

Overview of Municipal Finance, Service Level Benchmarks, and Financial Requirements

27th February 2019

Dr. Sandeep Thakur

Associate Professor & Coordinator 14FC Support Cell
National Institute of Urban Affairs, New Delhi

Urbanization Trend

Population	2011	2031
Urban Population	37.7 crore	60.0 crore
Million Plus Cities	53	87
% Urban Population	31.2%	40%

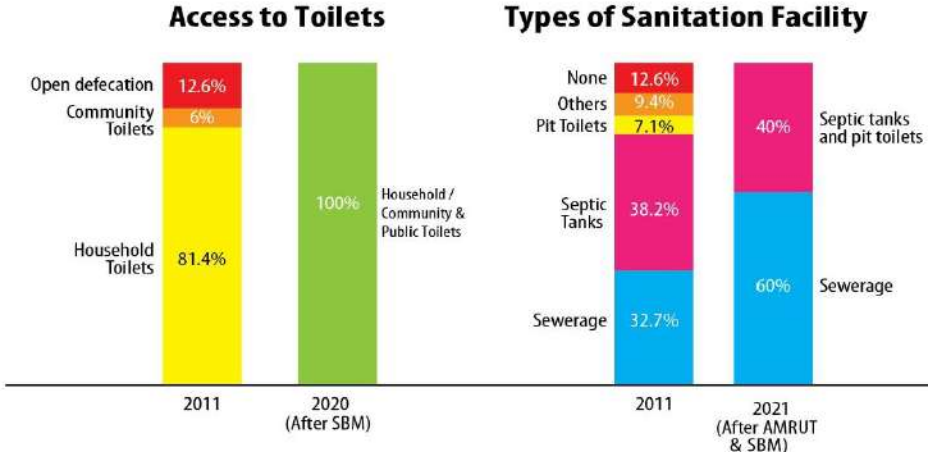
- [India's urban population](#) is expected to grow over 80 crore by 2051
- Decadal growth of urban population from 2001 to 2011 is 31.8% as compared to rural growth of 12.3%
- Urban areas contributes nearly 65% of the country's GDP, which is likely to go up to 70% by 2030
- 90% of the total tax receipts come from urban areas

Municipal Expenditure as % of GDP									
India	South Africa	Brazil	Russia	Germany	Canada	Austria	Spain	Switzerland	USA
1.1	6.9	8.0	6.5	7.2	7.2	7.4	6.4	9.7	6.5

Source: Census 2011, McKinsey Global Institute (MGI) Report, India's Urban Awakening: Building Inclusive Cities, Sustaining Economic Growth (2010); United Nations, Department of Economic and Social Affairs, World Cities Report, 2016, UN Habitat

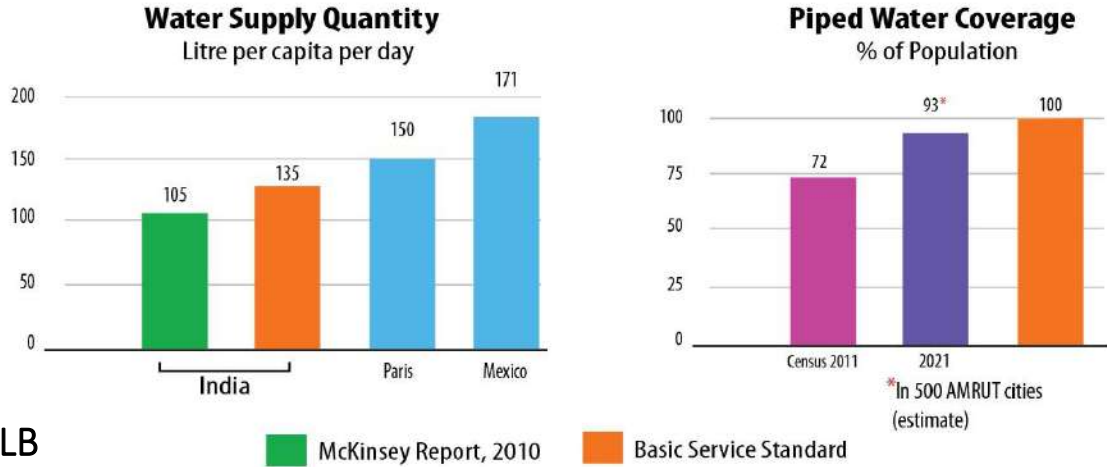
Service Level Status in Urban Areas

Sanitation



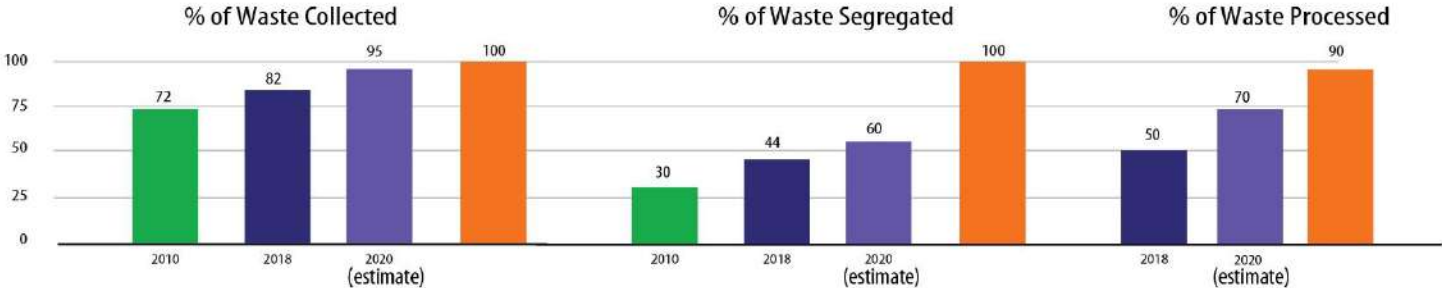
Source: Census of India 2011 and CPCB, Inventorization of STPs (2015)

Water Supply



Name of the ULB

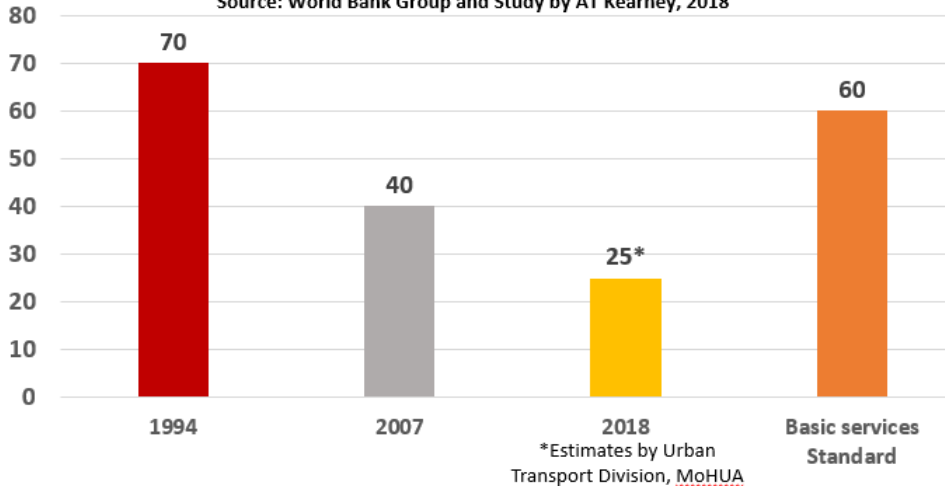
Solid Waste Management



Mckinsey Report 2010 SBM(U) Directorate Basic Service Standard

Share of Public Transport (% of Total trips)

Source: World Bank Group and Study by AT Kearney, 2018



Swachh Bharat Mission (Urban)

- **Launched** on 2 October, 2014, with the **objective** of eradicating open defecation and 100% Scientific Solid Waste Management in all statutory towns
- **Outlay:** Estimated cost of implementation: ₹ 62,009 Cr (Central Assistance: ₹14,623 Cr)
- **Coverage:** All Statutory Towns (4,378)
- **Components:** Individual household toilets, Community/Public toilets, Solid Waste Management, Information, Education and Communication and Capacity Building

Open Defecation Free (ODF)

Target: 100%

- 4,140 ODF cities including 3,461 ODF certified cities
- 22 states – 100% ODF in urban areas

Household Latrines (IHHL)

Target: 66 lakh units

- 62.06 Lakh units constructed/
under construction
(93.4%)

Community/Public Toilets (CT/ PT)

Target: 5.08 lakh seats

- 5.03 Lakh CT/PT seats built/under construction
(99.2%)

Solid Waste Management (SWM)

Target: 100% Door to Door collection and 80% processing

- 72,503 wards (86%) have 100% Door to Door collection
- 50.19% waste is being processed
- 50,248 wards (59.6%) have 100% segregation

	Name of the ULBs- Rajasthan	Per capita supply of Water 135 lpcd	Cost recovery in water supply services 100%	Coverage of sewage network services 100%	Household level coverage of SWM services 100%	Extent of segregation of municipal solid waste 100%	Extent of scientific disposal of municipal solid waste 100%
1	AJMER	130	39	7.43	20.97	0	0
2	BALOTRA	70	-	49.63	78	0	0
3	BANSWARA	100	20	0	0	0	0
4	DUNGARPUR	70	11	0	100	0	0
5	JHUNJHUNU	95	13.5	0	100	0	0
6	JODHPUR	135	25	78.31	40.35	0	0
7	KEKRI	80	66	0	25.82	0	0
8	KUCHERA	68	12	0	0	0	0
9	MUNDWA	80	12	0	80.86	0	0
10	NADBAI	56	7.5	-	-	0	0
11	NAGAR	45	6	0	0	0	0
12	NIMBAHERA	60	25	15.32	61.04	0	0
13	Nokha	85	14	91.14	84.59	0	0
14	PIPAR CITY	75	13	0	0	0	0
15	RAISINGHNAGAR	95	41.5	0	13.13	0	0
16	RINGUS	90	13	-	-	0	0
17	SAMBHAR LAKE	55	10	0	0	0	0
18	SHRI MADHOPUR	50	14.5	0	0	0	0
19	Sikar	120	13	0	25.65	0	0
20	TIJARA	70	19	0	0	0	0
21	Todabhim	68	8	0	0	0	0
22	UDAIPUR	110	21	20.3	71.49	0	0

S. No.	Name of the ULBs- Uttarakhand	Water Supply Services		Sewage management	Solid Waste Management		
		Per capita supply of Water 135 lpcd	Cost recovery in water supply services 100%	Coverage of sewage network services 100%	Household level coverage of SWM services 100%	Extent of segregation of municipal solid waste 100%	Extent of scientific disposal of municipal solid waste 100%
		135 lpcd	100%	100%	100%	100%	100%
1	LANDHAURA	135	80	0	70	0	0
2	Vikasnagar	213	60	85	100	35	0
3	POKHRI	135	60		35	20	0
4	CHAMOLI GAUCHAR	100	78	0	35	20	0
5	NAINITAL	135	83	95	25	35	6
6	GAIRSAIN	100	75	0	50	0	0
7	RUDRAPRAYAG	135	90	0	90	50	30
8	Pauri	135	85	0	40	30	0
9	KASHIPUR	60	70	11	90	65	20
10	Barkot	120	75%	0	70%	65%	55%
11	DUGADDA	95	83	0	35	20	0
12	Lalkuan	92	17		75	0	0
13	Kotdwar	135	90	30	35	20	0
14	CHAMOLI GOPESHWAR	100	70	75	65	40	20
15	Khatima	105	80	0	0	0	0
16	SHAKTIGARH	100	80	0	65	0	0
17	CHAMPAWAT	100	60	0	70	20	0
18	NAGAR NIGAM ROORKEE	115	80	70	100	0	0
19	MUNIKIRETI-DHALWALA	135	60	0	70	20	0
20	Nagar Palika Parishad Doiwala	110	75	0	80	80	50
21	NEW TERHI	95	60	0	70	60	0
22	NAGAR NIGAM HALDWANI-KATHGODAM	133	55	10	22	0	0

THE CONTEXT

- Inadequate sanitation has far-reaching effects imposing significant public health costs in urban areas.
- The UN states that in India, diarrhoea alone causes more than 1600 deaths each day. 90% of these deaths could be prevented through safe drinking water and adequate sanitation and hygiene practices.
- Beyond health impacts, the Water Sanitation Program (WSP) estimated that the total annual cost of poor sanitation amounted to a loss of \$54 billion or 6% of India's GDP (Water and Sanitation Program, 2011).
- At the access level, despite the guidelines of CPEEHO 1993 and 2013, the construction of septic tanks or pit latrines is not monitored by the ULBs and is left at the jurisdiction of the households.
- Many of the ULBs do not have adequate number of emptying trucks and are unable to provide prompt service.
- As a result, many private operators have come up to fill the gap. However, their fees are quite high and their services are not regulated.

THE CONTEXT

- Mostly faecal sludge is dumped into open urban areas or into surface drains or nearby areas to save cost and time as most of the treatment plants are located in the outskirts of the city and suitable dumping or treatment sites are not located in areas near collection sites.
- At present, faecal sludge that gets generated through the on-site systems is not properly managed and there are missing links.
- With the advent of SBM and allied sanitation-related reforms, the focus has been only on increasing the number of toilets, and little on treatment of the waste generated.
- By constructing so many toilets with onsite systems, we are just holding back the problem, not resolving it.
- Thus, it is high time that we focus on the management of the waste from these toilets. Septage Management will ensure open defecation-free (ODF) India and also cities and towns as well.

THE CONTEXT

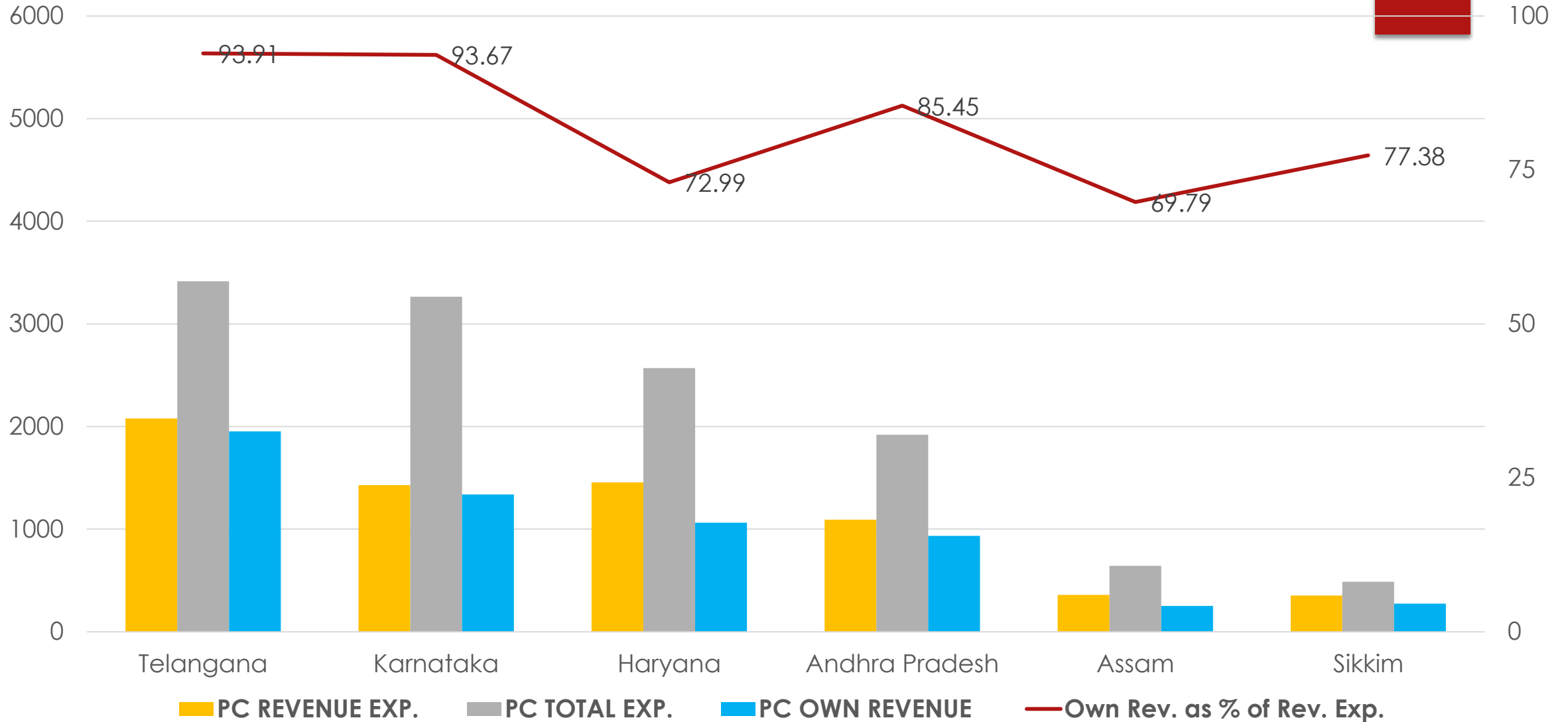
- Sewage Generation 61754 mld
- Untreated Sewage 38791 mld
- Sewage Treatment Capacity 22963 mld
- Sewage Treatment Capacity in percentage terms comes to 37.18, however, it is estimated that most plants works only at 72% of their capacity.
- Actual Sewage Treatment Capacity comes to only 26.77%.

THE CONTEXT

- In Rajasthan, the public health and sanitation expenditure includes 70-80% of salaries of staff of this department whereas only 20-30% is being spent on operation and maintenance works.
- Operation and maintenance works mainly related to solid waste management and some medical expenses.
- The ULBs expenditure statement does not show any expenditure which is being incurred on septage management.
- User charges and expenditure related to septage management are not included in the municipal budgets of the ULBs of Rajasthan and it is being undertaken separate from municipal budgets.

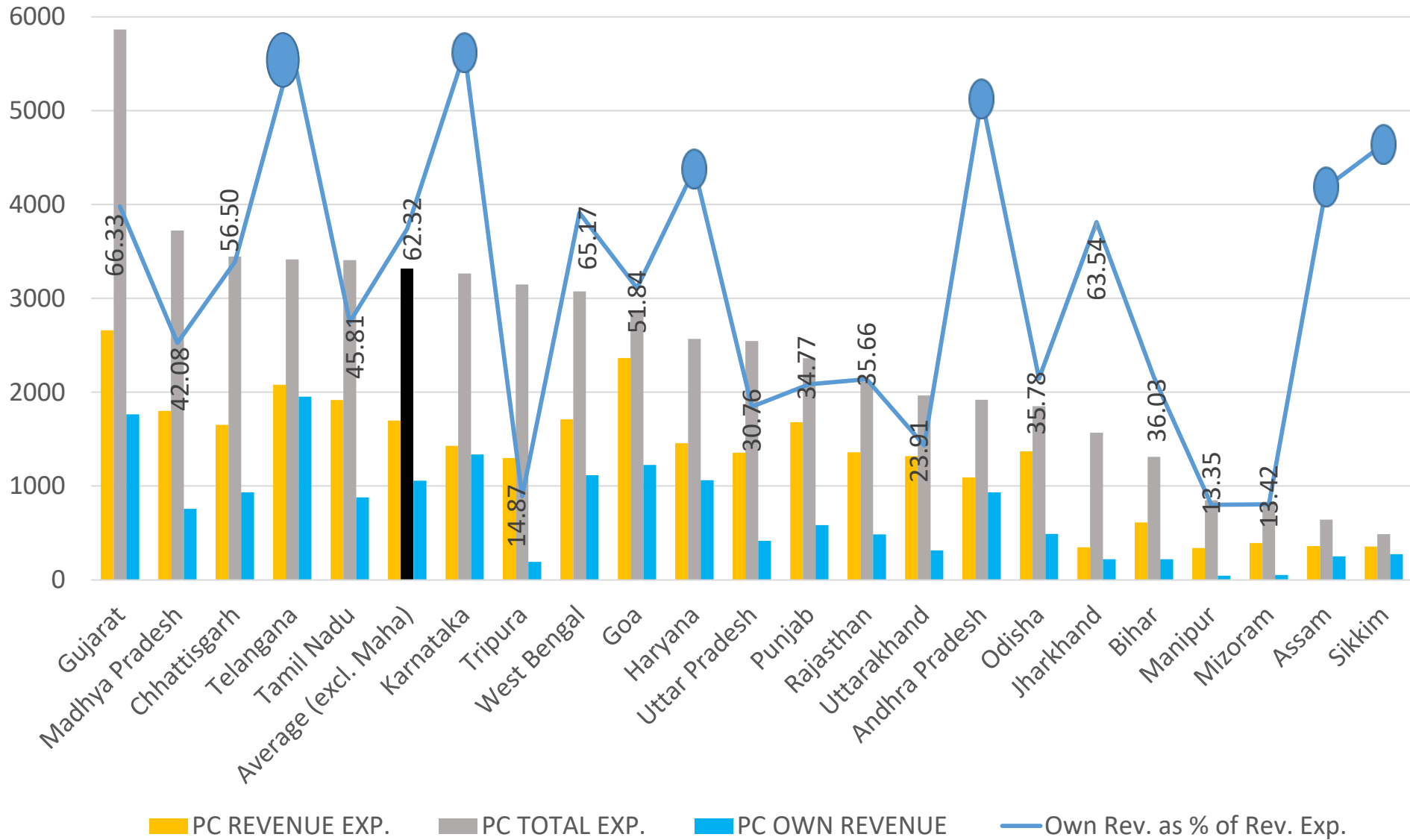
Overview of Municipal Finance- Existing Financial Situation of Municipalities in India

Per Capita Own Revenue VS Expenditure (2015-16)



Source: Interim Findings of Municipal Finance Report (14 FC Support Cell at NIUA)

Per Capita Own Revenue VS Expenditure (2015-16)

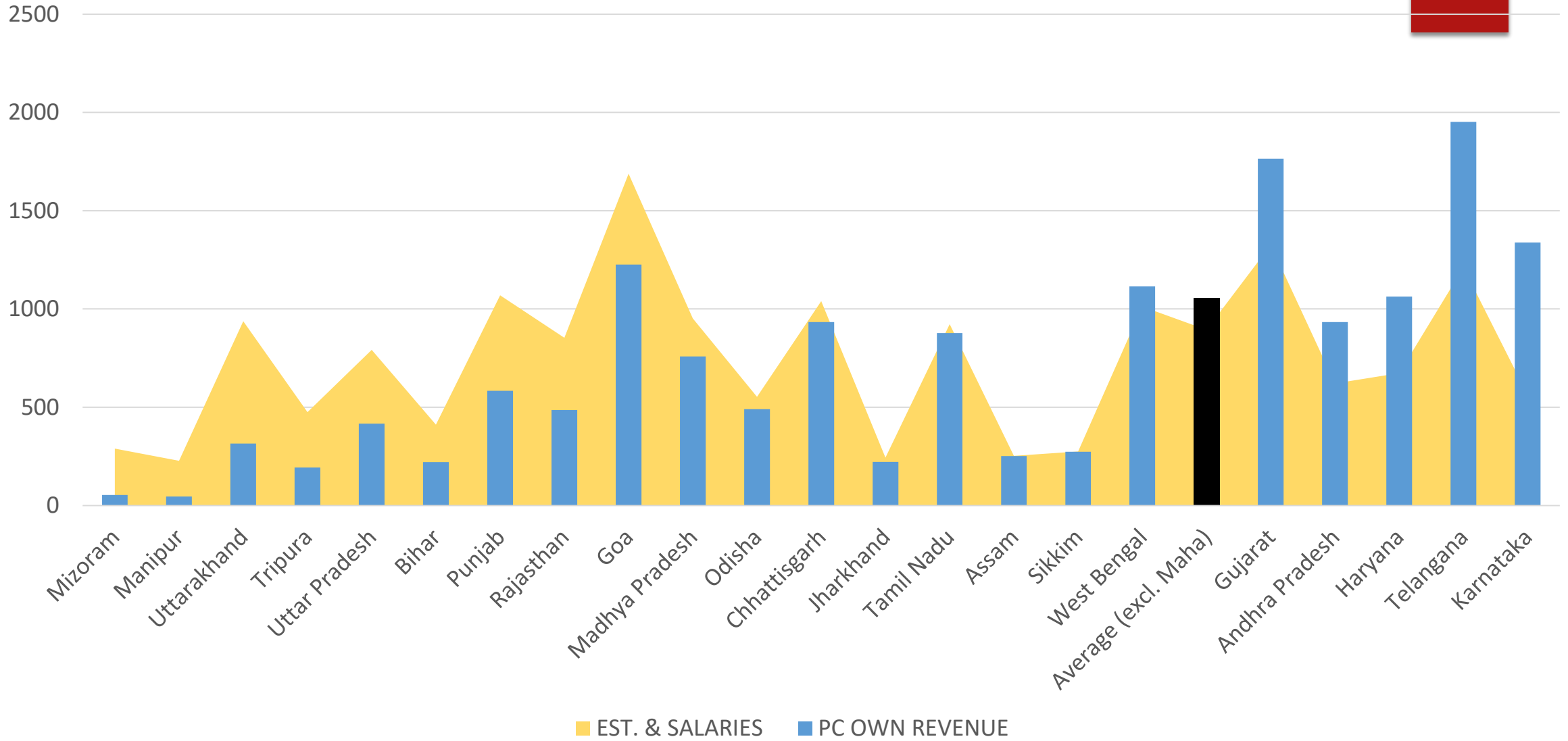


Ratio of Own Revenue receipts to Revenue Expenditure is a good performance indicator but it can be debated against the level of Total expenditure at the city level.

Jharkhand, Andhra Pr., Haryana **have better Ratios but level of spending is much lower** compared to Gujarat, Madhya Pradesh, Chattisgarh, Telangana, Tamilnadu etc. where the Ratios are not so good.

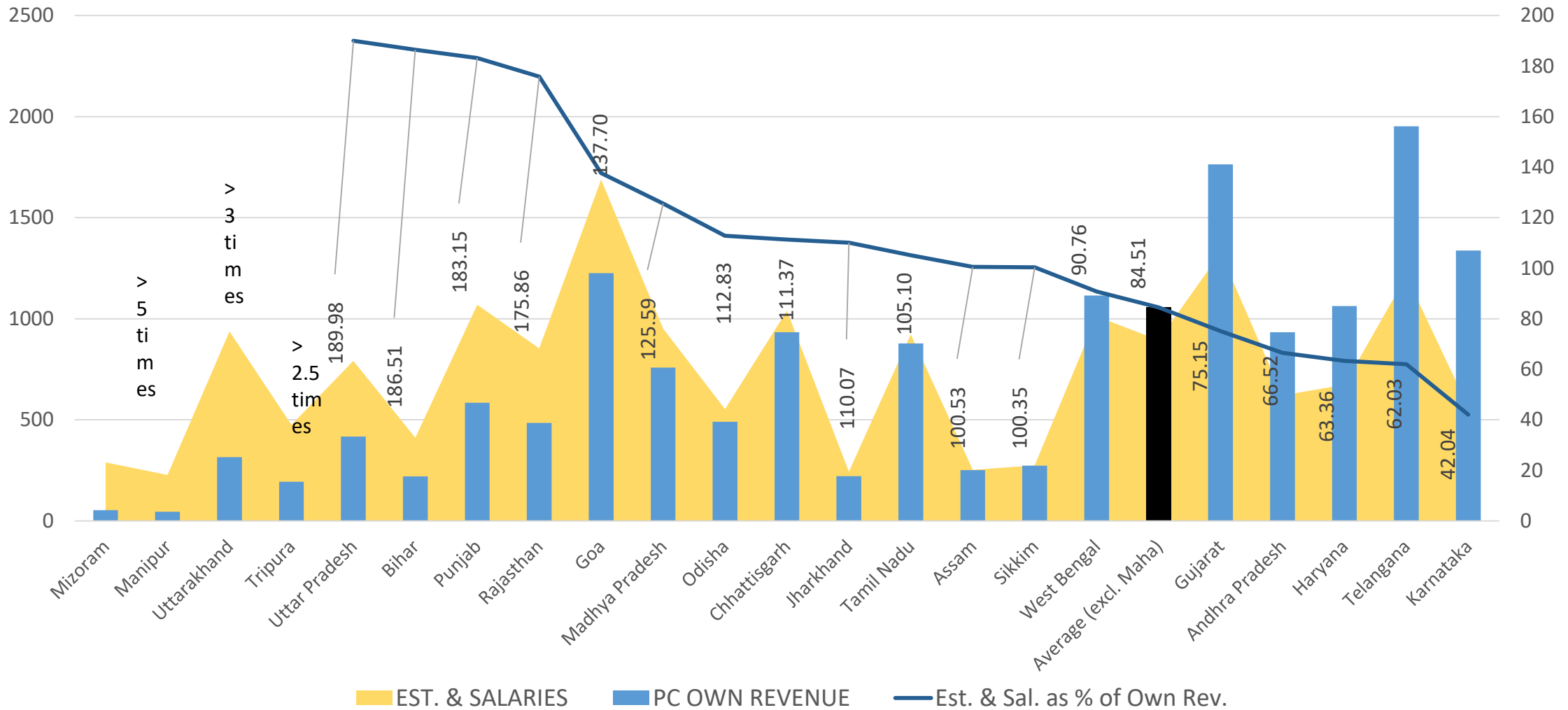
On the other hand, **situation is worse where the Ratio is low as well as level of spending is also low** such as North eastern states Manipur & Mizoram, Bihar, Odisha, Uttarakhand, Rajasthan, Punjab, Uttar Pradesh.

Per Capita Own Revenue Receipts VS Establishment & Salries Exp. (2015-16)



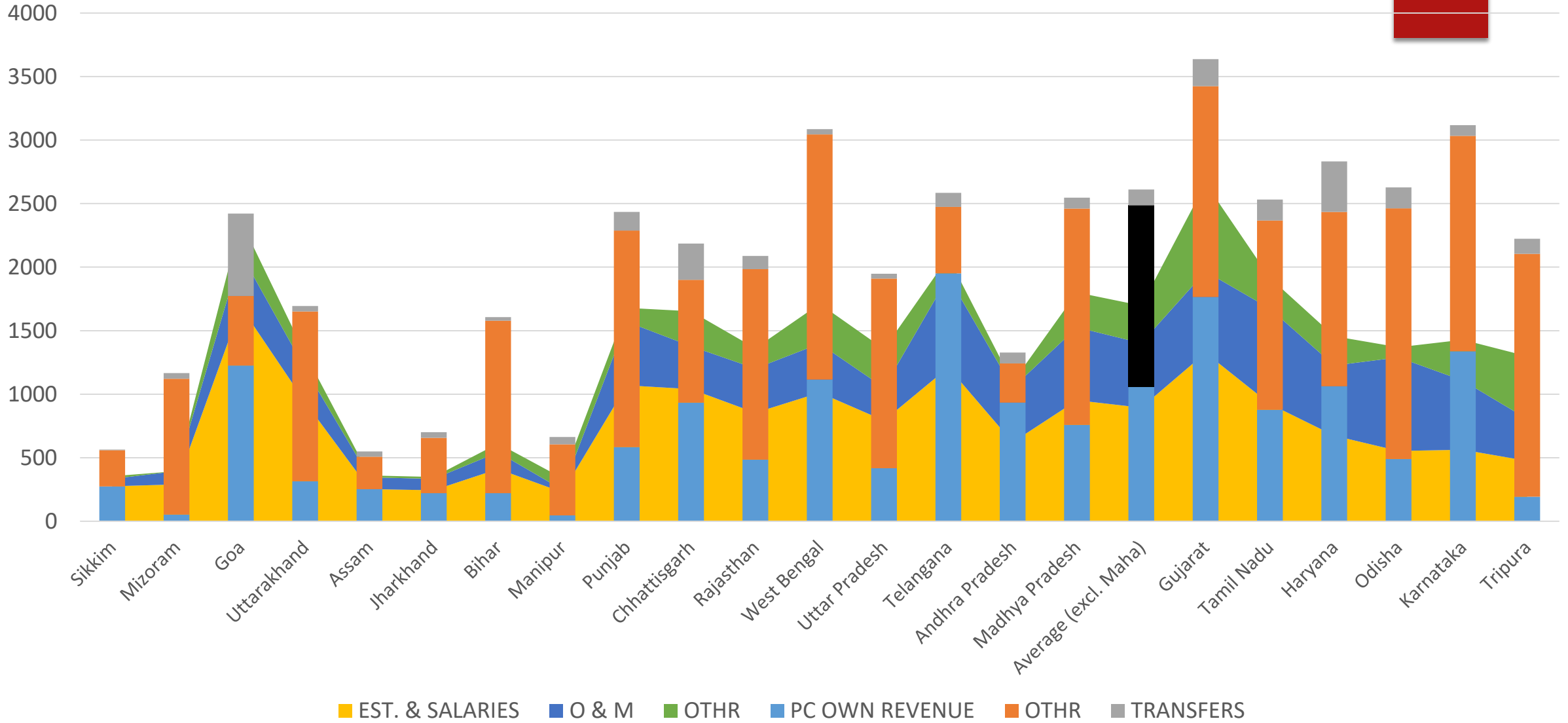
Source: Interim Findings of Municipal Finance Report (14 FC Support Cell at NIUA)

Per Capita Revenue Receipts VS Revenue Expenditure (2015-16)



Source: Interim Findings of Municipal Finance Report (14 FC Support Cell at NIUA)

Per Capita Revenue Receipts VS Revenue Expenditure (2015-16)



Source: Interim Findings of Municipal Finance Report (14 FC Support Cell at NIUA)

Indicators (2015-16)	Rajasthan 22 ULBs qualified	Uttarakhand 22 ULBs qualified	India All ULBs qualified
Own revenue and others as % of Revenue Receipts	23.20%	18.60%	40.50%
Transfers/Grants as % of Revenue Receipts	71.80%	78.85%	54.70%
Own revenue as % of Revenue Expenditure	35.66%	23.91%	62.32%
Establishment and salaries as % of revenue expenditure	62.70%	71.13%	52.67%
O&M and others as % of revenue expenditure	37.30%	28.87%	45.32%
Capital Expenditure Per Capita (Rupees)	749.70	645.91	1617.14
Revenue Expenditure Per Capita (Rupees)	1360.89	1318.14	1697.05
Establishment & Salaries Per Capita (Rupees)	853.31	937.53	893.89
O&M and Other Expenses Per Capita (Rupees)	496.85	380.49	769.16

State Sewerage and Waste Water Policy,
Rajasthan 2016

and

Draft Policy Faecal Sludge & Septage
Management, Rajasthan, 2017

- The Rajasthan's SWWP of 2016, has provided the estimated fund requirement for Sewerage and Water Supply Sectors is Rs.19,000 crore, out of which Rs.12,000 crore is for Sewerage sector and Rs.7,000 crore is for Water Sector.
- As per the FSSM 2017, in 2011, only 25.63% of urban HHs were connected with a piped sewerage network and highlighted that the Centralized Sewerage systems are not technically or financially viable for most of the small and medium towns and areas with water supply less than 70 lpcd.
- More than half of the urban population (53.48%) relied on on-site sanitation systems such as Septic Tanks (45.62%), Pit latrines (5.44%) and other systems (2.42%) for collection of faecal sludge and wastewater.
- The Policy has quoted, “This clearly indicates that on-site sanitation far supersede piped sewerage system and is the primary sanitation system in Rajasthan.”

- Looking at the poor financial performance of the ULBs of the state of Rajasthan, financing of ULBs in general and financing of FSSM need to explore innovative financing mechanisms.
- The FSSM Policy has also suggested setting up of an Urban Sanitation Fund at the state level which will consolidate funds received from multiple sources such as central schemes, Central and State Finance Commission grants, bilateral/multilateral grants and loans etc. and will provide to ULBs based on certain criteria.
- Similarly, ULBs will be expected to city-level sanitation fund linked to state sanitation fund for implementing city-level FSSM strategy, plan and projects.
- On the line of FSSM policy at the state level, all ULBs will also be required to prepare a city level FSSM plans, strategy and rules.

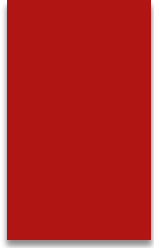
Finance Commissions and Resource Gaps of ULBs and Proposal for AMRUT PLUS

Earlier Finance Commissions

- Grants allocated to municipalities by 13th and 14th FCs:

Finance Commission	Basic Grants (in Rs. crore)	Earmarked or Performance-linked (Performance Grants) (in Rs. crore)
13 th FC	15,110	8,000
14 th FC	69,715	17,429

- **14th FC recommended Rs. 87,144 crore** (1.34% of the net central taxes for five year period 2015-16 to 2019-20)
- 14th FC Performance Grants to be disbursed to the States on achievement of [three mandatory conditions](#) by municipalities
- Performance Grants to be disbursed over a period of four years from 2016-17 onwards
- **In order to assess the performance of municipalities objectively in a transparent manner, [a 100 point Performance Grant Scheme](#)** has been developed for the remaining 3 years i.e. 2017-18 to 2019-20. A qualifying score of 50 out of 100 has been fixed for North-East/Hill States and 60 for all other States
- **It has been done without altering the three mandatory conditions stipulated by the 14th Finance Commission**



14 Finance Commission Grant (2015-16 to 2019-20)	Basic	Performance	Total
Rajasthan	3610.50	902.62	4513.12
Uttarakhand	652.66	163.17	815.83
India (Urban)	69715.04	17428.76	87143.80

Requirement of Funds as projected by HPEC 2011 and MGI 2010

HPEC 2011

@ 2009-10 prices

Sector	(in Rs. lakh crore)	%
Urban Roads	17.29	44.12
Urban Transport	4.49	11.47
Renewal and Redevelopment (incl. slums)	4.09	10.44
Water Supply	3.21	8.19
Sewerage	2.43	6.19
Storm Water Drainage	1.91	4.87
Capacity Building	1.02	2.60
Traffic Support Infra	0.98	2.50
Solid Waste Management	0.49	1.24
Street Lighting	0.19	0.47
Other sectors	3.10	7.91
Total	39.19	100

MGI 2010

@ 2009-10 prices

Sectors	in Rs. lakh crore	%
Water	4.3	8.11
Sewage	2.38	4.49
SWM	0.67	1.26
Storm Water	1.43	2.70
Urban Roads	8.92	16.83
Mass Transit	17.58	33.17
Affordable		
Housing	17.71	33.42
Total	53	100.00

[Back](#)

Resource Gap at the National Level

	Net Central Taxes (in Rs. crore) (Actuals)								RE	BE	Average Growth Rate %
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	
Net Central taxes	4,56,536	5,69,869	6,29,765	7,41,877	8,15,854	9,03,615	9,43,765	11,01,372	12,69,454	14,80,649	14.10

Net Central taxes	Projected Net Central Taxes (in Rs. crore)							2020-21 to 2024-25 Total
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
	16,89,432	19,27,654	21,99,467	25,09,609	28,63,482	32,67,254	127,67,466	

Five year Funding Gaps	In Rs. crore	% of Net Central Taxes
Funding Gap - Revenue	2,00,006	1.57
Funding Gap - Capital	10,01,672	7.85
Total Funding Gap	12,01,678	9.41

[Back](#)

AMRUT Plus

- Only 500 cities out of over 4,300 statutory towns are covered under AMRUT.
- It is imperative to meet the basic civic infrastructure needs and aspirations of these cities/towns (population nearly 19.04 crore).
- Even in the 500 AMRUT cities, coverage of sewerage and septage management will be around 60% by the end of Mission.
- Therefore, the left-over areas and remaining population of the 500 AMRUT cities need to be covered (nearly 27.08 crore population).
- Cities, especially million plus and other big cities need to be climate resilient, which require robust infrastructure for flood and drought proofing.
- Water supply and sewerage projects have longer gestation period, therefore carry over projects of AMRUT will need funds.
- **AMRUT Plus** has been envisaged to address these issues.

- Providing water supply to smaller cities/towns and additional population in AMRUT cities
- Sewerage and septage management for left-over areas/population of AMRUT cities as well as remaining towns/cities
- Storm water management in million plus and other big and strategically important cities
- Provisioning for carry over AMRUT projects
- Reforms, Capacity Building and Urban Planning
- Administrative and Office Expenses

Expenditure Heads (Estimates)	In Rs. crore
Water supply	1,52,000
Sewerage and Septage Management	1,35,000
Storm water management, green spaces & NMT	75,000
Total investments	3,62,000
Central share @ 50%	1,81,000
Reforms, Capacity building, urban planning, etc @ 15% of CA	34,000
Administrative & Office Expenses @ 5% of CA	11,300
Total Central Assistance	2,26,300
AMRUT carry forward	23,745
Total outlay - rounded off to	2,50,000

Remarks

- Urban policies are made to address larger city problems. As examples national urban infrastructure programmes like the JNNURM or the AMRUT targeted and spent more resources in larger cities than in smaller cities.
- For wide and sustainable adoption of FSM, it is important that FSM gets integrated into the policy and planning process of the country. India needs a national comprehensive FSM legislation, robust regulatory system, and strengthened ULBs to monitor the entire value chain of FSM.
- Usually, there is no city/town level agency that has the responsibility of on-site sanitation systems and faecal sludge management. States should take the necessary steps (bringing amendments to legislations or bye laws) to ensure that each city/town has a nodal agency which would be primarily responsible for FSM.
- There is a need to elaborate further about integrated FSM, suggest a basic framework, and should encourage all states to develop their septage management guidelines.
- The elaborated guidelines could include options of public–private partnership (PPP) as well as safety standards for effluent and treated septage discharge or reuse.

Remarks

- While longer term solutions can wait, there is an urgency to monitor and take remediation steps to ensure that there is time bound measurable improvement in the current status of faecal sludge management in all towns and cities. If this requires creating additional systems and manpower, this should be invested in on priority.
- Oftentimes, sanitation budgets are limited either to infrastructure creation, or to salaries for sanitation workers with local bodies.
- Sanitation budgets at the ULB level should also be allowed to cover non-sewered FSM systems. This should cover the entire chain from creation of on-site sanitation infrastructure (with appropriate household contributions), to transportation and treatment systems, their monitoring, operations and maintenance.
- FSM should be given priority in urban sanitation programmes and there should be an increased convergence between AMRUT (Septage Treatment and Management goals) and SBM goals of making India ODF.
- Achieving ODF should not merely be restricted to the act of going for open defecation but the faecal matter should also be properly disposed to reduce its ill effects.

Thank You