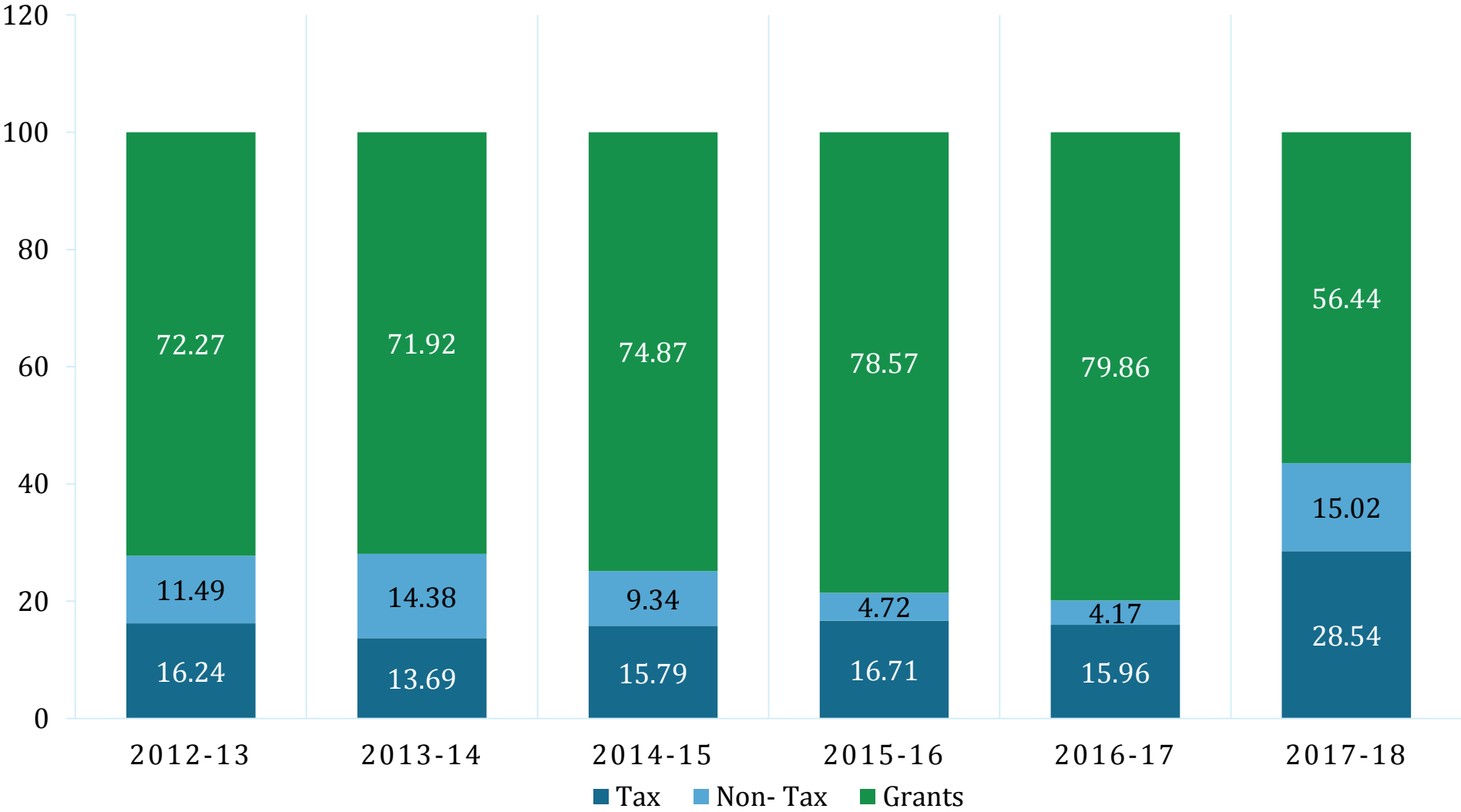
Revenue Expenditures are More than Revenue Income



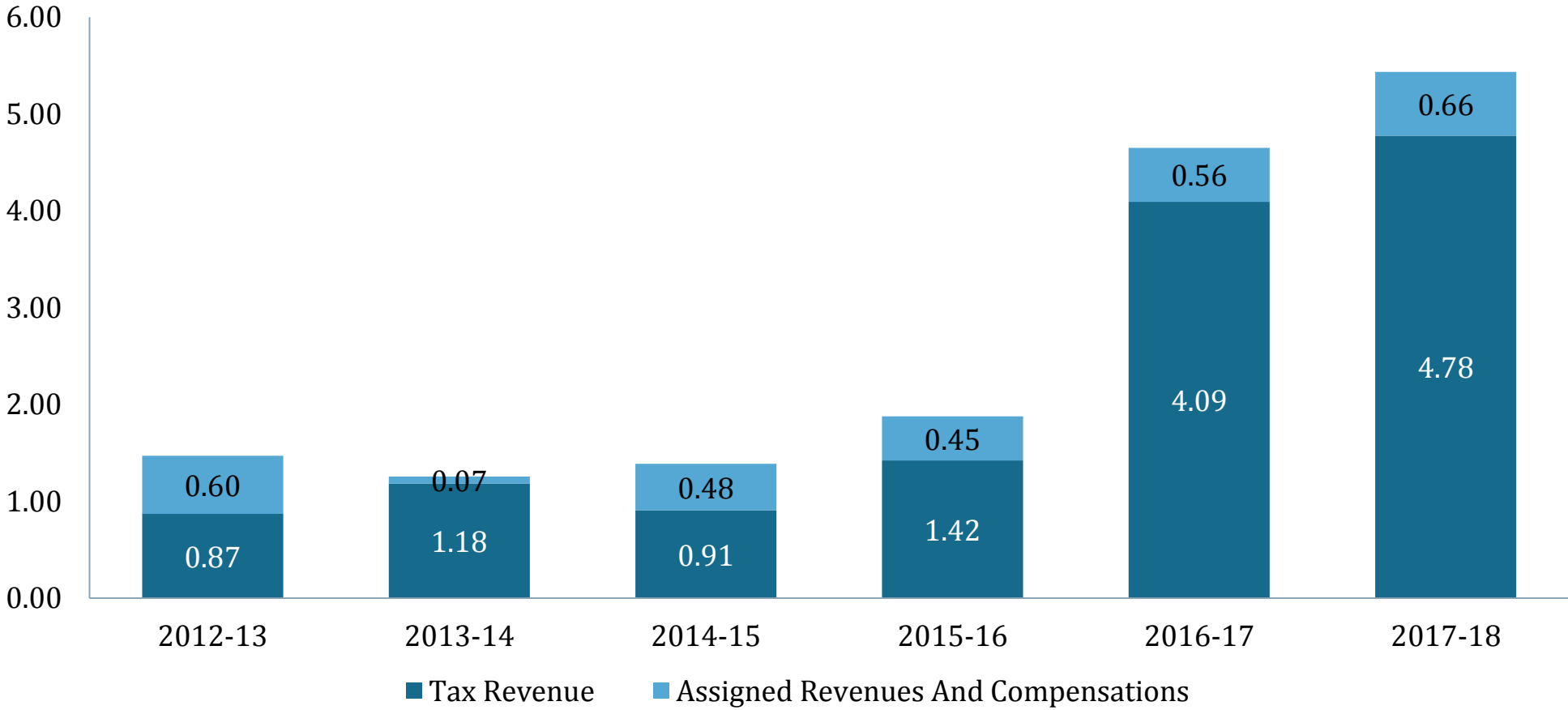
All figures in INR Crore

- As per graph, Council collect and spend more money as year passes except 2013-14.
- In 2013-14 ,Council had less fund of grants and contribution as compared to other years,

Revenue Receipt Share

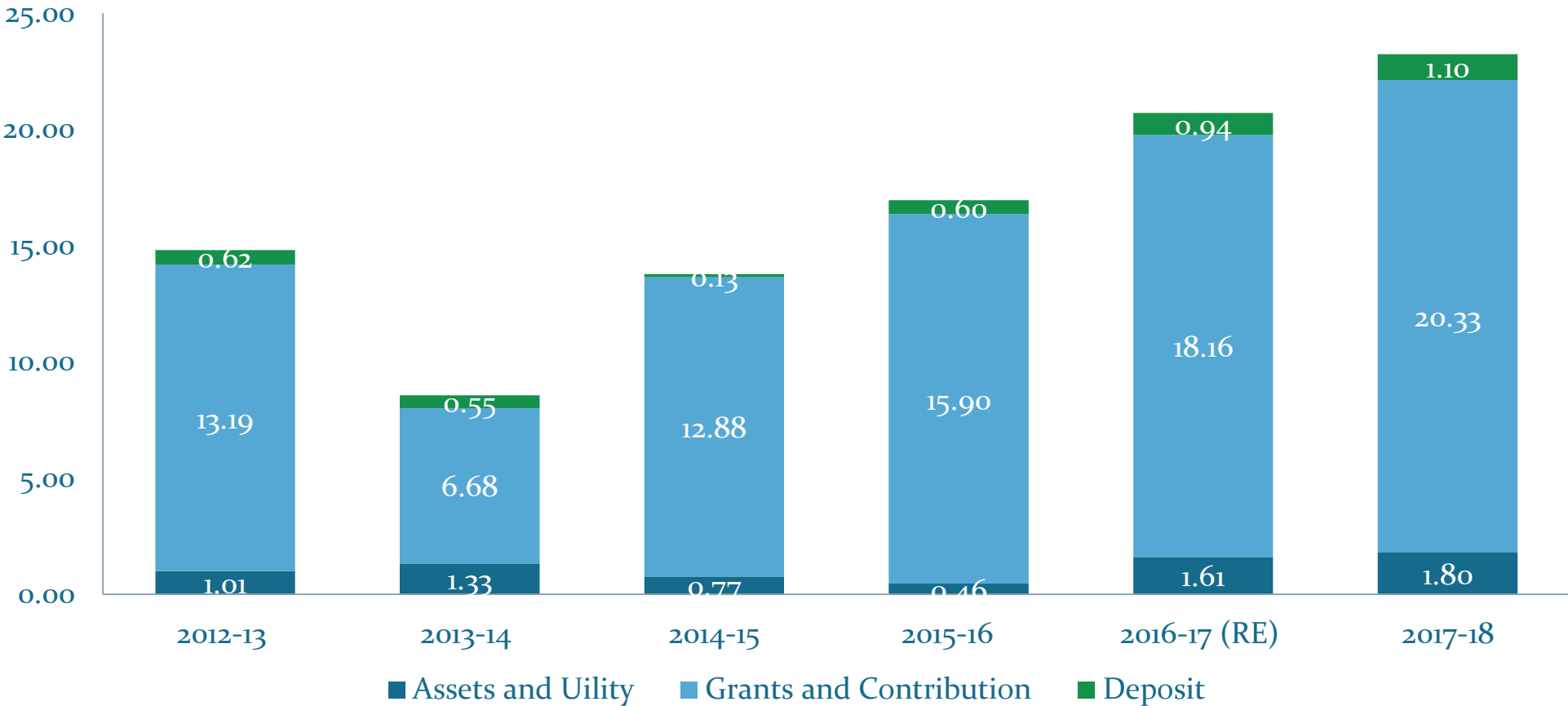


Revenue Receipt Share-Tax Revenue



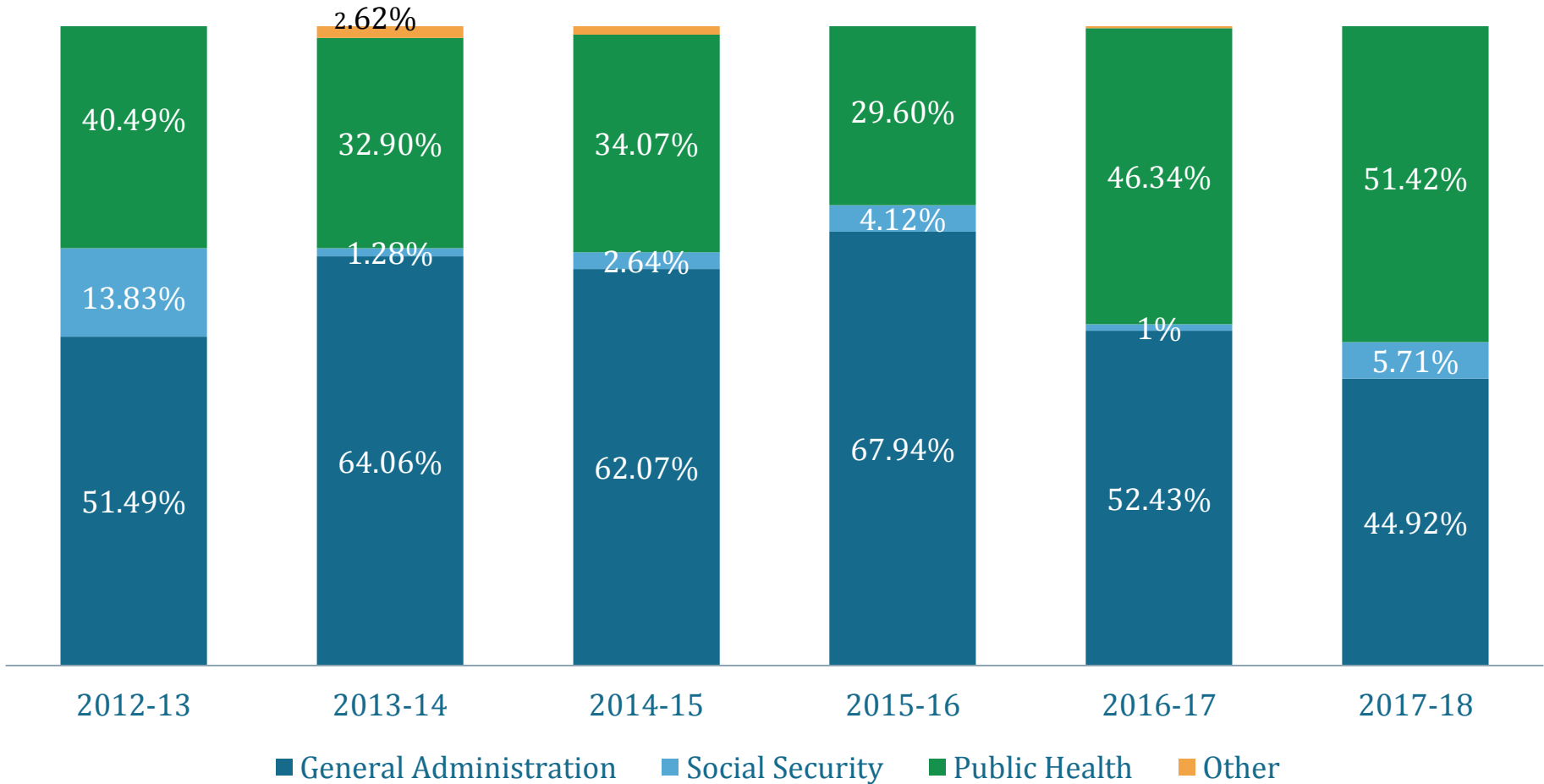
- According to graph maximum revenue collect from tax revenue.
- In 2016-17 and 2017-18, Collection of tax much high as compared to previous years.

Revenue Receipt Share-Non Tax Revenue



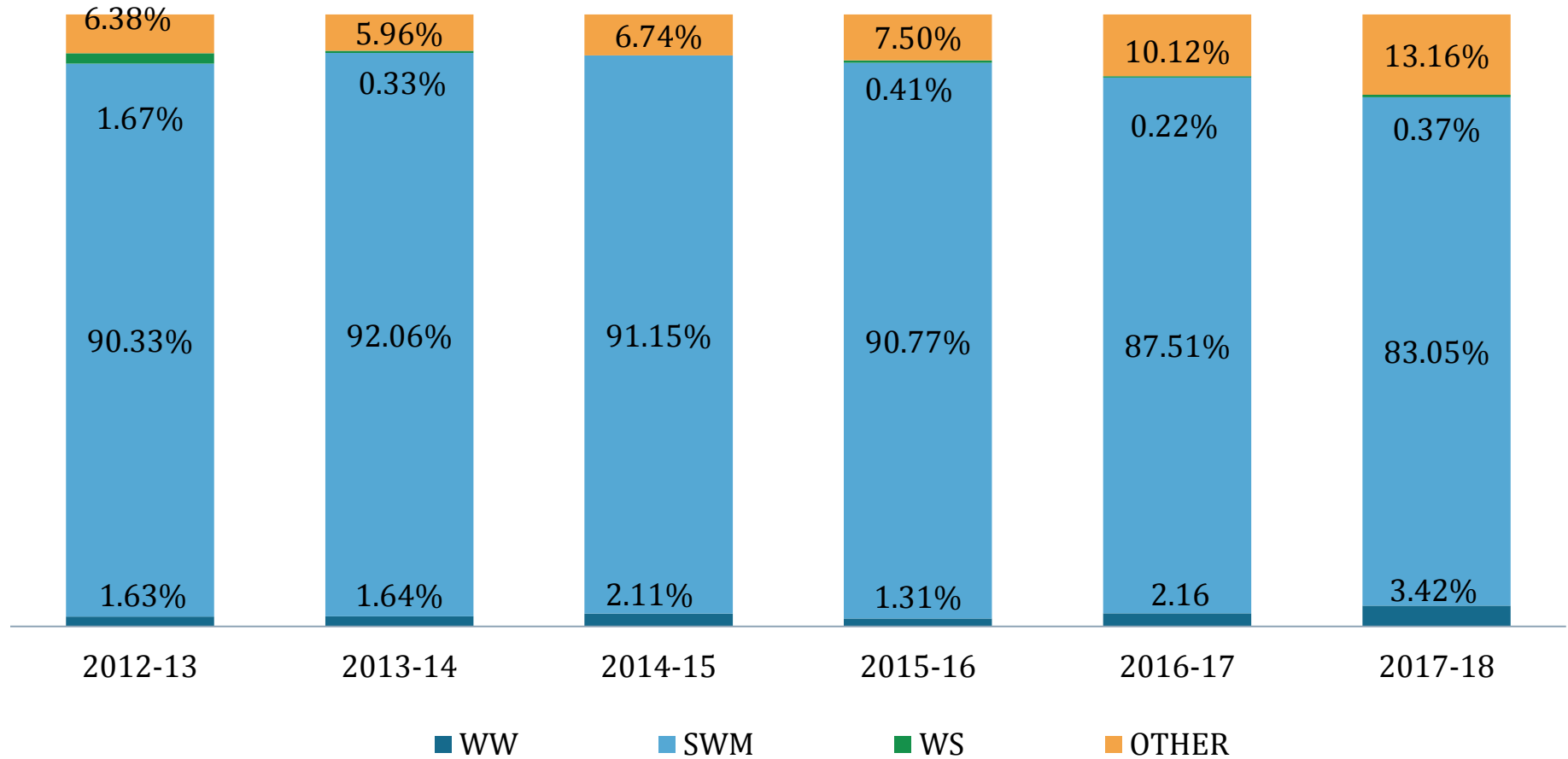
- Grants is major part of revenue receipts and it is increases slightly as year passes.
- But it is low in year 2013-14 because, got less fund available for grants and contribution.

Revenue Expenditure Share



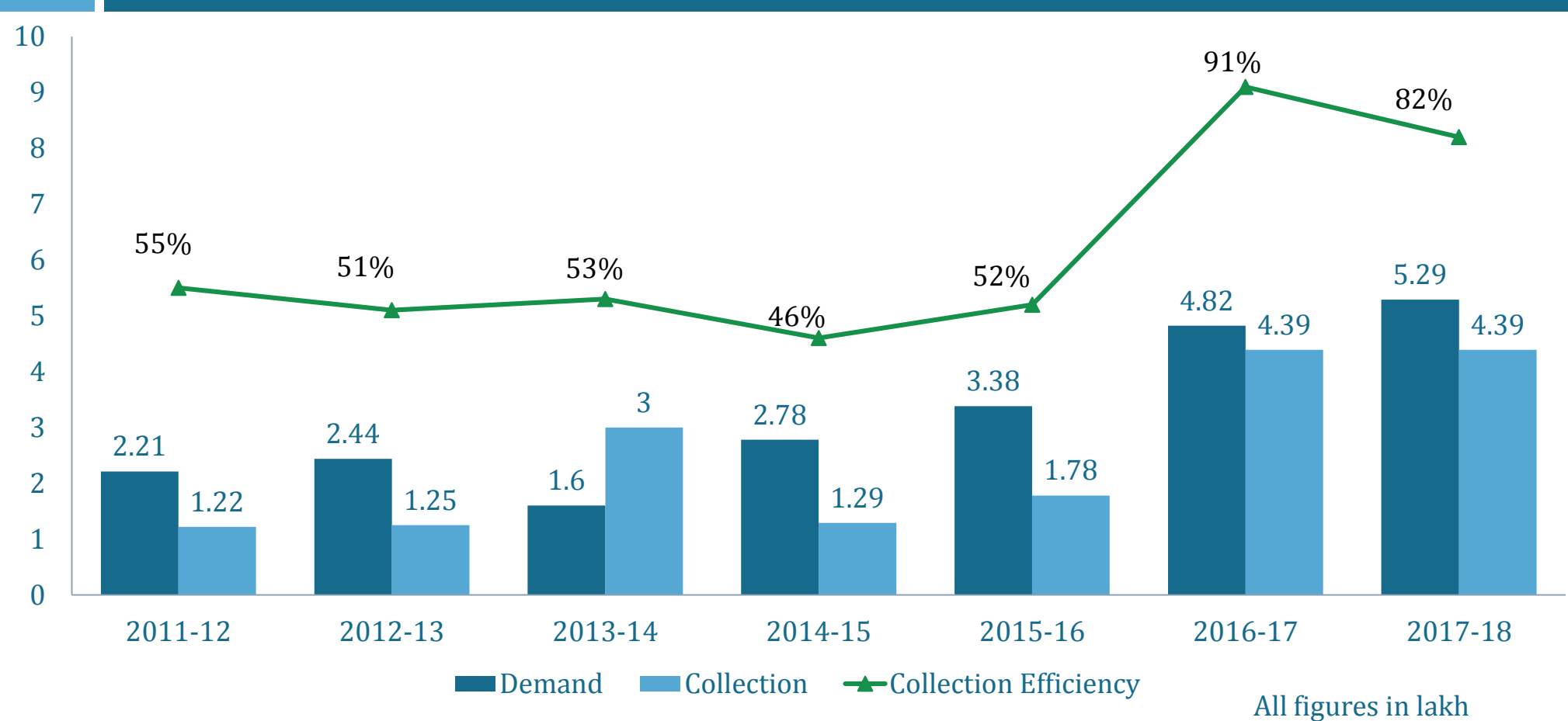
- Above graph shows the Akot M.C spend more fund on general administration and followed by public health.

Revenue Expenditure Share



- Almost same fund is used for public health sector in all year.

Property Tax Demand and Collection



- The efficiency of property tax collection is good in last 2 year as compared to preceding years.
- Sudden change in last 2 year collection efficiency because council printed poster, banners and advertisement in newspaper those who not paid tax and also levied extra charged up to Rs. 500 to 1000
- Council levied swachata tax in property tax with 1% of property tax.
- MJP levied water charged separately, these charges provided in water related slide .

Property tax

Construction Type				
Zone	RCC	Bricks and cement	Stone Construction	Kachha Construction
Zone-1	348	312	240	156
Zone-2	312	276	204	132
Zone-3	276	240	168	120
Zone-4	240	204	132	96

All Figures in Rupees

Property Tax Frame Calculations-

Built Up Area = A

Rent value of property = 7 Rs per Sq. m

Rent Value without depreciation = A x 7 = B

Rent Value with depreciation = C = B - 10% of total Rent

Property tax - D = C x 27% for property tax

Total Property Tax including other tax = Z = D + Special education tax - 2% of property tax +

Tree Tax - 1% of property tax + Education cess - 4% of property tax + Fire fighting - 1% of property tax + Special sanitation tax - 1% of property tax.

MC Budget

Demand Collection Budget Table (All figures in Lakh)

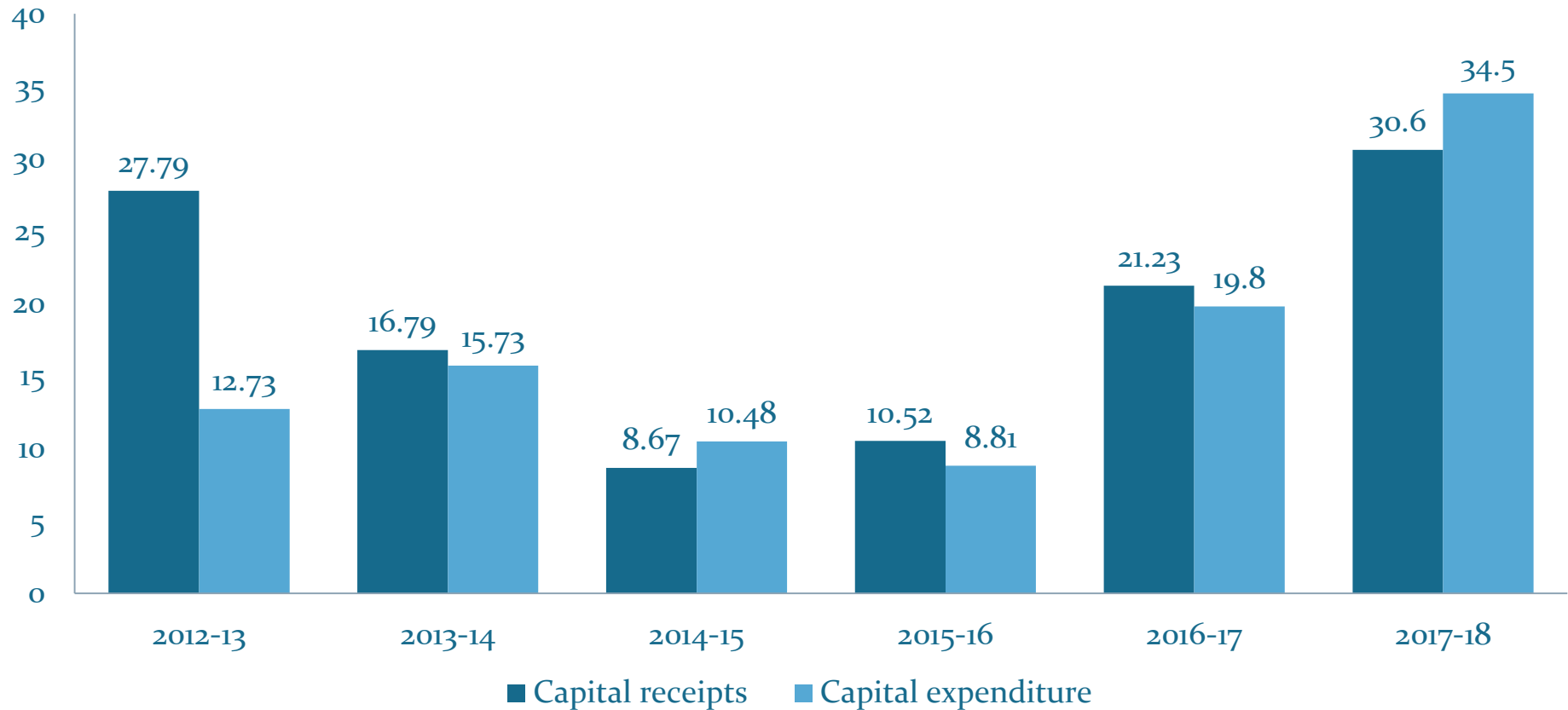
Taxes	Property Tax			Swachhta Tax		
Year	Demand	Collection	Efficiency	Demand	Collection	Efficiency
2011-12	2.21	1.22	55%	-	-	-
2012-13	2.44	1.25	51%	-	-	-
2013-14	1.60	3.00	53%	0.018	0.011	61%
2014-15	2.78	1.29	46%	0.025	0.0136	54.4%
2015-16	3.38	1.78	52%	0.048	0.029	60.41%
2016-17	4.82	4.39	91%	0.08	0.075	93.75%
2017-18	5.29	4.39	82%	0.08	0.075	93.75%

Water Tax-SLB Data

Year	2013-14	2014-15	2015-16	2016-17
Demand	2.18	2.05	2.29	2.30
Collection	0.27	0.27	1.79	1.80
Efficiency	13%	14%	79%	79%

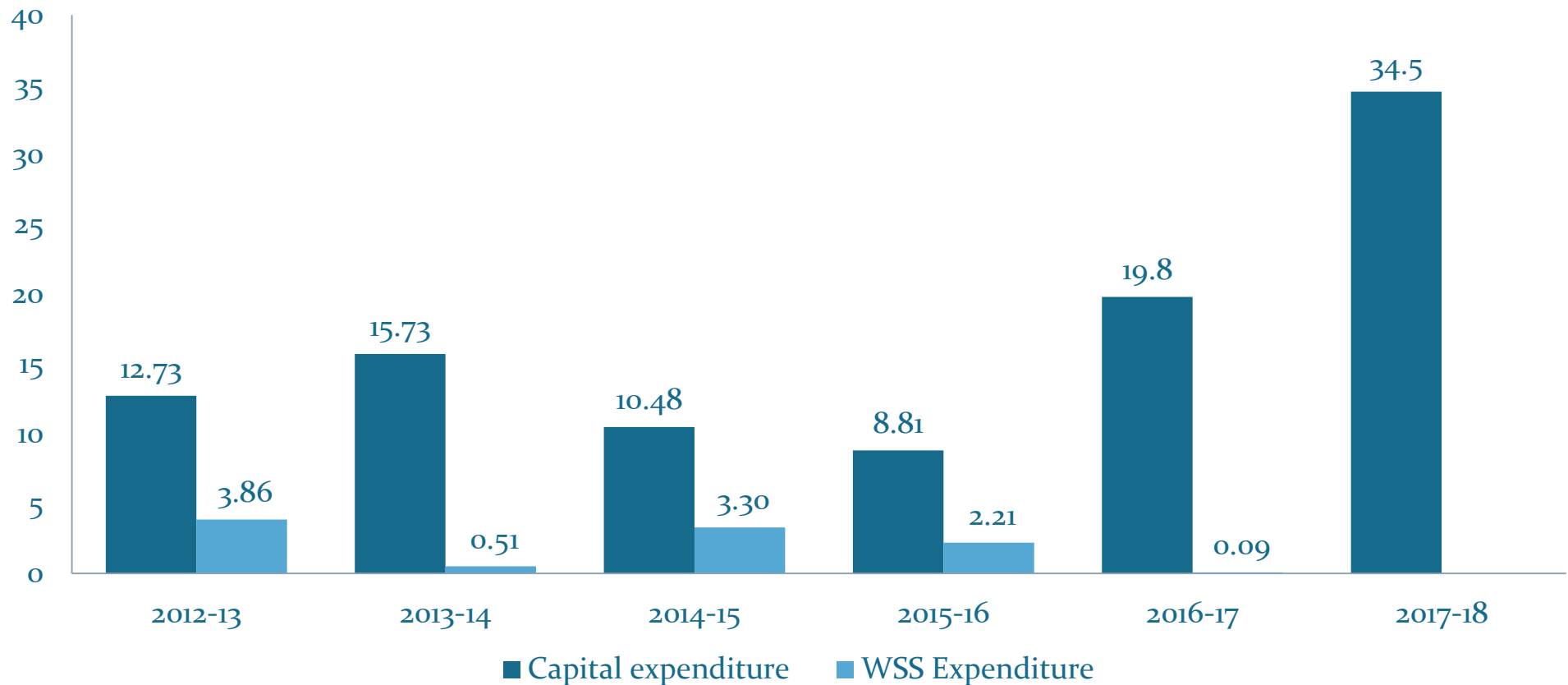
Capital Receipts & Expenditure

All figures in Crore



- Graph shows more capital fund received in year 2016-17 and 2017-18 as compared to previous years and out of which around 55% used.
- The maximum capital fund available with council is 14th finance commission fund.

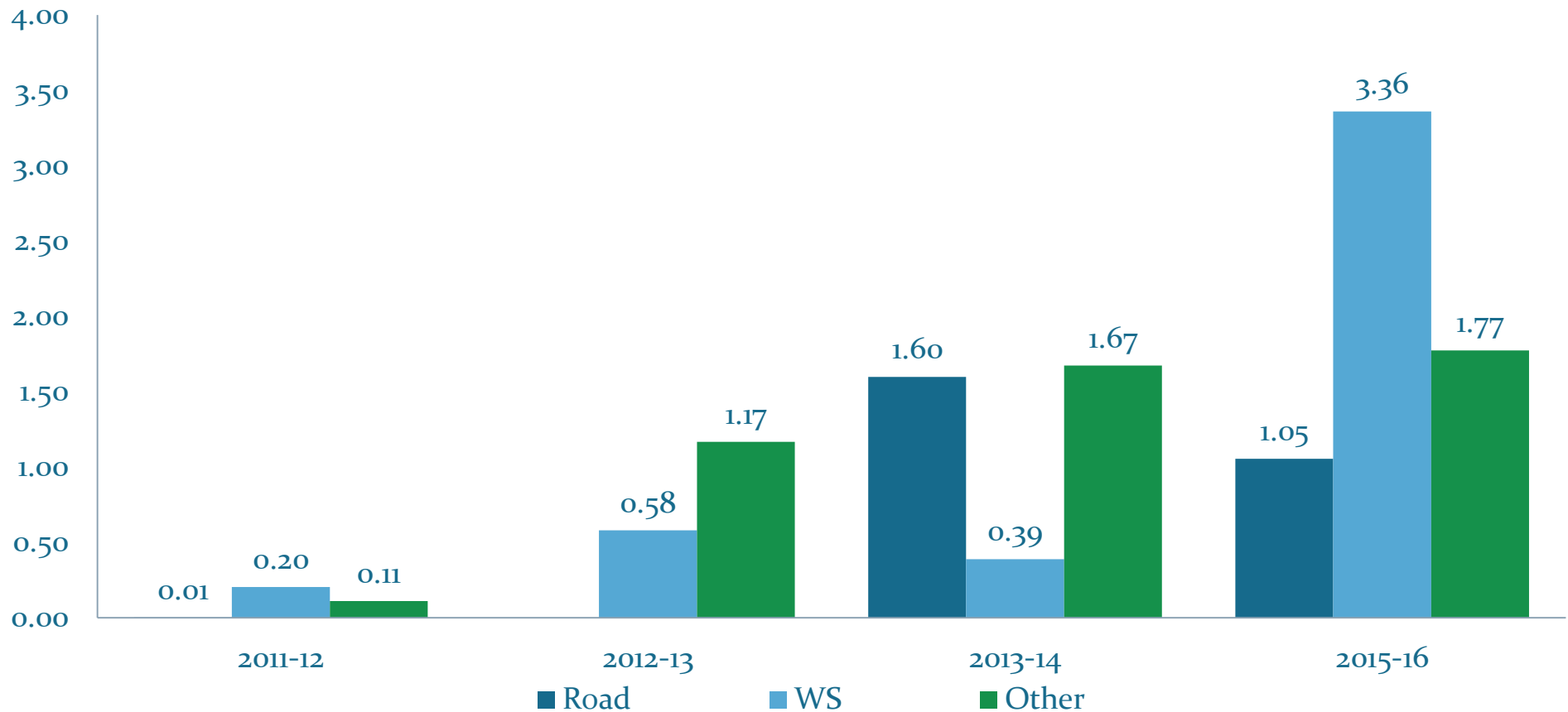
WSS-Capital Expenditure



All figures in Crores

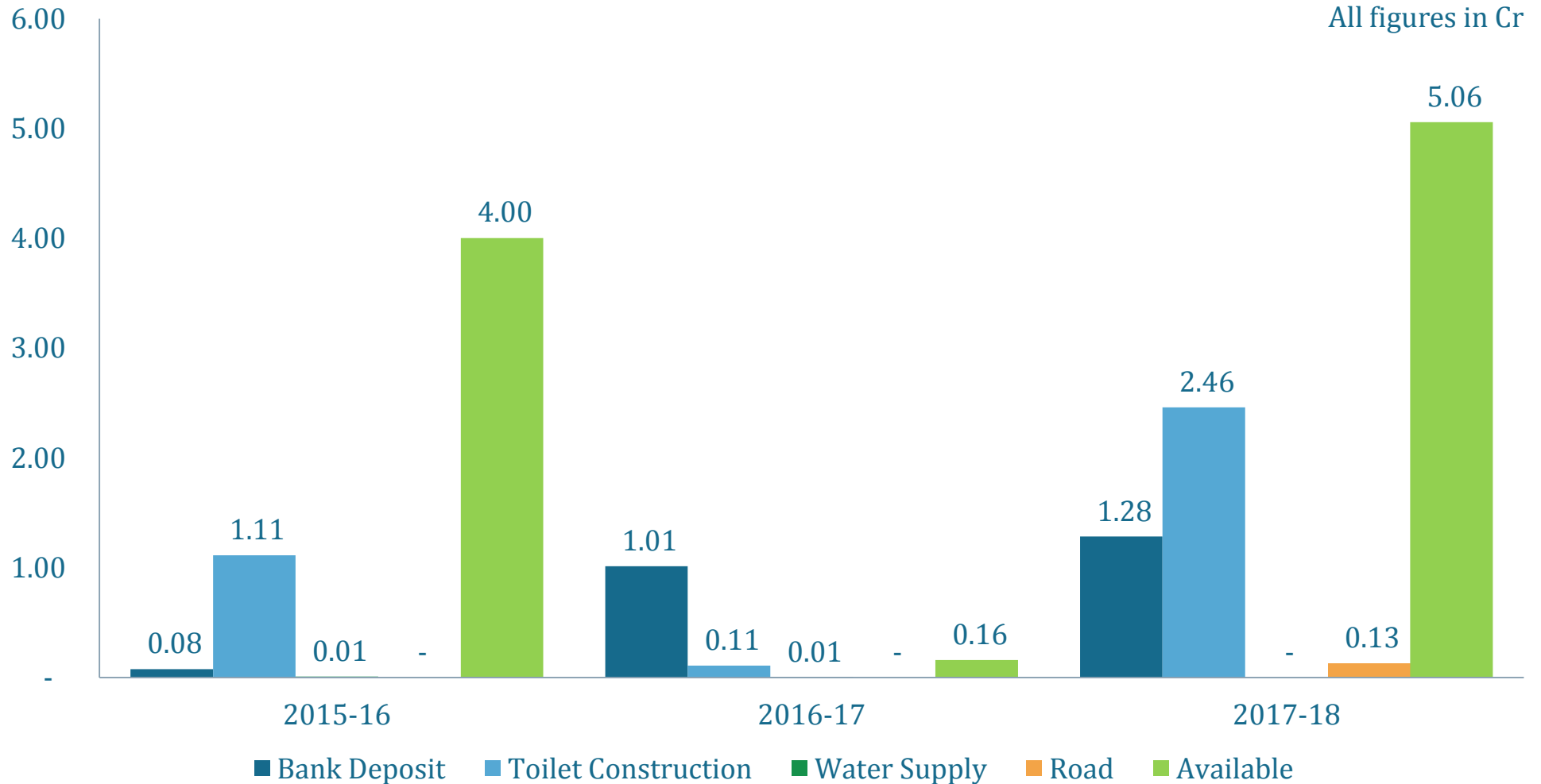
- Graph shows maximum capital receipts received in year 2016-17 and 2017-18 but very less fund is used in this year for WSS as compared to previous years

13th Finance Commission Fund Utilization



- Graph, shows maximum fund of 13th finance commission spend in year 205-16 included maximum share by water supply.
- No fund utilize for sanitation and SWM purpose.
- Other includes Salaries, Pensions, Income Tax, Development plan and electrical bills etc.
- 13th and 14th finance commission grants only can use for capital expenditure.

14th Finance Commission Fund Utilization



- Graph, shows maximum fund of 14th finance commission spend on toilet construction .
- Also, it has been observed that more fund is available.

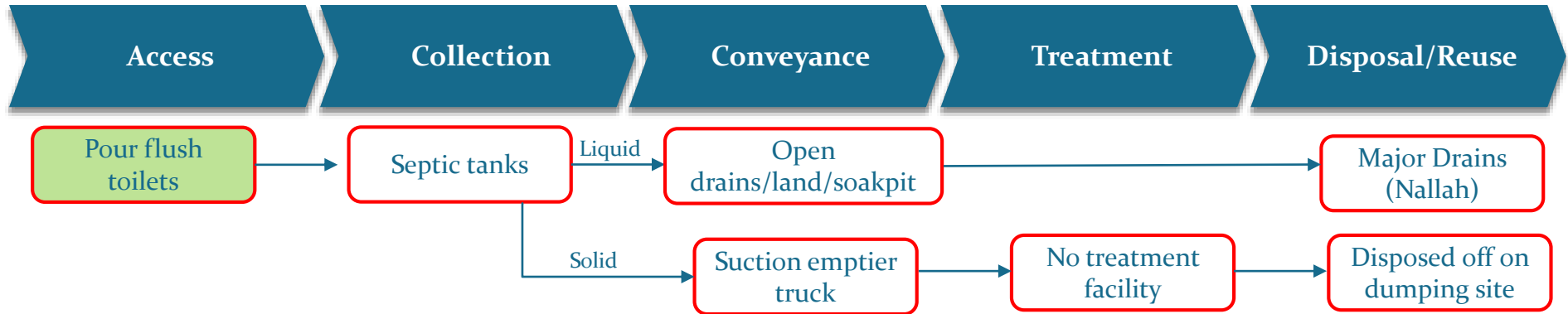
6. Ongoing Project and Proposals

Existing Proposals of the city . . .

S.N	Proposals	Funding	Status
1	2 Vacuum emptier truck	14th Finance Commission	Received administrative approval
2	1 Mobile Toilet	14th Finance Commission	Sent for administrative approval
3	Water Treatment Plant	14th Finance Commission	No activity yet
4	100% Coverage for water supply	Nagarothan Scheme	At present DPR has been sent to MJP for technical sanction.
5	Scientific Solid Waste Management	14th Finance Commission	preparing DPR with the help of MARS Collection and segregation in bidding process
6	Sewerage System and STP	14th Finance Commission	Sent request letter to divisional headquarter

7. Summary of Challenges

Summary: Current Sanitation Service Chain in Akot

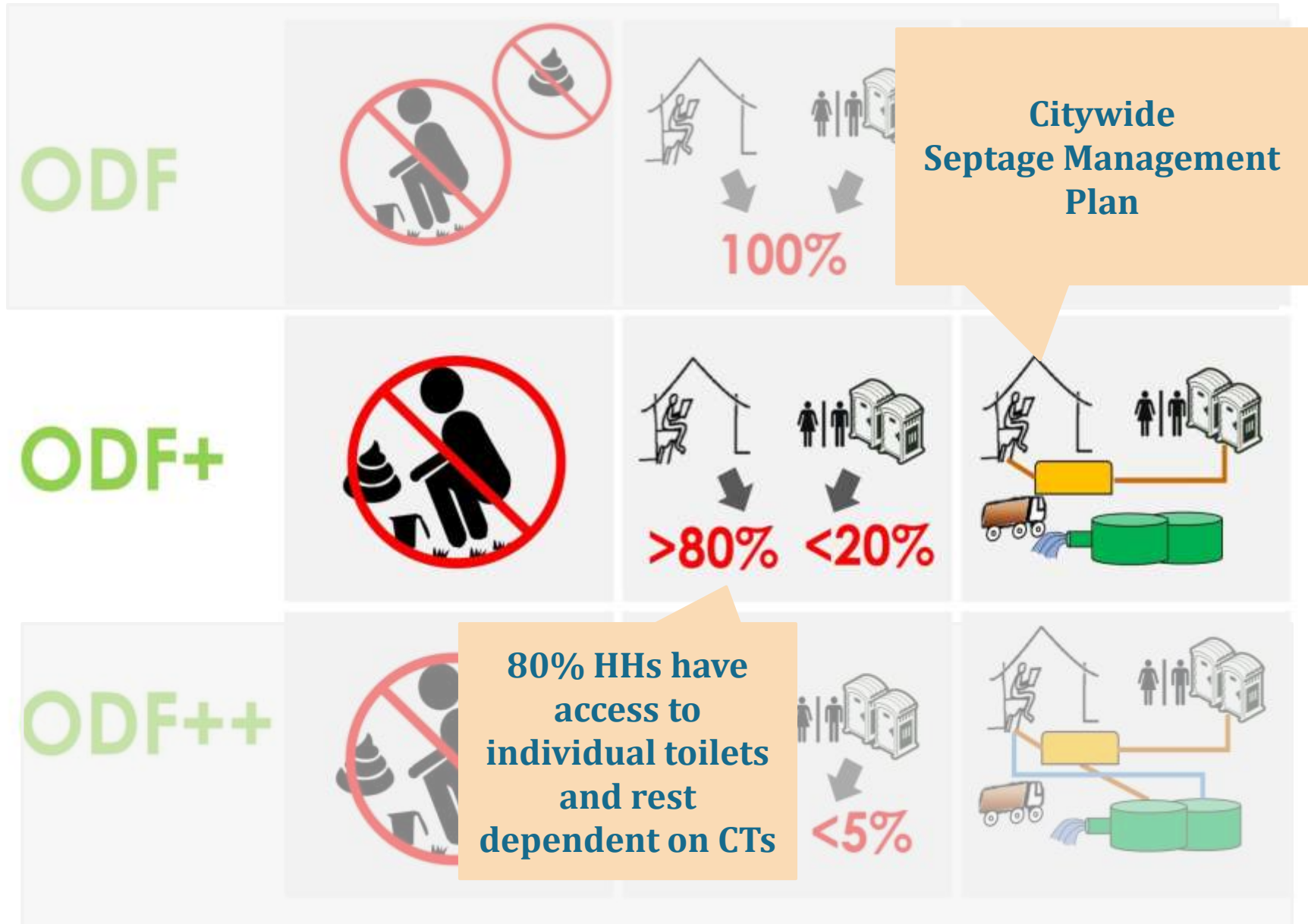


- Approximate coverage of IHHL is 92%.
- There are 6 CTs and 2 PTs with a total of 118 seats
- Some insanitary toilets still found in slums
- ~94% of toilets connected to septic tanks. Few toilets in slums are not connected to safe collection system
- Septic tanks are mostly 2 chambered but not designed as per standards
- Some of them lack access covers
- Only 5.25% septic tanks are cleaned annually on demand basis
- AMC has recently purchased 2 emptier trucks of 3000 lit capacity
- Coverage of drainage network is 77% (open and close)
- No facility for treating the septage and liquid effluents from septic tank
- Septage disposed off on dumping site without treatment
- Untreated effluents from septic tank left in the water bodies creating concern for agricultural produce dependent on it



8. Proposal

Concept of ODF , ODF +, ODF ++ by GoM



Why is Septage Management important !!!

**1 truck of Faecal Sludge and Septage
carelessly dumped
= 5,000 people shitting in the open!**

**1 Gram of Faeces may
contain:**

100 parasites eggs

1000 Protozoa

1,000,000 Bacteria

10,000,000 Virus

Recognition to Septage Management at National level . . .

- ❑ **National Policy on FSSM** by MoHUA, GoI
- ❑ **National declaration on Septage Management** by MoHUA, GoI
- ❑ One of the major **thrust areas** of **AMRUT**
- ❑ **Primer on septage Management and Rapid Assessment tool** for estimating **budget requirements** for **FSSM**
- ❑ **Septage Management Advisory** of Government of India provides references to CPHEEO guidelines, BIS standards, and other resources for preparing SMP / FSSM plan.



CEPT support for moving cities towards ODF+

Support for Onsite systems

- 1 For new toilets that are under construction: Ensuring suitable technology option

CEPT Support

- Dos and Don'ts Flyer
- Training to masons
- CT/PT Assessment

Support in Planning & Technology selection for Emptying & Treatment

- 2 Regular desludging of septic tanks within the city limit and exploring possibility of desludging septic tanks outside city limit

CEPT Support

- Exploring scheduled v/s demand based desludging
- Deciding type & number of vacuum emptier
- Deciding the model of operation (ULB v/s Private)
- Support in development of contract for emptying (if required)
- Support in development of monitoring process / awareness programs

- 3 Suitable technology options for treatment of septage

CEPT Support

- Carrying out septage quality tests to assess quality of septage to be treated.
- Carrying out Ground /river water quality tests
- Identification of suitable treatment technology based on technical and financial assessment and requirement of the ULB
- Support in development of monitoring process
- Market assessment for byproducts /reuse

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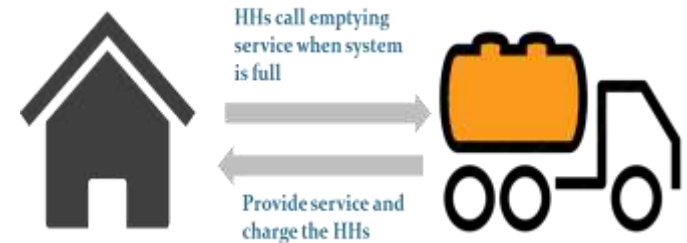
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Support for Conveyance Mechanism - Demand v/s Scheduled

□ Current practice – Demand based emptying (Complaint redressal mode)

- Cleaning is done **on-call** by the **household** who **raises a complaint** regarding this with either the ULB or Private when the tank is full
- A **fee is charged** by the ULB or Private for provision of these services
- Leads to low toilet usage due to the fear of tanks filling up and high cost of emptying



□ Proposed practice – Scheduled based emptying (Regular service mode)

- Septic tanks are cleaned on a **pre-determined schedule**.
- Households / property owners pay a **local tax** and get this services on regular intervals
- Scheduled emptying is being used in **Wai, Sinnar, Malaysia, Vietnam and Indonesia**



From a Consumer complaint system to Regular service . . .

Benefits of Scheduled Emptying

- **Equitable services** - all households / properties are covered by services
- **Pricing** – Services are offered at lower prices, due to efficiency gains
- **Behavior change** - Contribution to ODF sustainability as toilet usage can increase
- **Eradicate Manual scavenging** - Removal of need for manual scavenging due to regular emptying
- **Infrastructure optimization** - More predictable loads for treatment facility and route optimization of trucks
- **Environmental benefits** - Likely reduction in BOD and coliform in septic tank effluent, as well as lower likelihood of septic tank overflows

Support in operationalizing emptying services . . .

City	Demand Desludging (Existing)		Scheduled Desludging (5 year cycle)	
	No. of tanks emptied at present	Number of trucks	No. of tanks to be emptied daily	Number of trucks required *
Akot	2-3 daily	1 - 3000 L	13	3 trucks

Private sector is ready to invest for these trucks

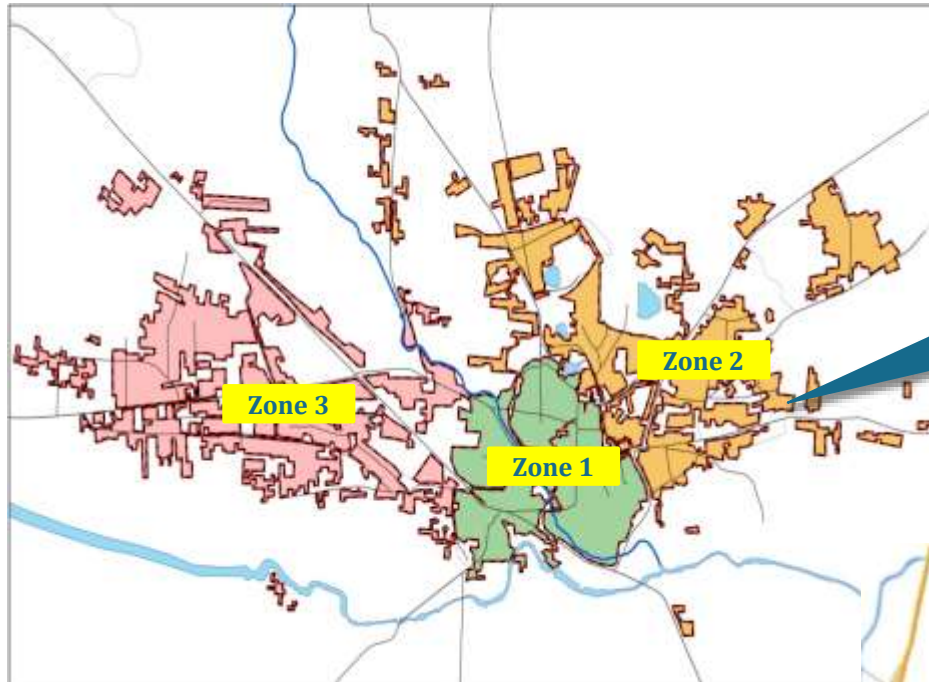
Support in

- Setting up **Monitoring mechanism** to monitor ULB / Private sector operations
- Support in **development of contract** for emptying (if required)
- **Awareness** for regularly desludging of septic tanks

Note : * - Truck sizes may range from 3000 – 5000 L based on road width and average size of septic tanks

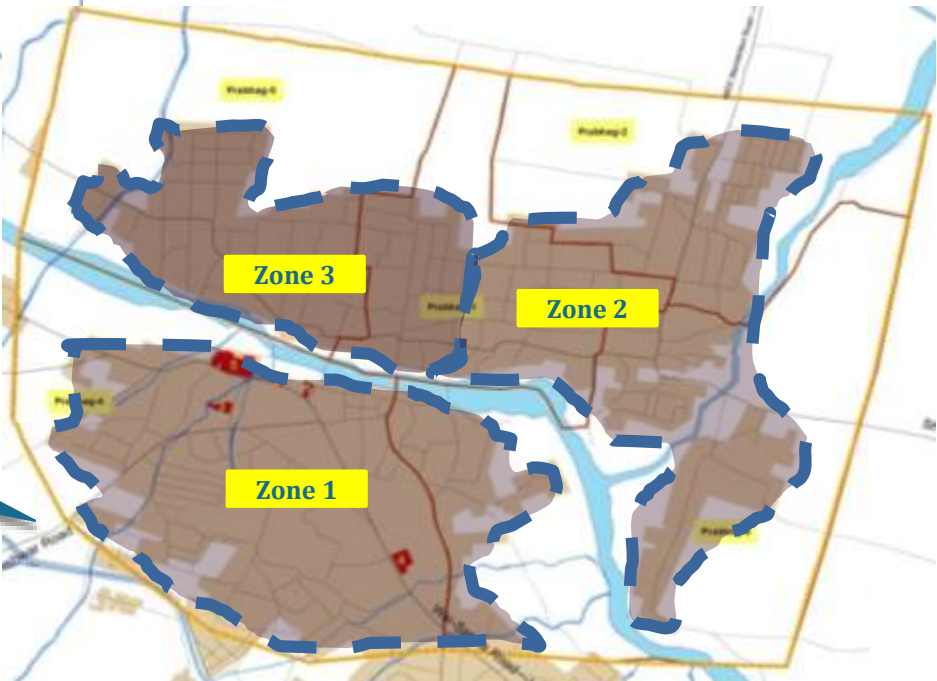
Example of Wai and Sinnar - Scheduled desludging services by involving private sector . . .

3 year cycle



3 trucks to desludge ~ 4000 septic tanks annually

2 trucks to desludge ~ 2000 septic tanks annually

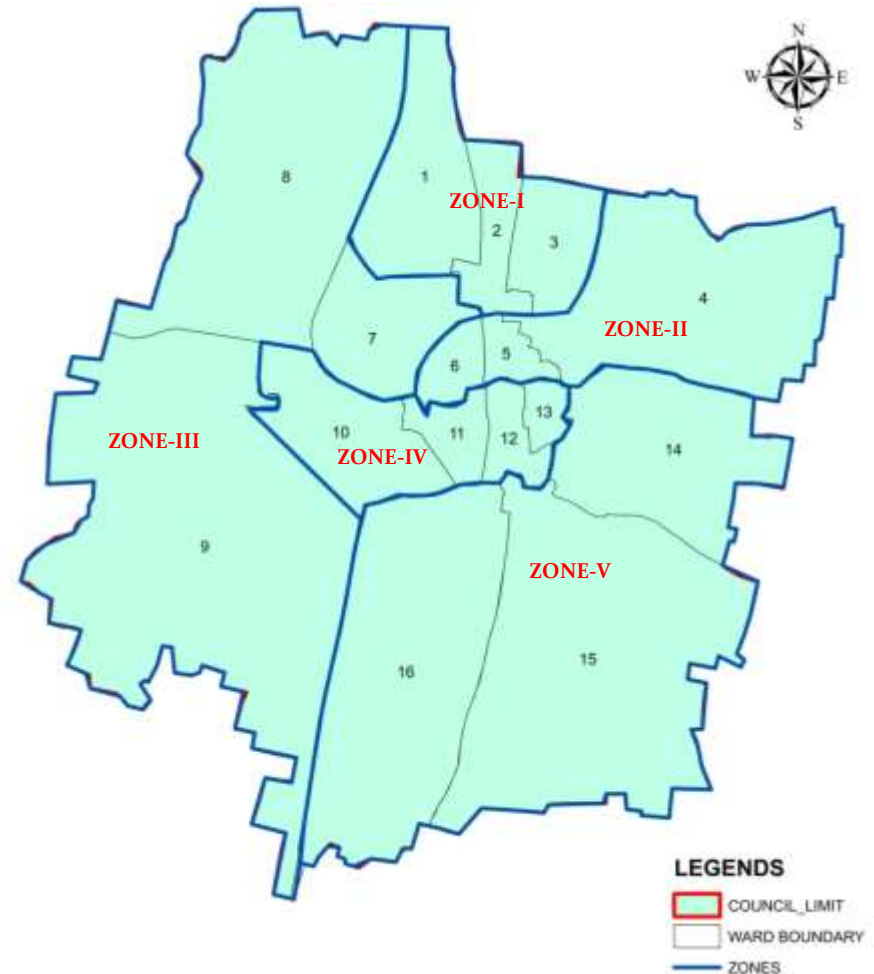


Zoning for Akot for schedule emptying

Zoning of the city for emptying of septic tanks

- The town has been divided into 5 zones for the septic tank desludging cycle. The septic tanks of each zone will be cleaned in turn every year during the 5 year cycle.
- The zones have been divided based on the distribution of households. The zones have been approximately delineated.

ZONE	Ward	Total Population
Zone-I	1,2,3	17,835
Zone-II	4,5,6	17,382
Zone-III	7,8,9	16,682
Zone-IV	10,11,12,13	20,729
Zone-V	14,15,16	20,004



*Population as per census 2011

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Support in operationalizing Treatment plant. . .

City	Demand Desludging	Scheduled Desludging
	Septage load cum/day	Septage load cum/day
Akot	12	65

Incremental Approach

Support in

- Identification of suitable septage treatment option
- Carrying out Wastewater quality tests
- Developing monitoring process
- Market assessment for by products /reuse

Need for **Incremental Approach** . . .

- Need to **start treating** the **existing septage** that is being dumped at dump site
 - ▣ Need to select **treatment technology** which is **modular** in approach



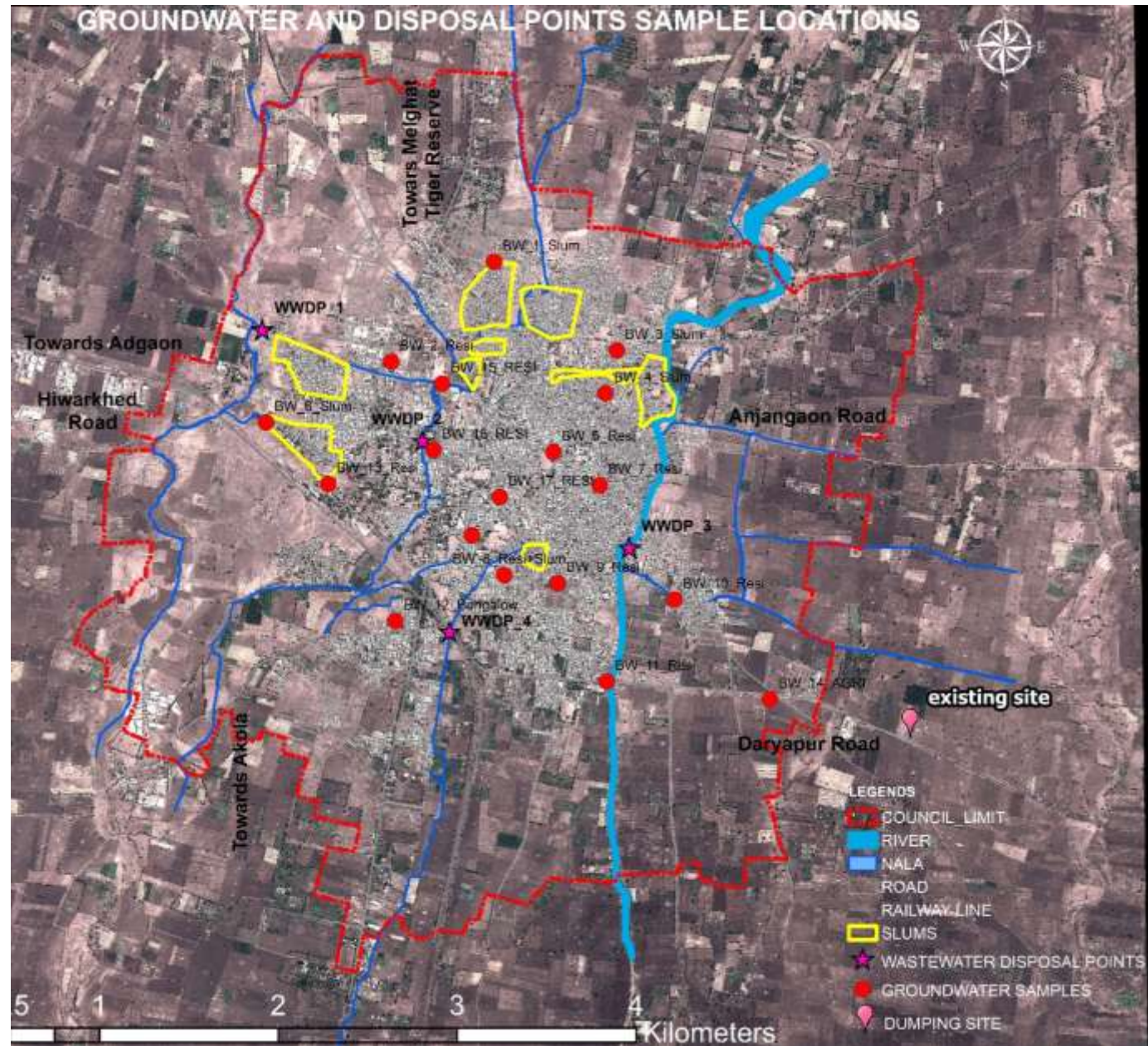
Incremental

- Need to move towards **scheduled desludging gradually**
 - ▣ Develop a **DPR**
 - ▣ Take **technical** and **administrative approvals**
 - ▣ Roll out **contracts** for **construction** and **O&M**

Quality tests to be carried out in ODF+ cities . . .

Sampling location points identified for:

- Surface water quality,
- Groundwater quality,
- Effluent quality
- Septage quality



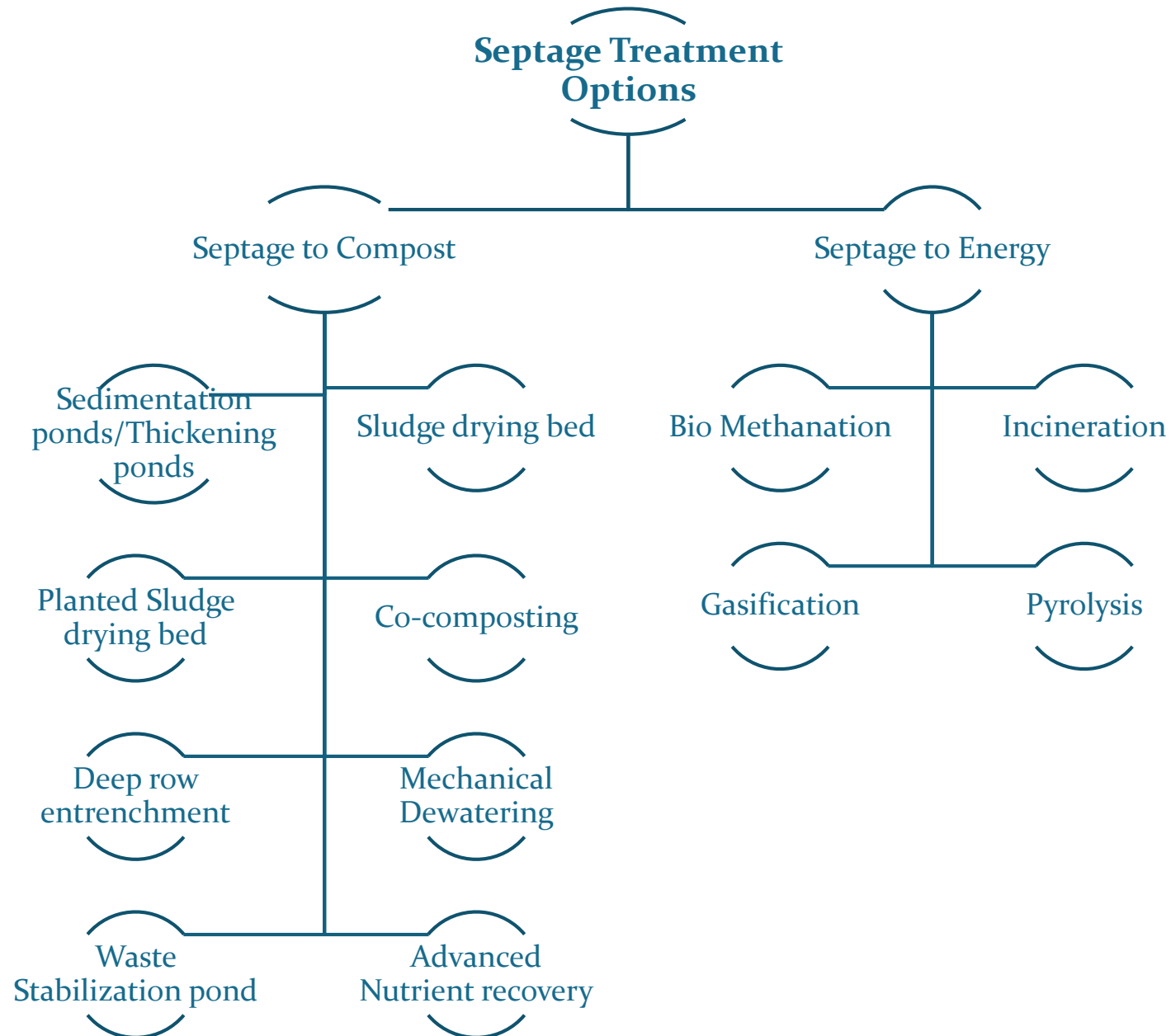
Septage Treatment

Options for cities without STP

- a. Co-treatment at nearby STP
- b. Co-treatment with SWM treatment facility
- c. Cluster based FSTP
- d. Independent FSTP ✓

Options for Akot

Septage Treatment Options



Technology options for AKOT

Approach	Financing	Akot		
		Sludge Drying Bed + Oxidation pond	Planted Sludge Drying Bed + planted gravel filter+ polishing pond	UASB/MBBR/SBR
Scheduled (65 cum/day)	Capex	55-60	145-150	245-250
	Opex/year	15-20	10-15	25-30

All figures in lakhs

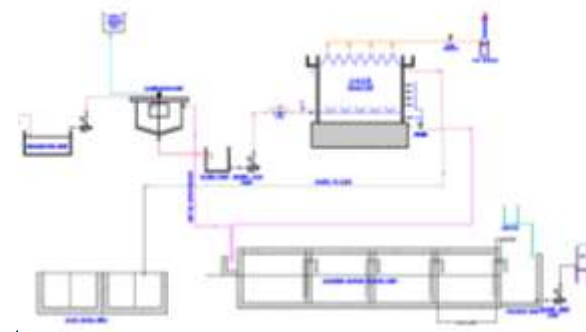
Land available for FSTP – 11 Acre --- area required is 500 – 9,000 sqm



Sludge drying bed



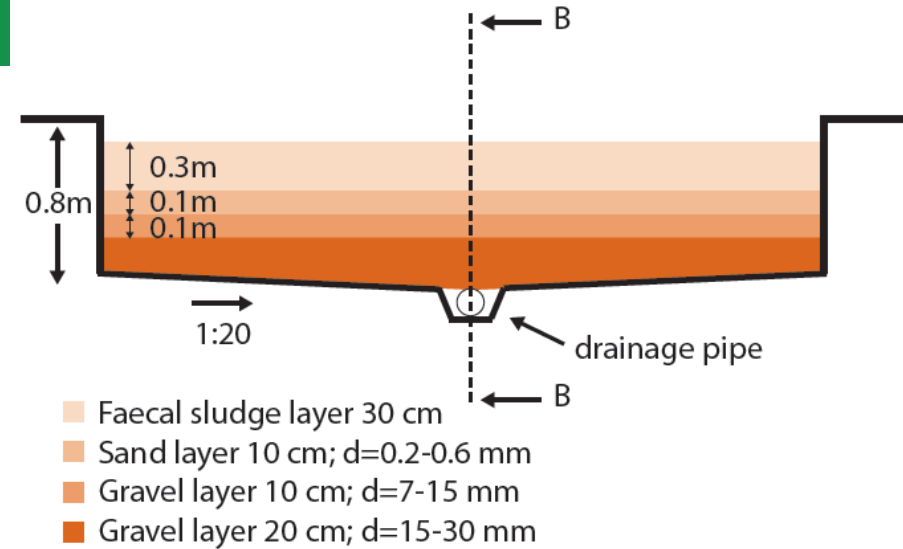
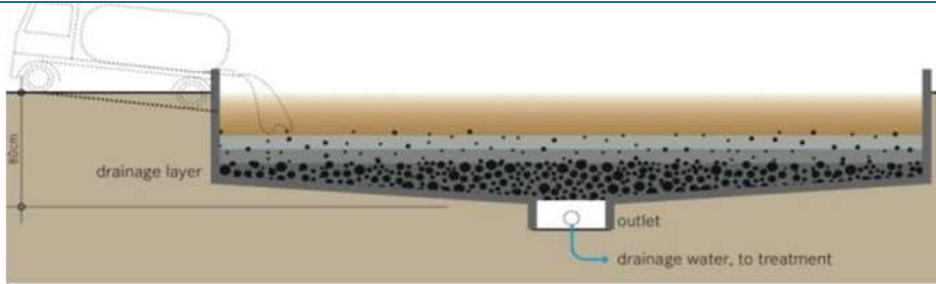
Planted sludge drying bed



UASB/MBBR/SBR

Technology Options for FSSM Services- Emptying & Treatment

Scenario 1: Sludge Drying Bed



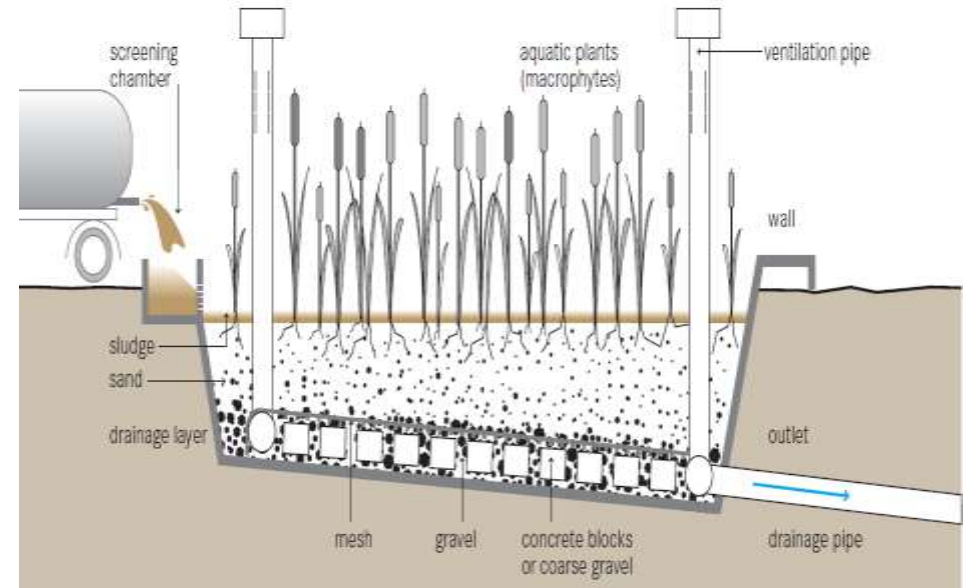
An Unplanted sludge Drying Bed is a simple, permeable bed that, when loaded with sludge, collects percolated leachate and allows the sludge to dry by evaporation

- Dried sludge must be removed every 10 to 15 days. Sand must be replaced when the layer gets thin. Treated Septage and leachate may require further treatment based on output quality
- This technology can be used in **hot and temperate climate**.
- **Climatic conditions** in India are **favorable** for SDB.
- Does **not require electricity** to function but is **land intensive**
- Simple technique but trained staff required.

Area available	46800 sq m (SWM and FSTP)
Maximum average rainfall of Akola (2016)	852.7 mm (state average 1272.8 mm)
Ground water level	30 m
Soil type	black cotton soil

Technology Options for FSSM Services- Emptying & Treatment

Scenario 2: Planted sludge drying bed



Planted sludge Drying Bed is similar to an Unplanted sludge Drying Bed with the benefit of increased transpiration

- The key feature is that the filters do not need to be desludged after each feeding /drying cycle. Fresh sludge can be applied directly onto the previous layer
- Dried sludge must be removed every 2-3 years. leachate may require further treatment based on output quality

Area available	46800 sq m (SWM and FSTP)
Maximum average rainfall of Akola (2016)	852.7 mm (state average 1272.8 mm)
Ground water level	30 m
Soil type	black cotton soil

Technology Options for FSSM Services- Emptying & Treatment

Scenario 3 : Independent FSTP

DBOT Tender Document for Fecal Sludge & Septage Treatment Plant at Sinnar, Maharashtra

Sinnar Municipal Council, Maharashtra

TENDER DOCUMENT

Name of Work

A Turnkey project on Design, Construction, Commissioning and Operation of Fecal Sludge & Septage treatment plant of capacity 70 m³/day at Sinnar Municipal Council, District - Nashik, Maharashtra

The work includes (i) Design, Construction and Commissioning of Fecal Sludge & Septage treatment plant (FSSTP) with all appurtenant structures and allied works including all necessary approvals from various government departments etc. complete including testing, trial run for One Month and commissioning of the plant (ii) operation & maintenance of the complete works of FSSTP and allied works for a period of 3 years



Chief Officer,

Sinnar Municipal Council, Maharashtra

Municipal Engineer:

Chief Officer

Vice President

President

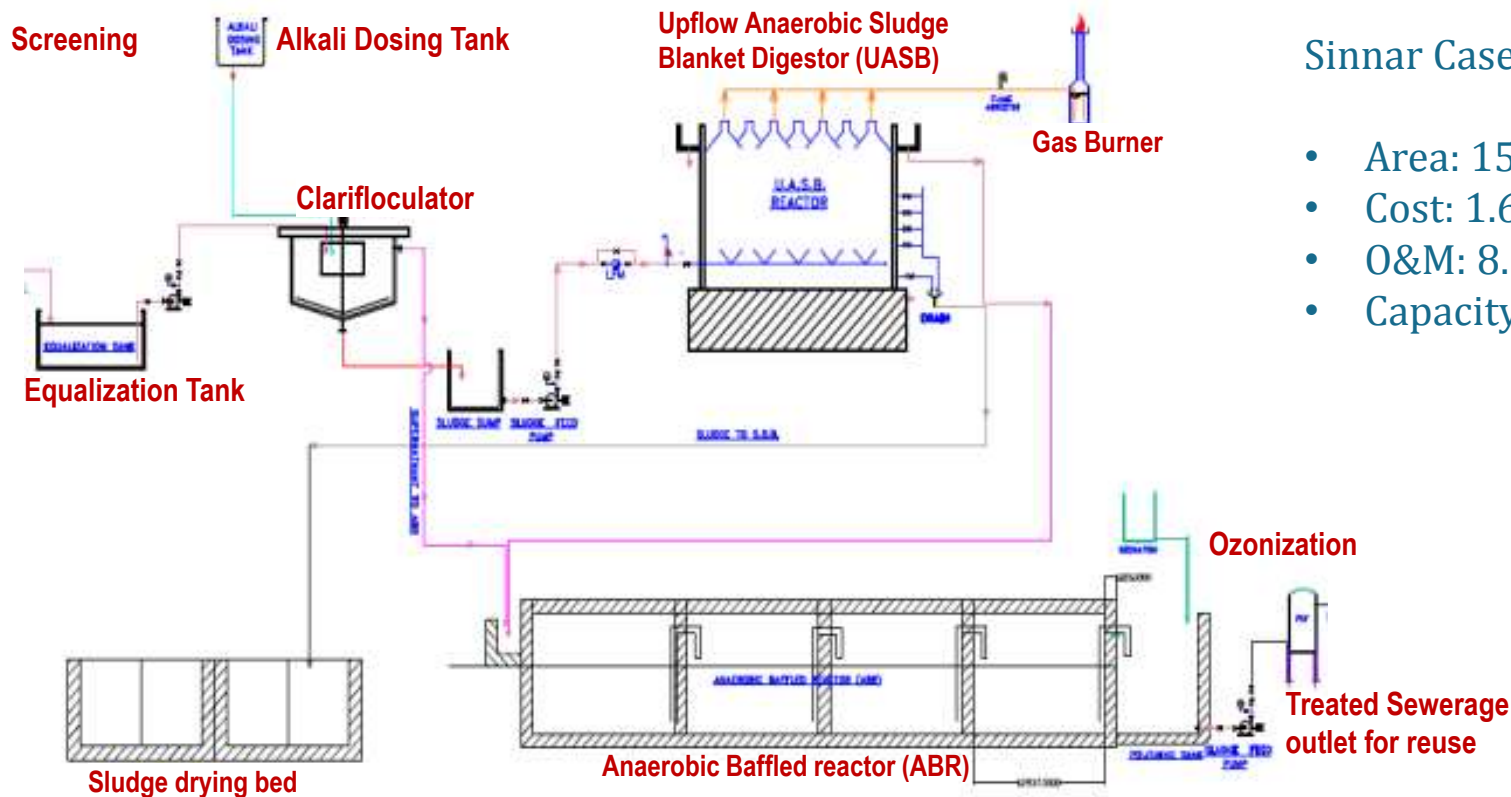
Support for Tendering and Bidding process for Design, Construction, Commissioning and Operation of the FSTP for a plant of 65 cum per day capacity on 2 acre of land.

Including:

- Preparation of Tender Documents
- Invitation of Bids
- Pre bid meetings
- Technical evaluation
- Contracts preparations

Technology Options for FSSM Services- Emptying & Treatment

Scenario 3 : Independent FSTP - UASB/MBBR/SBR



Sinnar Case Example:

- Area: 1547 Sq Mt
- Cost: 1.63 Cr
- O&M: 8.3 Lakh per year
- Capacity : 70 cum per day

Treatment Technology	Land Requirement	Energy Requirement	Climatic condition	Examples	Estimated Capex Cost (Rs. In lakhs/ cum)	O&M Cost (Rs. in lakhs/Year)
UASB/MBBR/SBR	Low	High	Nil	Sinnar, Kohima, Cochin, Periyanaickenpalayam	2.5-5	8-15

**How do we finance
FSSM Services??**

Capital costs can be financed through . . .

GoM resolution on use of 50% of funds for SBM and sanitation activities

१४ व्या केंद्रीय वित्त आयोगाच्या शिफारशीनुसार राज्यातील नागरी स्थानिक स्वराज्य संस्थांना प्राप्त होणाऱ्या मुलभूत अनुदानातून स्वच्छ महाराष्ट्र अभियानावर करावयाच्या खर्चाच्या कार्यपध्दतीबाबत.

महाराष्ट्र शासन
नगर विकास विभाग
शासन परिपत्रक क्रमांक: स्वमाअ-२०१७/प्र.क्र. ४१/नवि-३४,
हुतात्मा राजगुरु चौक, मादान कामा मार्ग
४ था मजला, मंत्रालय, मुंबई
दिनांक : २९ एप्रिल, २०१७

वाचा :

- (१) शासन निर्णय ,नगर विकास विभाग, क्रमांक स्वमाअ २०१५/ प्र.क्र.२३/नवि-३४, दिनांक १५ मे, २०१५.
- (२) शासन निर्णय ,नगर विकास विभाग, क्रमांक टिएफसी-८०१५/ प्र.क्र.१०६/नवि-०४, दिनांक ३ ऑगस्ट, २०१५.

शासन परिपत्रक :

१४ व्या वित्त आयोगाच्या शिफारशीनुसार राज्यातील नागरी स्थानिक स्वराज्य संस्थांना प्राप्त होणाऱ्या मुलभूत अनुदानातून किमान ५० टक्के एवढा निधी स्वच्छ महाराष्ट्र अभियानातील बाबींवर खर्च करण्याचे संदर्भात क्रमांक २ येथील दिनांक ३ ऑगस्ट, २०१५ च्या शासन निर्णयान्वये बंधनकारक करण्यात आले असून, सदर शासन निर्णयातील परिच्छेद १ (ii) (i) मध्ये नमूद करण्यात आलेली कामे या निधीमधून करण्यास मुभा देण्यात आलेली आहे.

२. या संदर्भात शासनाच्या असे निदर्शनास आले आहे की, काही शहरांमध्ये घनकचऱ्याचे संकलन व वाहतूक करून त्यावर प्रक्रीया न करता तो डंपिंग ग्राऊंडवर डंप करण्याचे काम कंत्राटीपध्दतीने (Outsource) करण्यासाठी १४ व्या वित्त आयोगाचा निधीचा वापर करण्यात येत आहे. तसेच, काही शहरांमधील घनकचऱ्याचे संकलन व वाहतूक करण्यासाठी वाहने खरेदी करण्याकरीता हा निधी वापरण्यात येत आहे.

३. केंद्र शासनाच्या स्वच्छ भारत अभियानाच्या धर्तीवर राज्यामध्ये स्वच्छ महाराष्ट्र अभियानाची अंमलबजावणी सुरु आहे. या अभियानांतर्गत घनकचरा व्यवस्थापन नियम, २०१६ अंतर्गत कार्यवाही करून शहरे "स्वच्छ" करणे हा महत्वाचा घटक आहे. त्यानुसार, राज्यातील प्रत्येक नागरी स्थानिक स्वराज्य संस्थांनी त्यांच्या शहरात निर्माण होणारा १००% कचरा निर्मितीच्या जागीच वेगवेगळा (ओला कचरा, सुका कचरा व घरगुती घातक कचरा) करून घेवून स्वतंत्रपणे संकलित करणे, या संकलित केलेल्या (ओला कचरा, सुका कचरा व घरगुती घातक कचरा) १००% कचऱ्याची वाहतूक करणे, ओल्या कचऱ्यावर केंद्रीय अथवा विकेंद्रित पध्दतीने जागीच प्रक्रीया

GoM resolution asking city to move towards ODF+ and to utilize incentive grant and 14th FC funds for ODF+ activities

स्वच्छ महाराष्ट्र अभियान (नागरी) अंतर्गत शहरांनी हागणदारी मुक्ततेचा दर्जा शासनातर्फे टिकविण्याबाबत.

महाराष्ट्र शासन
नगर विकास विभाग
शासन परिपत्रक क्रमांक: स्वमाअ-२०१७/प्र.क्र.२३/नवि-३४
शाहीद बंगलसिंग चौक, मादान कामा मार्ग,
मंत्रालय, मुंबई - ४०० ०३२.
दिनांक : १७ मार्च, २०१७

वाचा -

शासन निर्णय क्र. नगर विकास विभाग, स्वमाअ-२०१५/प्र.क्र.२३/नवि-३४, दि.१५ मे २०१५.

शासन आवेदन -

केंद्र शासनाच्या "स्वच्छ भारत अभियान (नागरी)" च्या धर्तीवर दिनांक १५ मे, २०१५ च्या शासन निर्णयान्वये राज्यामध्ये "स्वच्छ महाराष्ट्र अभियान (नागरी)" ची अंमलबजावणी सुरु झाली आहे. या अभियानांतर्गत शहरे "हागणदारी मुक्त" करणे व घनकचरा व्यवस्थापनांतर्गत "स्वच्छ" करणे या दोन प्रमुख बाबींचा समावेश आहे.

२. या अभियानांतर्गत शहरांमधील ज्या कुटुंबांकडे शौचालयाची सुविधा उपलब्ध नसल्याने जी कुटुंबे उपघटकावर शौचास जातात, अशा कुटुंबांना वैयक्तिक घरगुती शौचालय (MHL) अथवा सामुदायीक शौचालयाची (C) सुविधा उपलब्ध करून देवून शहरे हागणदारी मुक्त करण्यात येत आहेत.

३. राज्यातील सार्वजनिक शौचालय वापरमाना कुटुंबांची संख्या (२१%) देशातकरीबरील सार्वजनिक शौचालय वापरमाना कुटुंबांच्या संख्येच्या सरासरीपेक्षा जास्त आहे. या अभियानांतर्गत शहरे हागणदारी मुक्त झाल्यानंतर हागणदारी मुक्त शहराचा दर्जा शासनातर्फे टिकविण्यासाठी (ODF Sustainability) जास्त जास्त जास्त कुटुंबांना वैयक्तिक घरगुती शौचालयाची सुविधा उपलब्ध करून देणे आवश्यक आहे. तसेच शहरांमध्ये वाढण्यात आलेल्या शौचालयांच्या सेप्टिक टँक मधील मैला व्यवस्थापन करणे आवश्यक आहे.

४. हागणदारी मुक्त शहर (ODF) व ODF+ तसेच ODF++ शहरांचे निकष पुढील प्रमाणे आहेत :-

	निकष १	निकष २	निकष ३
ODF शहरे	दिवसान्ना कुठल्याही वेळेस शहराच्या कुठल्याच भागात एकाही व्यक्तीने उपलब्ध वापर शौचास बसल्याचे आढळून न येणे, तसेच शहरांमध्ये कुठेही उपलब्ध वापर मानवी विषेधे पुरावे न दिसणे	प्रत्येक कुटुंबास, संस्थेस व इतर सर्व प्रकारच्या मातमतांना शौचालयांची उपलब्धता असावी. (स्थानी अथवा गट शौचालये / सार्वजनिक शौचालये)	शहरातील सर्व शौचालये सुरक्षित मैला संकलन व विल्हेवाट प्रणालीस जोडलेली असावी.

GoM resolution for incentive funds for ODF+ activities

स्वच्छ महाराष्ट्र अभियान (नागरी)
अंतर्गत हागणदारी मुक्त व स्वच्छ
होगान्या नागरी स्थानिक स्वराज्य
संस्थांना प्रोत्साहन अनुदान देण्याबाबत.

	ODF Cities (Rs.)	Swachh Cities (Rs.)	Linked to Sustainability
A Class	2 Cr.	2 Cr.	30% released on first validation by State, if positive
B Class	1.5 Cr.	1.5 Cr.	30% released on validation by MoUD, if positive
C Class	1 Cr.	1 Cr.	40% released on 2 nd validation after a six months, if positive

Utilisation of funds for Sustainability and moving towards ODF+ and ODF++

महाराष्ट्र शासन
नगर विकास विभाग
शासन निर्णय क्रमांक: स्वभाअ २०१६/प्र.क्र.२३/नवि-३४
हुतात्मा राजगुरु चौक, मादाम कामा मार्ग
४ व्हा मजला, मंत्रालय, मुंबई
दिनांक : २८ मार्च, २०१६

बाबा:

- (१) शासन निर्णय, नगर विकास विभाग, क्रमांक स्वभाअ २०१५/प्र.क्र.२३/नवि-३४, दिनांक १५ मे, २०१५.
- (२) राज्य अभियान संचालनालय, स्वच्छ महाराष्ट्र अभियान संचालनालय, यांचे परिपत्रक क्रमांक राअस/कार्यान्वयन सूचना/४२/१५-१६ दिनांक २८ जुलै, २०१५
- (३) शासन निर्णय, नगर विकास विभाग, क्रमांक स्वभाअ २०१५/सं.क्र.१५४९/नवि-३४, दिनांक २९ ऑक्टोबर, २०१५.

प्रस्तावना :

केंद्र शासनाच्या "स्वच्छ भारत अभियान (नागरी)" च्या धर्तीवर संदर्भीय दिनांक १५ मे, २०१५ च्या शासन निर्णयान्वये राज्यामध्ये "स्वच्छ महाराष्ट्र अभियान (नागरी)" ची अंमलबजावणी सुरु झाली आहे. या अभियानांतर्गत शहरांमधील ज्या कुटुंबांकडे शौचालयाची सुविधा उपलब्ध नसल्याने ती कुटुंबे उघड्यावर शौचास जातात, अशा कुटुंबांना वैयक्तिक घरगुती शौचालय अथवा सामुदायिक शौचालयाची सुविधा उपलब्ध करून देऊन, शहरे "हागणदारी मुक्त" करणे व घनकचरा व्यवस्थापनांतर्गत शहरात निर्माण होणारा १००% कचरा निर्मितीच्या जागीच (ओला व सुका) वेगवेगळा करून स्वतंत्रपणे संकलित करणे, या संकलित केलेल्या (ओला व सुका) १००% कचऱ्याची वाहतूक करणे, ओल्या कचऱ्यावर केंद्रीय अथवा विकेंद्रित पध्दतीने जागीच प्रक्रिया करणे तर सुक्या कचऱ्याचे विलगीकरण करून त्यावर प्रक्रिया करणे व उर्वरित कचऱ्याची शास्त्रीय पध्दतीने विकसित केलेल्या भराव भूमीवर विल्हेवाट लावून शहर "स्वच्छ" करणे या दोन प्रमुख बाबींचा समावेश आहे.

२. स्वच्छ महाराष्ट्र अभियानाच्या अंमलबजावणीस गती यावी व हागणदारी मुक्त झालेल्या तसेच स्वच्छ झालेल्या शहरांचा यथोचित सन्मान व्हावा म्हणून, राज्यातील हागणदारी मुक्त झालेल्या व स्वच्छ झालेल्या शहरांना प्रोत्साहन अनुदान देण्याची बाब शासनाच्या विचाराधीन होती.

शासन निर्णय :

प्रस्तावनेत नमूद केलेल्या बाबींचा विचार करून स्वच्छ महाराष्ट्र अभियानांतर्गत "हागणदारी मुक्त" झालेल्या व "स्वच्छ" झालेल्या नागरी स्थानिक स्वराज्य संस्थांना पुढील प्रमाणे प्रोत्साहन अनुदान देण्यास शासन मान्यता देत आहे:

- **Sinnar Municipal Council has passed resolution to fund FSTP project cost through 14th FC funds.**

- **The project cost includes:**
 - **Capex**
 - **Opex for 3 years**

Funds available with Akot for FSM

Cost of Technology

Funding : Capex

Fund utilization -- Availability						
City	Funds under scheme	Received (in Rs. Crore)	Utilized Fund		Available Fund	
			Amount (In crore)	Percent	Amount (In Crore)	Percent
Akot	14 th FC	17.69	5.20	29.5%	12.49	70.5%
	SBM Incentive grant	0.5	-	-	0.5	100%

Funds are available for ODF+ activities

O & M can be financed through Charges or taxation . . .

Funding : Opex

Including tax ,user charges, fines and so on.

OPEX

- By levying sanitation tax
- Collection of tipping fee
- By reuse and retail of the by product

Sr No.	Amount	Sanitation Tax
Existing sanitation tax	17/-	1 % of existing property tax
Average Existing Property Tax	Rs-1680/-	-
For scheduled emptying sanitation tax	Rs -253/-	-
Property tax with scheduled emptying sanitation tax	Rs-1933/-	13% of modified property tax

Only 13% increase in property tax will finance the scheduled desludging services

Taxation can be done as per the Maharashtra Municipal Councils, Nagar Panchayats and Industrial Townships Act, 1965, Chapter IX : Municipal taxation, Section 108 only if it is provided as a service

Also revenue from sale of septage compost under HARIT

Can partly finance O&M of services

Sinnar has levied differential tax on all properties for financing FSSM services

City level resolution for taxation

Differential taxation rates

Residential Properties **with / without toilets** –
Rs. 300 / annum

Non Residential Properties **with toilets** –
Rs. 300 / annum

Non-residential properties **without toilets** –
Rs. 100 / annum

सिन्नर नगरपरिषद, सिन्नर मे. विशेष सभा
ठराव क्रमांक ६१ दिनांक २४/०३/२०१७

विषय क्रमांक ५) सिन्नर नगरपरिषद तर्फे आकारण्यात येणारा स्वच्छता कर, घनकचरा व्यवस्थापन कर व मैला व्यवस्थापन कर यांची पुनःरचना करणेबाबत चर्चा करून निर्णय घेणे.

प्रस्तावाचा मजकूर - कार्यालयीन टिपणीचे समागृहात चर्चा होवून सिन्नर नगरपरिषदे तर्फे सद्या आकारण्यात येणारे विशेष स्वच्छता कर, विशेष घनकचरा कर व मैला व्यवस्थापन कर यांची पुनःरचना करून यापुढे सन २०१७-१८ या आर्थिक वर्षापासून खालील प्रमाणे मैला व्यवस्थापन कर व घनकचरा कर म्हणून आकारण्यात यावेत व त्याप्रमाणे बिल तयार करून मालमत्ता धारकांना देण्यात यावेत.

वार्षिक कराचे दर (रुपये)

अ.क्र.	कराचे नांव	निवासी मालमत्ता		विगर निवासी मालमत्ता	
		शौचालय असलेले	शौचालय नसलेले	शौचालय असलेले	शौचालय नसलेले
१.	मैला व्यवस्थापन कर	३००/- (प्रति सिट)	३००/-	३००/- (प्रति सिट)	१००/-

वार्षिक कराचे दर (रुपये)

अ.क्र.	कराचे नांव	निवासी	विगर निवासी
१	घनकचरा व्यवस्थापन कर	१००/-	३००/-

वरीलप्रमाणे कर आकारणी करणेस सदरची सभा सर्वानुमते मान्यता देत आहेत. त्याप्रमाणे प्रशासकीय कार्यवाही करण्यात यावी.

सुचक :- श्री. लोखंडे गो.वि.
अनुमोदन :- श्री. चौथवे प्र.झुं.
ठराव सर्वानुमते मंजूर



अध्यक्ष,

सिन्नर नगरपरिषद, सिन्नर

Wai has levied tax on all properties for financing FSSM services

Incremental approach: Moving towards ODF++

- ❑ ULBs should take **incremental approach** for **liquid waste management**
- ❑ All four ULB's topographic profile suits for incremental approach for liquid waste treatment
- ❑ First step to **tap the liquid waste** from **existing discharge points** either **diverted** through **interceptor sewer** or **in-situ decentralized treatment system** as per availability of land
- ❑ Need to carry out **quick preliminary technical** and **financial feasibility** assessment for possible options

City	Waste Water generated (MLD)	Cost for interceptor sewer (Rs in Cr)	Treatment cost (Rs in Cr)
Akot	6.4	0.75 - 1	6.5 - 7.5

Stakeholders for ODF sustainability and FSSM

Self-Help Groups

- 302 Active SHG groups in Akot
- SHGs can help for **Awareness generation for ODF sustainability and FSM related activities**
- **Mobilization of loans for IHHL**



Elected and Administrative wing

- PAS team briefed the elected and administrative wing of AMC about the ODF+ work. Their support will be required to **plan and implement the project.**



Industries

- There are few Oil mills around Akot.
- Assess their interest for CSR funding



Stakeholders for ODF sustainability and FSSM

Financial institutions

- Assess availability of sanitation loan product if there is demand

Local Gov. of Outgrowth Areas

- Village near Akot (Wadali Satwai) will be consulted while making the septage management plan.

Citizen

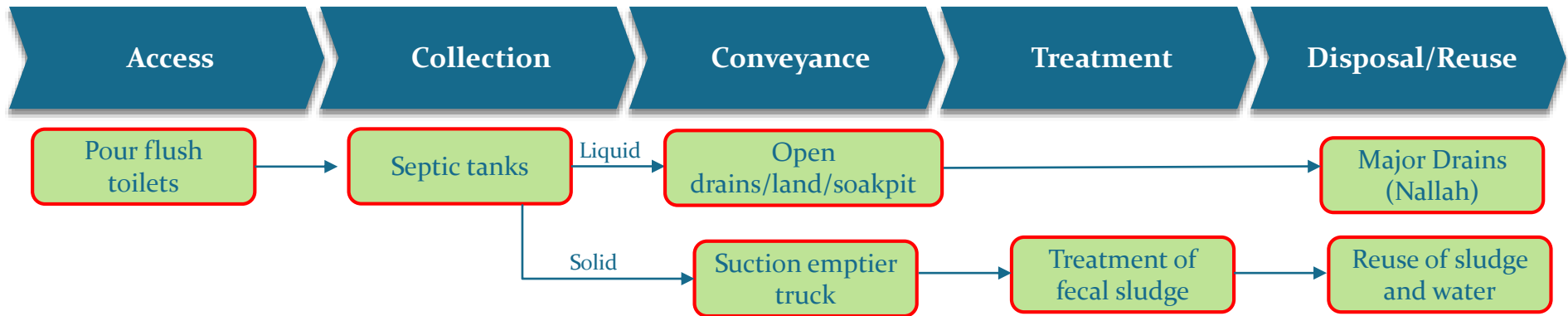
- Citizens participation is solicited for effecting planning and implementation of scheme.
- Team will identify various platforms and events to involve them in the process.

Technology and service providers

- Technology and service provider for the FST and schedule emptying will have to be assessed and involved at the decision making, awareness campaigns etc



Summary: Proposals across sanitation service chain in Akot



- Achieve atleast 95% coverage of IHHL
- Improve and maintain condition of CTs and PTs
- Convert insanitary toilets to improved toilets
- Enforcing regulations on septic tank design standards. New septic tanks to be built as per standards
- Providing access covers to allow regular cleaning
- Creating Database on septic tanks for properties
- Preparing a schedule for periodic cleaning of septic tanks to ensure that all septic tanks are cleaned at least once in 3-5 years
- Council can operate/hire operator service with new fleet of trucks
- Provide drains(Closed/ open)/ soakpits in unserved areas
- Installing treatment facility for the treating the septage
- Quality of effluent emptying into drains will be better
- Safe disposal of treated fecal matter and/reuse of treated water and septage.
- Explore revenue generating model from treated septage.



Measures to be taken by AMC for Implementing FSSM Plan

- ❑ Consent from AMC for implementing FSSM activities in Akot through a council resolution
- ❑ Pass a general resolution for the following-
 - Fecal sludge management-Desludging and type and setting up a FSTP
 - Private sector involvement
 - Land allocation
 - Levying a revised sanitation tax
 - Desludging in the outgrowth and charge based on distance
- ❑ Allocate land for setting up FSTP and acquire land if necessary.
- ❑ Allocate funds for the project.
- ❑ Invite tenders.
- ❑ HH Survey (through Sanitab/Property tax survey) to make accurate database of septic tanks.
- ❑ Action plan towards attaining universal access to individual toilets and reduce dependency on community toilets.
- ❑ Finalize the timeline for implementation of ODF+ plans

Proposed Timeline for discussion . . .

Sr. No.	Key steps	Timeline (months)											
		1	2	3	4	5	6	7	8	9	10	11	12
	FSM Plan and Execution												
1	Discussion with ULB (Elected and other administrative wing to take up FSM and activities related to ODF sustainability)												
2	Stakeholders identification / consultation throughout the FSM planning process												
3	City level FSM plan based on secondary data source / data base of SaniTab survey												

Thank you

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