

# Report on The Status of Civic Issues in Mumbai

With a focus on



Water



Sewerage



Solid Waste Management



Toilets



Air Quality



May 2025

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## Abbreviations

ALM : Advanced Locality Management	MLD : Minimal Liquid Discharge
AMRUT : Atal Mission for Rejuvenation and Urban Transformation	MoHUA : Ministry of Housing and Urban Affairs
AQI : Air Quality Index	MPCB : Maharashtra Pollution Control Board
ATR : Action Taken Report	MPN : Most Probable Number
BLFT : Bioreactor Landfill Technology	MSW : Municipal Solid Waste
BMC : Brihanmumbai Municipal Corporation	NCAP : National Clean Air Programme
BOD : Biochemical Oxygen Demand	NCV : Net Calorific Value
BWG : Bulk Waste Generators	NCT : National Capital Territory
C&D : Construction and Demolition	NGT : National Green Tribunal
CAAQMS : Continuous Ambient Air Quality Monitoring Stations	PPP : Public-Private Partnership
CAA : Constitutional Amendment Act	RDF : Refuse derived fuel
CBO : Community Based Organization	RFID : Radio-Frequency Identification
CCRS : Centralised Complaint Registration System	RTI : Right to Information Act 2005
CO : Carbon Dioxide	SAFAR : System of Air Quality and Weather Forecasting And Research
CPCB : Central Pollution Control Board	SBM : Swachh Bharat Mission
CRZ : Coastal Regulation Zone	SDG : Sustainable Development Goal
DWSC : Dry Waste Segregation Centres	SFC : Segregated Combustible Fractions
ESR : Environment Status Report	SHG : Self Help Groups
FC : Faecal Coliform	SMPA : Swachh Mumbai Prabodhan Abhiyan
IEC : Information, Education & Communication	SO <sub>2</sub> : Sulfur dioxide
IITM : Indian Institute of Tropical Meteorology	STP : Sewerage Treatment Plant
IITM : The Indian Institute of Tropical Meteorology	SWM: Solid Waste Management
MCAP : Mumbai Climate Action Plan	TSS : Total Suspended Solids
MEDA : Maharashtra Energy Development Agency	ULB : Urban Local Bodies

## Metric Conversion Table

### VOLUME

m <sup>3</sup> or cu.m	Cubic metre	1 m <sup>3</sup> or cu.m = 10,00,000 cm <sup>3</sup>
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### MASS

MT or T	Metric tonne or tonne	1 MT or T = 1,000 kg
Kg	Kilogram	1 kg = 1,000 g
Mg	Milligram	
L	Litre	
ml	Millilitre	

### ENERGY

MW	Megawatt	1 MW = 1,000 KW
kW	Kilowatt	1 KW = 1,000 W

## I. Foreword

Mumbai's civic body, the Brihanmumbai Municipal Corporation (BMC), stands out as one of the wealthiest municipal corporations in the world. Its annual budget surpasses that of many Indian states. For 2025-2026, the BMC announced its annual budget to be ₹74,366.76 crore, 24% more than the last fiscal year. However, the city of dreams stands at a critical crossroads. Its civic and environmental issues compound and reflect environmental as well as administrative failures.

Despite the Urban and Regional Development Plans Formulation and Implementation Guidelines by the Ministry of Housing and Urban Affairs, the per capita supply of water exceeds the national norms. Slums get around 45 litres/day versus 135 litres/day in non-slum areas. The slum households therefore rely on costly private tankers, paying ₹750/month, compared to ₹25.76/month for metered users. The promise of 24x7 water supply remains unfulfilled, with only 8% of city zones getting round-the-clock water in 2024, while 71% receive upto four hours daily.

The status of the financial capital's sanitation infrastructure is equally troubling. In 2024, only one in four public toilet seats was for women. Data for the same year shows that there is only one public toilet seat for every 752 males and 1,820 females, whereas the recommended ratio is one for every 100–400 males and 100–200 females, as per the Swachh Bharat Mission norms. Additionally, the number of public toilet seats have dropped by 5% (881 to 846) between 2018 to 2024.

It is outrageous that in 2023, 60% (4,010 out of 6,676) of the community toilet blocks had no electricity, which also poses a safety concern for women and children. In India's largest city, 69% (4,518 out of 6,591) of community toilets lack water connections, while only 31% (2,073 out of 6,591) are connected to piped water connections. The absence of water in toilets signifies poor hygiene, cleanliness, and the inability to provide a basic sanitation service to the public.

Solid waste management (SWM) in the city is also declining. Complaints about it have increased by 380% (5,213 to 25,031) since 2015, yet Mumbai still relies on outdated bylaws from 2006, ignoring the 2016 Central Government Solid Waste Management Rules. Gratefully, BMC is currently accepting feedback for the upcoming policy. However, the city still relies on two large dumping grounds at Deonar and Kanjurmarg. As a respite, the Bombay High Court recently directed the civic officials to look for an alternate dumping ground and stop using Kanjurmarg.

BMC's Environment Status Report (ESR) 2023-2024 reveals that 5,500 metric tonnes per day (MTD) of waste goes to Kanjurmarg landfill and 700 MTD goes to Deonar dumping ground. However, data received through the Right to Information Act paints a different picture. It shows that, in 2024, 6.7 lakh MTD (1,841/day) of waste was transported to Deonar and 5,018 MTD of waste was dumped at Kanjurmarg. The discrepancies evident in the data raises serious concerns about whether statutory instruments such as ESR reports are being duly considered.

The 15-kilometer-long Mithi River remains polluted this year too. Despite a hefty budget allocation of ₹654.44 crore in 2023-24 for its rejuvenation, the river witnessed increased Biological Oxygen Demand (BOD) from 50 mg/l in 2019 to 210 mg/l in 2023, with fecal bacteria levels increasing by more than 200 times—far exceeding safe limits.

Last year, Mumbaikars recorded over 1.15 lakh citizen complaints—a sharp 70% increase compared to 2015. Through Mumbai’s Centralised Complaint Registration System (CCRS) in the last 10 years, there has been a 380% increase in complaints of SWM, air pollution complaints have increased by 334%, and drainage complaints have risen by 59%. In 2024, from the total of 14,522 water-related complaints, 44% were of shortage of water. In 2024, time taken to resolve complaints has also increased (from 32 days in 2023 to 41 days).

The delay in holding the municipal elections has removed an important layer of accountability in local governance. For Mumbai to accommodate its growing population, we need to increase public toilet seats for women so they get equal access to sanitation facilities. The officials need to be efficient at AQI monitoring stations to identify the local causes of air pollution and provide timely solutions. We must implement 100% metered water connections in slums to allow them to access the required quantity of water at just ₹21.38 per month instead of the ₹750 they are currently paying. There is a need to create awareness among the public about the importance of waste segregation, reuse, and recycling. This can be done through public campaigns, awareness programs, and outreach activities. Lately, BMC’s ESR’s data has been conflicting with the data collected through RTIs. It is an important tool that needs to be used for the betterment of civic issues in the city, and in the absence of elected representatives, administrators need to be more vigilant about it.

**Milind Mhaske**  
**CEO, Praja Foundation**

## II. Acknowledgement

Praja has obtained the data used in compiling this whitepaper through the Right to Information (RTI) Act, 2005. Hence, it is very important to acknowledge the RTI Act and everyone involved, especially the officials who have provided us this information diligently.

We would like to appreciate our stakeholders; particularly, our elected representatives and government officials, the civil society organisations (CSOs) and the journalists who utilise and publicise our data and, by doing so, ensure that awareness regarding various issues that we discuss is distributed to a wide-ranging population. We would like to take this opportunity to specifically extend our gratitude to all government officials for their continuous cooperation and support.

Praja Foundation appreciates the support given by our supporters and donors, namely Friedrich Naumann Foundation, Tree of Life Foundation, Lal Family Foundation, A.T.E. Chandra Foundation, Madhu Mehta Foundation and numerous other individual supporters. Their support has made it possible for us to conduct our study and publish this white paper.

We would also like to thank our group of Advisors and Trustees for their guidance. Lastly, it is vital to mention the contributions of members of the Praja team to execute this report. The Praja team including our staff and young fellows and interns have put their best efforts in collecting data, analysing findings and drafting the report. On a concluding note, we acknowledge their commitment towards the success of this project

The views and opinions expressed in this report are solely of Praja Foundation and not of our supporters. It does not imply an endorsement from them or any entity they represent.

### III. Introduction

Praja has published reports on various key service deliveries such as water supply, solid waste management (SWM), sewerage, air quality, etc. In addition, Praja also analyses the overall complaints registered by citizens on the Centralised Complaints Registration System (CCRS) to understand the rising concerns of citizens in Mumbai. Our reports provide a status of these service deliveries in Mumbai and recommendations for targeted interventions to improve these services.

Sanitation and pollution are key challenges that affect the environment, human health, and socio-economic systems. It is important to address them which can ensure protection to the ecosystems and ensure a sustainable future for generations to come. For the same reason, this year's report on 'Status of Civic Issues in Mumbai' aims to understand the impact of public services such as public toilets, community toilets, and air and water pollution on Mumbai.

The report aims to show a correlation between the status of these services and suggest effective recommendations to address these issues. Public and Community Toilets are some crucial services that affect public health and hygiene. If not managed properly, they can lead to unhygienic living conditions, health-related issues and pollution of natural resources.

Similarly, water and air quality is an important factor in climate change as pollutants can have a significant impact on the environment and citizens' health. The report references the guidelines mentioned in the Swachh Bharat Mission published by the Central Government, CCRS citizen charter, etc. The paper correlates this information with data collected via the Right to Information Act (RTI), BMC's Environment Status Report (ESR), and BMC's website to provide a comprehensive overview of the state of these services in Mumbai.

## Section I: Water Supply & Sewerage

### Part 1. Water Supply

#### A. Key Summary

Mumbai's water supply system struggles with significant disparities between the available water resources and how they are distributed throughout the city. Mumbai receives 4,370 MLD of water daily, but due to pipeline losses, only 3,975 MLD reaches users. Despite the prescribed guidelines by the Urban and Regional Development Plans Formulation and Implementation guidelines by the Ministry of Housing and Urban Affairs the per capita supply exceeds the national norms. Slum residents get around 45 litres/day versus 135 litres/day in non-slum areas. The Slum households therefore rely on costly private tankers, paying ₹729/month, compared to ₹28.62/month for metered users.

Only 8% of the city gets 24x7 water; the average supply is just 5.37 hours/day. Out of the total Water Supply Complaints, shortages and contamination complaints are over 59% (6,436 and 2,083 respectively out of 14,522), echoing health data that recorded over 1.1 lakh diarrhoea cases in 2023. Uneven metering and underutilisation of the water department's capital expenditure budget (only 69% 3,511 out of 5,058 spent in 2023–24) reflect gaps in planning and accountability.

#### B. Accessibility, Adequacy and Affordability of Water Supply in Mumbai

Mumbai city is largely dependent upon freshwater supply from seven water reservoirs- two within the city limits (Vihar and Tulsi) and five outside the city limits (Tansa, Modak Sagar Upper Vaitarna, Bhatasa and Middle Vaitarna) at an average distance of 138kms. Raw water available from these sources is conveyed through 2235 mm to 5500 mm diameter pipelines and tunnels to water treatment facilities at Bhandup Complex (2810 MLD) and Panjrapur (1365 MLD). The treated water is stored in the Master Balancing Reservoirs (MBR) located at Bhandup Complex (within Mumbai) and Yewai (Outside Mumbai) and is further distributed to 27 service reservoirs located throughout Mumbai City with a water supply network of about 450kms.<sup>1</sup>

<sup>1</sup> MCGM Environment Status Report 2023-24.

**1. Table 1: Water Sources, Demand, and Supply Deficit in Mumbai (2023–24): As per the Environmental Status Report**

Source	Yield in MLD	Ownership	Treatment Plant
Tulsi	14	BMC	Tulsi
Vihar	100	BMC	Vihar
Tansa	448	BMC	Bhandup Complex
Modak Sagar (Lower Vaitarna) Upper Vaitarna, Middle Vaitarna	1,769	BMC	Bhandup Complex
		Government of Maharashtra / BMC	Bhandup Complex
Bhatsa	2,039	Government of Maharashtra	Bhandup Complex and Panjarapur
<b>Subtotal (A)</b>	<b>4,370</b>	-	
Enroute + Losses (B)	-395		
<b>Total Supply to City (A-B=C)</b>	<b>3,975</b>		
<b>Total Demand of City (D)</b>	<b>4,664<sup>2</sup></b>		
Water Supply Gap (Deficit) (D-C)	689		
<b>Water Gap (%)</b>	<b>15%</b>		

**Inference:**

- B. The total water yield from all sources is 4,370 MLD, with the majority coming from larger reservoirs like Modak Sagar (1,769 MLD) and Bhatsa (2,039 MLD). Smaller sources like Tulsi (14 MLD) and Vihar (100 MLD) contribute relatively minor portions to the overall supply.
- C. Total water supply to the city is 3,975 MLD, while the total demand is 4,664 MLD, resulting in a water supply gap of 689 MLD.
- D. This gap represents a 15% shortfall in meeting the city's water demand. The gap highlights the need for either increasing water yield (from new sources or improved efficiency in existing ones) or reducing the conveyance losses.
- E. As per MoHUA benchmarks, the standard water supply norm is set at 135 litres per person per day (lpcd). However, approximately 40% (Slum population) of Mumbai's population receives only 45 lpcd. This estimate includes residents of recognised slums and authorised buildings, which typically receive 45 lpcd and 135 lpcd respectively. Notably, unrecognised slums and the homeless population remain excluded from this calculation, indicating that actual access may be even lower for some groups.

**• Table 2: Water Supply and Enroute Loss in Mumbai from 2019-20 to 2023-24 as per ESR<sup>3</sup>**

Years	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Overall Water Yield from source (MLD)</b>	4,173	4,173	4,548	4,386	4,370
<b>Overall Water Supply (MLD)</b>	3,850	3,850	3,944	3,924	3,975
<b>Enroute + Losses (MLD)</b>	323	323	604	462	395
<b>Enroute + Losses</b>	7.74%	7.74%	13.28%	10.53%	9.04%

**Inference:**

- The Overall Water Yield from the source has increased by 4.7% from 2019-20 to 2023-24, whereas the overall water supply to the city has increased by 3.2% during the same period.
- The overall conveyance loss has increased from 2019-20 to 2023-2024 from 7.74% to 9.04%

<sup>2</sup> RTI data (2024)

<sup>3</sup> MCGM Environment Status Reports 2019-20 to 2023-24. Conveyance losses are the amount of water lost in transmitting water from the source to the city distribution network. It is calculated as the difference between the Overall Water Yield from source and the Overall water supply to the city.

- Conveyance losses as of 2023-24 were 9.04% of the total water yield was at 395 MLD. This amount, considering the average per capita requirement of 135lpd (as per MoHUA norms), could have served the water requirements of an additional 29,25,926 persons.

• **Table 3: Sources of Drinking Water for Households (HH) in Mumbai (Census 2011)**

Source	Within premises (HH)		Near premises (HH)		Away (HH)		Total HH	
	Number	%	Number	%	Number	%	Number	%
Tap water from treated source	20,71,006	98.3%	3,96,043	83.1%	48,338	58.5%	25,15,387	94.4%
Tap water from un-treated source	27,575	1.3%	29,260	6.1%	8,118	9.8%	64,953	2.4%
Covered well	1,408	0.1%	1,145	0.2%	1,500	1.8%	4,053	0.2%
Un-Covered well	879	0%	1,360	0.3%	1,606	1.9%	3,845	0.1%
Hand pump	3,964	0.2%	8,810	1.8%	3,260	3.9%	16,034	0.6%
Tube well/Borehole	1,527	0.1%	2,953	0.6%	1,301	1.6%	5,781	0.2%
Spring	0	0%	1,772	0.4%	34	0%	1,806	0.1%
River/Canal	0	0%	4,083	0.9%	95	0.1%	4,178	0.2%
Tank/Pond/Lake	0	0%	8,631	1.8%	5,386	6.5%	14,017	0.5%
Others (community toilets, tankers)	0	0%	22,388	4.7%	13,039	15.8%	35,427	1.3%
<b>Total</b>	<b>21,06,359</b>	<b>100%</b>	<b>4,76,445</b>	<b>100%</b>	<b>82,677</b>	<b>100%</b>	<b>26,65,481</b>	<b>100%</b>

#### Inference:

- Although the central government's **Jal Jeevan Mission** has set a target of piped water connections for all households by 2024 this applies only to rural areas in line with the targets adopted by the central government under the **Sustainable Development Goals** (SDGs). 96.8% of drinking water was sourced from tap water from the piped system and 79% were within the premises.
- However, the SDGs refer to achieving universal and equitable access to safe and affordable drinking water for all measured by the proportion of the population using safely managed drinking water services. Further, under WHO norms <sup>4</sup> for an improved water source, vendor provided water including water tankers/carts, unprotected wells, and surface water sources are considered unimproved sources of water. Mumbai's census data shows an overall 2.2% of such unsafe water sources apart from another 2.4% of households, which use untreated tap water.
- 79% of the total water sources were within the premises of the household whereas 18% are near the premises (within 100mt) and 3% are away from the household (more than 100mt). 5,59,122 households source their water from outside of their dwelling.

<sup>4</sup> [https://www.who.int/water\\_sanitation\\_health/monitoring/jmp2012/key\\_terms/en/](https://www.who.int/water_sanitation_health/monitoring/jmp2012/key_terms/en/)

• Table 4: Ward wise Number of zones with water supply duration (2024)<sup>5</sup>

Ward	Number of Supply Zones #	Average Number of hours of Water Supply	Zones Categorised by Daily Water Supply Hours							
			<=2 hrs	>2 to <=4 hrs	>4 to <=8 hrs	>8 to <=12 hrs	>12 to <=18 hrs	>18 to <24 hrs	24hrs	NA
A	13	2.46	10	2	0	1	0	0	0	0
B	6	1.88	5	0	1	0	0	0	0	0
C	5	1.53	5	0	0	0	0	0	0	0
D*	20	3.50	7	6	5	1	0	0	0	1
E*	16	4.87	10	3	0	0	0	1	1	1
F/N	9	3.30	3	4	2	0	0	0	0	0
F/S	10	5.03	1	8	0	0	0	0	1	0
G/N	4	4.25	0	2	2	0	0	0	0	0
G/S	9	5.53	1	5	2	0	0	0	1	0
H/E	9	3.11	0	9	0	0	0	0	0	0
H/W	14	3.25	0	14	0	0	0	0	0	0
K/E	18	6.48	1	14	0	0	0	1	2	0
K/W	21	2.37	10	9	2	0	0	0	0	0
L	8	10.56	1	1	2	0	3	0	1	0
M/E	21	7.56	2	8	7	0	0	0	4	0
M/W	5	11	0	1	2	0	0	1	1	0
N	9	11.83	1	1	2	2	0	0	3	0
P/N	19	3.89	4	10	4	1	0	0	0	0
P/S*	15	2.73	2	11	0	0	0	0	0	2
R/C	9	3.54	4	4	0	0	1	0	0	0
R/N	6	2.46	2	4	0	0	0	0	0	0
R/S	21	4.48	6	10	3	0	1	0	1	0
S	16	12	0	4	4	2	2	0	4	0
T	4	24	0	0	0	0	0	0	4	0
Total	287	5.37	75	130	38	7	7	3	23	4

**Note:** NA stands for 'Water Supply Timing' not available

#: Ward receives water supply based on its zone

**Note (\*):** D, E ward has one zone and P/S ward has two zones for which water supply timing was not available.

#### Inference:

- The average water supply in Mumbai is only 5.37 hours per day.
- Water supply timings are an important indicator of accessibility to water services. This is especially the case for household connections that do not have storage facilities.
- The average water supply timings for A, B and C wards are the lowest, while N, S, and T wards have the highest supply time. T ward receives 24 hours of water supply.
- Out of the 287 zones, 205 zones (71%) receive up to four hours of water supply, while 23 zones (8%) receive water supply for 24 hours.

<sup>5</sup> As per RTI Response

● **Table 5 : Water Metered and Unmetered Connections in BMC as on March 2025<sup>6</sup>**

Ward	Metered Connections				Non Metered Connections				% of Non-Metered
	CM*	DM*	IND*	Total	CM*	DM*	IND*	Total	
A	3,131	2,260	119	5,510	282	45	12	339	6%
B	1,516	351	25	1,892	150	1	0	151	7%
C	2,569	489	82	3,140	178	6	9	193	6%
D	3,371	5,125	204	8,700	620	32	21	673	7%
E	2,522	2,410	682	5,614	504	11	6	521	8%
F/N	2,103	15,741	42	17,886	400	13	1	414	2%
F/S	1,656	3,505	234	5,395	332	7	10	349	6%
G/N	2,920	9,762	190	12,872	481	31	1	513	4%
G/S	1,674	3,954	337	5,965	419	35	34	488	8%
H/E	1,910	39,924	81	41,915	632	26	0	658	2%
H/W	3,257	18,124	17	21,398	1,489	283	0	1,772	8%
K/E	3,916	35,242	818	39,976	2,028	198	1	2,227	5%
K/W	4,544	28,476	245	33,265	1,671	153	0	1,824	5%
L	2,805	35,424	596	38,825	710	34	6	750	2%
M/E	1,176	48,217	155	49,548	131	10	0	141	0%
M/W	2,009	23,754	95	25,858	745	1,558	1	2,304	8%
N	2,423	20,098	191	22,712	587	1,077	1	1,665	7%
P/N	3,467	49,719	271	53,457	990	90	3	1,083	2%
P/S	2,379	16,507	831	19,717	1,128	62	9	1,199	6%
R/C	3,475	16,639	37	20,151	1,469	111	1	1,581	7%
R/N	2,089	15,412	125	17,626	660	99	2	761	4%
R/S	2,680	27,463	460	30,603	732	89	1	822	3%
S	1808	31162	360	33,330	951	71	5	1,027	3%
T	2547	11087	134	13,768	725	156	0	881	6%
<b>Grand Total</b>	<b>61,947</b>	<b>4,60,845</b>	<b>6,331</b>	<b>5,29,123</b>	<b>18,014</b>	<b>4,198</b>	<b>124</b>	<b>22,336</b>	<b>4%</b>

\*CM- Commercial, DM-Domestic, IND- Industrial

#### Inference:

- MCGM's water metering policy of 2019 highlights the goal of 100% metering in consonance with Atal Mission for Rejuvenation and Urban Transformation (AMRUT) launched in 2015 that sets universal metering as one of its goals. However, as outlined in the MCGM policy, old connections in the island city will continue to be unmetered until its redevelopment.
- Data of metered connections shows that 87% of the connections are residential while 12% were commercial and 1% were industrial.
- Of the overall units across the city, 4% have non-metered connections
- E, G/S, H/W and M/W wards have the highest percentage (8%) of non-metered connections while M/E (0.3%), F/N, H/E, L and P/N (2%) have the least percentage of non-metered connections.
- Wards H/W, K/E, K/W, P/S and R/C have a large proportion of commercial units with non-metered connections.

<sup>6</sup> As per RTI Response

• **Table 6: Affordability of Water Supply (Residential)**

Type of Connection	Non-Slum	Slum		
		Slum (Metered Tap Only)	Slum (Tanker)	Slum (Total 135 LPCD)
URDPFI Norms	135 lpcd	135 lpcd		
BMC Water Supply	135 lpcd	45 lpcd		
Deficiate	0	90 lpcd	Deficiate 90 lt Supply by Tanker	
<b>Total Water Supply (BMC)</b>	<b>135 lpcd</b>	<b>45 lpcd</b>	<b>90 (via Tanker)</b>	<b>135 (45 tap + 90 tanker)</b>
Cost criteria by BMC <sup>7</sup>	₹ 6.36/1000lt	₹ 5.28/1000lt	₹ 270/1000lt	-
Average expense per day based on per day norm (135lpcd)	₹ 0.86	₹ 0.24	₹ 24.30	-
Monthly Cost (₹)	₹ 25.76	₹ 7.13	₹ 729.00	₹ 736.13
Remarks	Full need met by tap; low cost	Only partial need met	High cost for additional water from tanker	Overall high burden due to costly tanker reliance

\* Urban and Regional Development Plans Formulation and Implementation (URDPFI)

**Note: (\*\*)** Cost of water for slum households is calculated based on the following consideration: if a slum household receives 45 lpcd through a metered tap at ₹5.28/1000L, the monthly expense per capita is ₹7.13. To meet the daily norm of 135 lpcd, the remaining 90 lpcd is often sourced from tankers at ₹270/1000L, costing ₹729 per capita monthly. Therefore, the total monthly water cost per capita for a slum household using 135 lpcd is approximately ₹736.13, underscoring the high burden of unequal water access.

**(\*)** The cost of water is calculated considering the entire amount received from a tanker.

#### Inference:

- In Mumbai, water is charged either as a service cost (for unmetered old connections in the island city, billed via property tax under Section 141 of the MCGM Act) or based on consumption (for metered taps and tanker supply as per Water Charges Rules, last revised in 2022).
- Although slum households receive water at a nominal cost (₹5.28/1000L vs ₹6.36/1000L for non-slums), the real burden lies in unequal access. Slum residents often rely on tankers priced at ₹270/1000L, leading to massive cost disparities.
- For example, a slum household using 45 lpcd via a metered tap pays ₹7.13/month per capita, but to meet the standard 135 lpcd, the remaining 90 lpcd via tanker costs ₹729/month per capita.
- With an average family size of 4.5 people, a slum household ends up spending ₹3,312.58/month, if slum households receive 135 lpcd entirely through a metered connection, the cost drops drastically to ₹97.94 per household/month, or ₹21.38 per capita/month, making a strong case for universal metered piped supply in slums.

<sup>7</sup><https://portal.mcgm.gov.in/irj/go/km/docs/documents/MCGM%20Department%20List/Hydraulic%20Engineer/DOCS/Circulars/Circular%20of%20Rate%20Revision%2016.06.2022>

## C. Quality of Water Supply and Citizen complaints registered in Mumbai

An important component of water supply is the quality of water - safe water supply is one of the criteria of SDGs under its water and sanitation Goal 6. The Bureau of Indian Standards (BIS) sets specific quality requirements of potable water and water for domestic use, which is regularly monitored by the MCGM.<sup>8</sup> According to the Environment Status Report of the MCGM, 200 drinking water samples are collected daily for testing at the G/North water-testing laboratory. Apart from user point and distribution network, quality testing is also done at the source point, prior to and after treatment.

• **Table 7: Ward Wise Drinking Water Quality Testing Results from 2020 to 2024<sup>9</sup>**

Ward	% of unfit samples				
	2020	2021	2022	2023	2024
A	0.84%	0.23%	0.84%	2.60%	1.40%
B	1.49%	1.50%	5.97%	1.59%	2.90%
C	0.18%	0.17%	0.46%	0.30%	0.00%
D	1.57%	0.62%	1.18%	0.71%	0.35%
E	0.93%	0.19%	1.16%	0.54%	0.09%
F/N	2.20%	0.07%	0.48%	0.09%	0.14%
F/S	1.89%	1.92%	0.16%	0.41%	0.09%
G/N	4.02%	0.91%	0.30%	1.33%	0.23%
G/S	0.84%	0.22%	1.50%	0.28%	0.49%
H/E	0.00%	0.00%	0.94%	2.24%	1.62%
H/W	1.55%	0.21%	0.30%	0.00%	0.56%
K/E	0.82%	0.00%	0.20%	0.10%	0.22%
K/W	0.50%	0.15%	0.15%	0.34%	0.17%
L	1.06%	0.48%	1.04%	0.61%	0.00%
M/E	2.15%	0.00%	0.69%	0.31%	0.46%
M/W	1.68%	0.50%	0.51%	0.71%	0.00%
N	1.22%	0.00%	0.78%	0.27%	0.00%
P/N	0.40%	0.06%	0.17%	0.09%	0.00%
P/S	2.39%	0.09%	0.36%	0.30%	0.05%
R/C	1.42%	0.82%	1.98%	0.36%	0.61%
R/N	0.68%	0.00%	0.31%	0.16%	0.00%
R/S	0.50%	0.26%	0.57%	0.31%	0.16%
S	0.94%	0.14%	0.07%	0.14%	0.08%
T	2.32%	0.11%	0.10%	1.08%	0.81%
Other (S.R)	0.36%	0.07%	0.31%	0.30%	0.13%
<b>Total</b>	<b>1.02%</b>	<b>0.29%</b>	<b>0.67%</b>	<b>0.54%</b>	<b>0.33%</b>

\* BIS declares drinking water unfit if it is bacteriologically contaminated or if chemical contaminants exceed the maximum permissible limits set in its quality standards.

### Inference:

- The percentage of unfit testing samples has reduced considerably from 1.02% in 2020 to 0.33% in 2024.
- B (2.90%) and H/E (1.62%) wards had the highest percentage of unfit samples in 2024.
- 21 out of 24 wards had less than 1% unfit samples in 2024.

<sup>8</sup> <https://cpcb.nic.in/wqstandards/>

<sup>9</sup> As per RTI Response

• **Table 8 : Water related complaints registered in CCRS for the year 2020 & 2024<sup>10</sup>**

Complaints Type	2020				2024				Complaints Registered from 2020 to 2024 (%)
	No. of Complaint	Closed	Closed %	Avg. Days	No. of Complaint	Closed	Closed %	Avg. Days	
Burst water main lines	804	774	96%	30	534	476	89%	49	-34%
Contaminated Water Supply	1,369	1,252	91%	28	2,083	1,857	89%	47	52%
Leakage near meter	88	81	92%	27	93	81	87%	54	6%
Leaks in Water Lines	3,434	3,274	95%	29	3,336	2,941	88%	48	-3%
Maintenance of Electric Pumps in Municipal Colonies	3	0	0%	-	3	2	67%	20	0%
Non receipt of water bills	666	634	95%	27	212	185	87%	41	-68%
Overflow of overhead tank/ suction tank	232	226	97%	26	186	165	89%	43	-20%
Providing water by tankers	35	34	97%	23	50	42	84%	37	43%
Removal of water meters	81	75	93%	27	99	82	83%	46	22%
Shortage of water supply	3,914	3,774	96%	30	6,436	5,737	89%	46	64%
Unauthorised tapping of water connections	859	842	98%	24	992	889	90%	42	15%
Unauthorised use of water-Change of User	201	197	98%	25	202	168	83%	51	0%
Use of Booster Pump	119	118	99%	26	231	212	92%	39	94%
Water supply during non-supply hours	50	46	92%	23	65	60	92%	36	30%
<b>Grand Total</b>	<b>11,855</b>	<b>11,327</b>	<b>96%</b>	<b>29</b>	<b>14,522</b>	<b>12,897</b>	<b>89%</b>	<b>46</b>	<b>22%</b>

Avg. Days: Average days to closed complaint

#### Inference:

- B. Total water complaints increased by 22% from 11,855 in 2020 to 12,897 in 2024, while Complaint resolution decreased from 96% to 89%, suggesting reduced efficiency in addressing issues.
- C. Average days for closed complaints also increased by 59% from 29 days to 46 days.
- D. The highest number of complaints in 2024 were related to shortage of water (5,737), followed by leaks in water lines (2,941) and contaminated water supply (1,857), together accounting for nearly 82% of all water-related complaints registered that year.
- E. Complaints related to contaminated water supply have increased by 52% over the last five years (from 1,369 to 2,083), contributing to a rise in water-borne diseases reported in Mumbai government dispensaries and hospitals<sup>11</sup>, including Diarrhoea (1,11,928 cases), Typhoid (5,481), Cholera (1,14 cases), and Hepatitis A (1,260 cases) in 2023.

<sup>10</sup> As per RTI Response

<sup>11</sup> [https://www.praja.org/praja\\_docs/praja\\_downloads/Mumbai%20Health%20White%20Paper%202024.pdf](https://www.praja.org/praja_docs/praja_downloads/Mumbai%20Health%20White%20Paper%202024.pdf)

## D. Sustainability

Sustainability is an important factor in the water supply in urban areas. It has been an emerging theme of all major water policies, and rightly so. A Niti Aayog report on the Composite Water Management Index<sup>12</sup> highlighted a serious water-stress situation in India's cities and predicted that 21 major cities will run out of water by 2020. The extent of water crisis has been more than evident after Chennai faced severe water scarcity in 2019. It is therefore of utmost importance to focus on the sustainability of water, given that even in Mumbai the water demand is estimated to double in the next 20 years.

The recently launched national **Jal Shakti Mission**<sup>13</sup> lays a specific focus on rejuvenation of water sources and adoption of sustainable practices for water conservation through tracking of rainwater harvesting, reuse of treated wastewater, rejuvenation of water bodies, plantation and awareness programmes. Mumbai already has an existing **MCGM rainwater harvesting policy**<sup>14</sup> to make RWH mandatory to new properties coming for development from 1st Oct. 2002 having plot area 1000 sq.mt and more. From 8.05.2019 as per DP 2034, the condition is binding to all developments having a plot area 500 Sq. Mts. and more.

Information acquired through an RTI, as on October 2020, there is total number of **3209 RWH units** in Mumbai city. However, this needs to be tracked with the number of properties developed since 1<sup>st</sup> October, 2002 compared to the RWH units and ward wise for effective monitoring of policy implementation.

<sup>12</sup> <https://niti.gov.in/sites/default/files/2019-08/CWMI-2.0-latest.pdf>

<sup>13</sup> <http://nwm.gov.in/>

<sup>14</sup> <https://portal.mcgm.gov.in/iri/go/km/docs/documents/MCGM%20Department%20List/Solid%20Waste%20Management/Rain%20Water%20Harvesting/Water%20Conservation%20and%20Rainwater%20Harvesting%20EN.pdf>;  
 MCGM Environment Status Report 2018-19

## E. City, State, and National Water Policies: Current Status

Figure 1: City level Policies for Water and there current status

City Level	
Water for All Policy	
Provisions	Current status
<ul style="list-style-type: none"> <li>• Older buildings to pay fair water rates</li> <li>• Increase supply (e.g., desalination)</li> <li>• Standing Committee to set user-based charges</li> <li>• Set charges for user categories</li> </ul>	<ul style="list-style-type: none"> <li>• Island city unmetered; charged via property tax</li> <li>• Deficit of 689 MLD (2023–24); no desalination implemented</li> <li>• Rules under 2015 Water Charges, updated in 2022</li> <li>• User-type-based rates (slum, non-slum, tanker, industrial)</li> </ul>
BMC's Water Charges Rules and Regulations	
Provisions	Current status
<ul style="list-style-type: none"> <li>• Include Water Tax &amp; Water Benefit Tax</li> <li>• Mandatory water metering</li> <li>• Volumetric billing where meters exist</li> </ul>	<ul style="list-style-type: none"> <li>• Island city still charged via property tax (MCGM Act, Sec 141)</li> <li>• 4% connections unmetered (22,336 connections); island exempt until redevelopment</li> <li>• Metered = per litre   Unmetered = lump sum</li> </ul>
BMC Draft Water Metering Policy	
Provisions	Current status
<ul style="list-style-type: none"> <li>• Meter all municipal properties within 1 year</li> <li>• Mandatory Rainwater Harvesting (RWH) for large plots</li> <li>• Promote conservation practices</li> </ul>	<ul style="list-style-type: none"> <li>• Full citywide metering yet to be achieved</li> <li>• RWH rules: &gt;1000 sq.m (2002), &gt;500 sq.m (2019)</li> <li>• 3,209 RWH units by Oct 2020</li> <li>• RWH infrastructure mandated, but usage unclear</li> <li>• Aligned with Jal Shakti Mission</li> </ul>

Figure 2: State level Policies for Water

State Level

Maharashtra State Water Policy 2019

Provisions

Promotion of conservation & RWH



Current Status

RWH mandatory (1000 sq.m from 2002; 500 sq.m from 2019)  
3,209 RWH units by Oct 2020

Domestic Water Priority



Slum: 45 lpcd vs. Non-slum: 135 lpcd  
High tanker dependence and cost in slums

Universal Access



High reliance on shared standposts and tankers (₹270/1000L)



The Water (Prevention and Control of Pollution) Act, 1974

Provisions

- Prevent/control pollution, maintain water quality
- Central/State Water Labs

Current status

- Unfit water samples declined: 1.02% → 0.33% (2020–2024)
- Contamination complaints rose 52% (2020–2024)
- Linked to waterborne diseases



Jal Shakti Abhiyan

Provisions

- Promote RWH in buildings/open spaces

Current status

- RWH mandatory for plots >500 sq.mt (2019)  
- 3,209 units by Oct 2020

Figure 3: National Level Water Policies

National Level	
National Water Policy 2012 	
Provisions	Current status
<ul style="list-style-type: none"> <li>• Ensure equitable access to water.</li> <li>• Emphasise sustainable development, conservation, and efficient use.</li> <li>• Advocate for equity and social justice in water use and allocation.</li> <li>• Good governance through informed decision-making, participation, accountability</li> </ul>	<ul style="list-style-type: none"> <li>• Slums: 45 lpcd vs. Non-slums: 135 lpcd</li> <li>• Supply timing avg: 5.37 hrs/day (2024);</li> <li>• 71% zones <math>\leq 4</math> hrs</li> <li>• Conveyance losses: 9.04% (395 MLD) in 2023–24</li> <li>• Slum residents pay more due to tanker reliance</li> <li>• Equity in access and affordability remains a challenge</li> <li>• Water quality tests follow BIS norms</li> <li>• CCRS complaint data available</li> <li>• Complaint resolution time increased (2020–2024)</li> </ul>
National Water Mission	
Provisions	Current status
<ul style="list-style-type: none"> <li>• Public water database</li> <li>• Framework for 20% efficiency improvement</li> <li>• Integrated resource management</li> </ul>	<ul style="list-style-type: none"> <li>• BMC shares detailed supply, loss, quality, complaints data via RTI and portal</li> <li>• 96% metered connections</li> <li>• Differential pricing used</li> <li>• Sourced from 7 reservoirs</li> <li>• 3,200+ RWH units since 2019</li> <li>• Distribution inequity and shortages remain</li> </ul>
 Water Cess Act (1977)	
Provisions	Current status
<ul style="list-style-type: none"> <li>• Cess rates based on category/purpose</li> <li>• Metering provisions</li> </ul>	<ul style="list-style-type: none"> <li>• Water rates vary by use (slum, non-slum, commercial, tanker)</li> <li>• 96% connections metered (as of March 2025)</li> </ul>

## Part 2. Sewerage and Water Treatment

### A. Key Summary

In 2022, Mumbai generated about 1,956 MLD of sewage, but only 1,474 MLD is treated. Most Sewerage Treatment Plants (STPs) offer only basic treatment, and out of eight only two STP meet Biological Oxygen Demand (BOD) limit as per Central Pollution Control Board norms) exceed pollution limits. The STP in Malad reported BOD levels 10 times above permissible levels. Due to urbanisation, Mithi River continues to be polluted with BOD at 50 mg/l in 2019 to 210 mg/l in 2023.

Ongoing upgrades under MSDP-2 have left Worli and Bandra STPs discharging untreated sewerage into the sea. The gap between infrastructure development and environmental protection is widening, necessitating faster implementation and regulatory oversight.

Sewerage and sanitation systems are as important as the water supply systems in urban areas since they act as complements for enabling sustainable and healthy cities. All major national policies that focus on water, also deal with sewerage systems. This is because in the near future, a lot of water demand can be met by effective treatment of wastewater.

There are various national level policies related to sewerage. The Atal Mission for Rejuvenation and Urban Transformation (**AMRUT**) policy<sup>15</sup> of the central government declares providing a sewerage connection to every household as one of its mission statements. Similarly, the **National Water Mission**<sup>16</sup> aims at incentivising the recycling of water including wastewater and the development of an eco-friendly sanitation system. The **Jal Shakti Abhiyan**<sup>17</sup> of the ministry has increased the reuse of sewage water as one of its targets.

If we look at Mumbai's performance in this context, currently there are 8 Sewage Treatment Plants (STPs). However, it is important to note that most STPs in Mumbai are only undertaking primary treatment.<sup>18</sup> This is evident from the table below where only a few STPs on average let out permissible treated wastewater.

Untreated sewerage poses the risk of contaminating water sources and is a major cause of river and marine pollution. Sewerage from units not connected to the piped sewer system, leakages in sewage pipes, and poor treatment of sewerage all pose a serious risk, not just for the environment alone, but also for human health. Water and vector-borne diseases are more likely to have a serious impact on human lives due to water contamination, mismanaged and untreated sewage.

According to norms of the Pollution Control Boards, the three major indicators used for measuring the quality of wastewater are as follows:

**1. Biochemical Oxygen Demand (BOD):** Refers to the amount of dissolved oxygen in the water required to decompose the organic matter. The higher the organic matter (sewage and pollutants) in the water, the

<sup>15</sup> <http://amrut.gov.in/content/innerpage/the-mission.php>

<sup>16</sup> <http://nwm.gov.in/>

<sup>17</sup> <http://geourbanmissions.gov.in/>

<sup>18</sup> RTI reply shows that as of 2019, 4 of 8 STPs have preliminary treatment, 3 have primary and secondary treatment while one has primary, secondary and tertiary treatment.

more is the BOD; the more the BOD, the lesser is the available oxygen for aquatic life. CPCB norms for BOD from STP outlet are 20mg/lit. MPCB has adopted a stricter norm of 10mg/lit. The CPCB norm followed for BOD of waterbodies is 3mg/lit.

2. **Total Suspended Solids (TSS):** Refers to the dry weight of undissolved solid particles in water. The prescribed limit for STP outlet is 50mg/lit. by CPCB and 20mg/lit. by MPCB.

3. **Faecal Coliform (FC):** Faecal Coliform is bacteria found in the faeces of warm-blooded animals and humans, commonly found in human excreta and a major cause of water-borne diseases. The CPCB's prescribed limit for faecal coliform in all waterbodies is 2500MPN<sup>19</sup>/100ml and for drinking water, detectable faecal coliform has to be nil.

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<sup>19</sup> Most Probable Number (MPN) is a method to estimate concentration of microorganisms in liquid.

## 1. Status of Mumbai's Sewerage Treatment Plant

- Table 9: Status of Mumbai's Sewerage Treatment Plant's Waste Water Quality from Jan-2020 to Dec-2024<sup>20</sup>

Criteria			(mg/lit.)				
			2020	2021	2022	2023	2024
BOD (Prescribed limit is 20mg/lit. by CPCB and 10 mg/lit. by MPCB)	Colaba	Inlet	135	96.54	91.64	121.26	131.33
		Outlet	<5	3.43	3.45	1.27	5.00
	Worli	Inlet	89	109.51	120.31	123.56	141.33
		Outlet	2.14	2.18	1.76	1.91	-
	Bandra	Inlet	78	82	90.51	81.33	115.83
		Outlet	1.65	2.03	1.27	2.11	-
	Versova	Inlet	117	120.35	131.61	143.54	146.09
		Outlet	29.92	29.43	44.30	53.44	58.09
	Bhandup	Inlet	80	62.29	81.59	90.98	85.64
		Outlet	31.17	26.64	34.40	30.40	20.70
	Ghatkopar	Inlet	76	91.91	98.15	95.69	100.25
		Outlet	34.5	34.59	37.45	38.01	24.45
	Malad	Inlet	125	123.63	134.38	144.24	126.83
		Outlet	125.64	131.53	137.44	140.61	99.36
TSS (Prescribed limit is 50mg/lit. by CPCB and 20mg/lit. by MPCB)	Colaba	Inlet	174	144.02	124.57	151.37	137.42
		Outlet	<5	5.10	7.28	2.10	7.50
	Worli	Inlet	119	162.73	242.60	152.60	151.55
		Outlet	-*	2.59	3.43	4.38	-
	Bandra	Inlet	95	117.33	118.83	123.88	137.33
		Outlet	-*	3.04	3.17	4.26	-
	Versova	Inlet	153	170.83	176.85	153.32	183.82
		Outlet	17.7	20.12	47.83	65.58	72.91
	Bhandup	Inlet	90	94.01	89.33	111.86	107.55
		Outlet	23.88	43.26	31.06	33.80	25.10
	Ghatkopar	Inlet	115	125.63	129.30	114.58	115.17
		Outlet	33.5	40.03	39.51	43.02	21.55
	Malad	Inlet	164	162.23	173.35	171.85	160.25
		Outlet	155.71	179.42	185.52	181.53	124.64
	Charkop	Inlet	155	204.35	212.71	247.10	239.55
		Outlet	<5	3.04	3.83	3.90	9.60

\*Discharge is through Marine Outfall, BO: Biochemical Oxygen Demand, TSS: Total Suspended Solids

(-) Worli and Bandra plants are undertaking construction work under the Mumbai Sewage Disposal Project-2 (MSDP-2)

### STP's Index

Colour	BOD limit	TSS limit	Remark
	20mg/lit.	50mg/lit.	CPCB criteria met
	10 mg/lit.	20mg/lit.	MPCB criteria met
			< than CPCB & MPCB criteria

### Inference:

- Malad STP repeatedly failed to treat sewerage effectively—its BOD and TSS outlet values remained higher than inlet values every year, reflecting systemic failure and urgent need for revamp.
- Versova, Bhandup, and Ghatkopar STPs consistently failed to meet MPCB norms, and in many years, also breached CPCB limits for both BOD and TSS, pointing to chronic inefficiencies in treatment operations.

<sup>20</sup> As per RTI Response

4. The lack of outlet data for Worli and Bandra in 2024 is due to ongoing upgrades under MSDP-2, suggesting efforts are being made to enhance treatment capacity and quality in the coming years.
5. Rapid urbanisation is leading to increasing inlet BOD and TSS loads (e.g., Charkop inlet BOD rose to 213.55 mg/l in 2024).

• **Table 10: Quality of Water Bodies in Mumbai in Accordance with CPCB norms (2023)<sup>21</sup>**

Station name	Type of Water Body	B.O.D. (mg/l)		Faecal Coli form (MPN/100ml)	
	CPCB Norms	<3 mg/l		<2500MPN/100ml	
		Min	Max	Min	Max
Source					
Bhatsa U/S Of Liberty Oil Mills, Satnel, Shahapur, Thane (2653)	Minor River	1	4	2	34
Bhatsa D/S Of Liberty Oil Mills, Satnel, Shahapur, Thane (2654)	Minor River	1	4	2	22
Bhatsa D/S Of Pise Dam Near Pise Village (Ulhas)	Minor River	1	4.4	2	8
Tansa Near Road Bridge, Village Dakewali, Wada, Palghar (2709)	Minor River	1	4	2	17
Vaitarna Near Road Bridge, Gandhare Village, Wada, Thane (2712)	Minor River	1	4	2	21
Outlet					
Sea Water at Nariman Point, Colaba, Mumbai	Marine	7	15.5	170	920
Sea Water at Malabar Hill, Walkeshwar, Mumbai	Marine	7	18	240	1,600
Sea Water at Haji Ali, Worli, Mumbai	Marine	7	14	350	1,600
Sea Water at Shivaji Park, Dadar, Mumbai	Marine	6	24	110	920
Sea Water at Juhu Beach, Juhugaon, Santacruz, Mumbai	Beach	8	16	23	920
Sea Water at Gateway of India, Colaba, Mumbai	Sea	7	16	79	1,600
Sea Water at Charni Road Choupathy, Girgaon, Mumbai	Sea	6	18	140	1,600
Sea Water at Worli Sea Face, Worli, Mumbai	Sea	6	20	22	920
Sea Water at Versova Beach, Andheri, Mumbai	Beach	6	16	46	1,600
Mithi (2168)	Minor River	1	210	1,700	5,40,000
Mahim Creek At Mahim Bay (1318)	Creek	7	28	26	920

**Inference:**

- a. The above table shows that Mumbai's water sources are highly polluted even in their natural status.
- b. Major sea outlets and beaches in Mumbai are however polluted from untreated sewerage or surface pollution including solid waste. The minimum BOD recorded in all the major beach outlets is much higher than the prescribed norm for beaches of less than 3mg/l. The Faecal Coli Form is high too, but it is within the maximum limit prescribed.
- c. Mithi river pollution from untreated sewerage and waste disposal is evident from the high BOD (maximum 210mg/l.) as well as very high Faecal Coli Form. (Maximum 540000MPN/100ml).

<sup>21</sup> <https://cpcb.nic.in/nwmp-data/>; for CPCB norms : <https://cpcb.nic.in/water-quality-criteria/>

1. **Table 11 : Outlet Quality of Water Bodies of Marine, Beach, Sea and River in Mumbai from 2019 to 2023**

Outlet	B.O.D. (mg/l) <3 mg/l (Maximum)					Faecal Coli form (MPN/100ml) <2500MPN/100ml (Maximum)				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Sea Water at Nariman Point, Colaba, Mumbai	20	NP	18	14	15.5	17,000	NP	920	920	920
Sea Water at Malabar Hill, Walkeshwar, Mumbai	15	NP	17	14	18	1,600	NP	540	920	1,600
Sea Water at Haji Ali, Worli, Mumbai	16	NP	17	14	14	1,600	NP	540	920	1,600
Sea Water at Shivaji Park, Dadar, Mumbai	45	NP	16	13	24	1,600	NP	920	920	920
Sea Water at Juhu Beach, Juhugaon, Santacruz, Mumbai	14	NP	40	14	16	1,600	NP	540	1,600	920
Sea Water at Gateway of India, Colaba, Mumbai	16	NP	18	14	16	1,600	NP	920	1,600	1,600
Sea Water at Charni Road Choupathy, Girgaon, Mumbai	17	NP	17	14	18	1,600	NP	540	1,600	1,600
Sea Water at Worli Sea Face, Worli, Mumbai	16	NP	17	13	20	920	NP	540	540	920
Sea Water at Versova Beach, Andheri, Mumbai	14	NP	18	14	16	1,600	NP	920	540	1,600
Mithi River	50	54	45	80	210	3,500	92,000	17,000	5,400	5,40,000
Mahim Creek At Mahim Bay	50	NP	17	14	28	920	NP	540	540	920

\*NP: Not Provided

**Inference:**

1. The B.O.D. level in the Mithi River was very high, rising from 50 mg/l in 2019 to 210 mg/l in 2023.
2. The concentration of faecal bacteria in the Mithi River has seen a dramatic increase over the past five years. It has risen from 3,500 mg/l in 2019 to 5,40,000 mg/l in 2023, which is over 200 times higher than the permissible safe limit.

## C. Water Supply and Sewerage related Budget, Citizens Complaints and Human Resources<sup>22</sup>

• **Table 12: Budget Estimates and Actual Expenditure of 'G' Budget (Water & Sewerage) in Crores**

Water & Sewerage		2021-22	2022-23	2023-24	2024-25	2025-26
Budget Estimates	RE	4,123	3,939	4,264	4,159	6,790
	CE	3,634	4,391	6,968	9,820	13,457
	Total	7,757	8,331	11,232	13,979	20,247
Revised Estimate	RE	4,456	4,319	6,198	6,402	-
	CE	2,014	4,147	5,058	10,045	-
	Total	6,469	8,467	11,256	16,447	-
Difference (in %)	RE	8%	10%	45%	54%	-
	CE	-45%	-6%	-27%	2%	-
	Total	-17%	2%	0%	18%	-
Actuals	RE	3,769	4,513	5,002	-	-
	CE	1,836	2,287	3,511	-	-
	Total	5,605	6,800	8,513	-	-
Percentage Utilised	RE	85%	104%	81%	-	-
	CE	91%	55%	69%	-	-
	Total	87%	80%	76%	-	-

### Inference:

- The revised estimate for Water and Sewerage department has increased from 6,469 in 2021-22 to 16,447 in 2024-25 whereas, the budget estimated for 2025-26 is 20,247.
- The difference in budget and revised estimates of revenue expenditure shows an increasing trend however, capital expenditure has always decreased in the years Except last year.
- The budget utilisation percentage has declined from 87% in 2021-22 to 76% in 2023-24.

• **Table 13: Comparison of Citizens Complaints, Time take to resolve Complaints, Budget Utilisation and Human Resources**

Department	Citizen Complaints			Average days to resolve a complaint			Budget Utilization (%)			Human Resources Vacant Post (%)		
	2022	2023	2024	2022	2023	2024	2021-22	2022-23	2023-24	2022	2023	2024
Water	13,097	14,752	14,522	26	29	46	87%	80%	76%	43%	44%	46%
Sewerage	490	550	517	49	34	53						

### Inference:

- Citizen complaints have increased, from 13,097 in 2022 to 14,752 in 2023, showing continued service-related issues.
- There was a slight drop in complaints in 2024 to 14,522, but it still remains higher than in 2022.
- The average number of days to resolve a complaint has increased significantly, from 26 days in 2022 to 46 days in 2024.
- This delay in complaint resolution shows a decline in service efficiency over the years.
- Budget utilisation has decreased from 87% in 2021-22 to 76% in 2023-24, suggesting a possible gap in resource planning or execution.
- Despite rising complaints and slower resolution times, the department is utilising less of its available budget, which could lead to greater citizen dissatisfaction.

<sup>22</sup> As per RTI Response

## D. Recommendations

- **Part 1. Water Supply:**
- **Water Supply and Timing:** The required MoHUA standard of 135lpcd should be supplied to every connection with at least six-hour water supply in all areas, including the slum areas.
- **Quality:** MCGM tests for drinking water quality checks need to cover all areas in the wards for an accurate measure of water contamination. If there are more water complaints from a particular area, then corrective measures should be taken accordingly. In addition, the rise in water-borne diseases can be attributed to the quality of water and ensuring better measures to increase quality should be implemented.
- **100% Metering:** Implementing 100% metered water connection in slums would allow them to access required quantity of water at just ₹14.54 per month as compared to ₹700-750 they are currently paying. Water metering should be adopted for residential connections per household to accurately track the amount of water used. At the same time, priority should be given to 100% metering of commercial units to track and proportionally supply water between residential and commercial units ensuring improved revenue generating system.
- **Sustainability:** For ensuring equity and sustainability in the water supply systems, more localised methods of water resource and supply management through localised and collectively owned sustainable practices can be promoted. MCGM can look to incentivising and strict monitoring of the implementation of RWH projects especially, in developments having plot area 500 Sq. Mts. and more. RWH will also enable meeting the future water demand and reduce the transmission wastage of water.
- **Monitoring and Response:** Proper record maintenance of water connections and amount of water supplied, and a social audit of the supply adequacy and quality should be regularly done to ensure that amount and timing of water is equitable across the city. Furthermore, MCGM must put in place effective measures to promptly address complaints registered according to time given in the Mumbai Citizens' Charter to ensure all their grievances are resolved at the earliest.
- **Leakage Prevention:** MCGM should initiate a city-wide audit of old and leaking water pipelines and prioritise their replacement with corrosion-resistant materials. This will reduce water loss during transmission, which currently accounts for a significant percentage of Non-Revenue Water (NRW). Pressure management techniques and district metering areas (DMAs) should be set up to localise issues and systematically reduce leakages.
- **Slum Infrastructure Improvement:** Special attention should be given to improving infrastructure in slum areas, ensuring they have access to piped water and functioning sewer systems. Water ATMs and community water points with smart cards can also be considered as interim solutions where piped connections aren't immediately feasible.

- **Part 2. Sewage and Water Treatment:**

- **Treatment:** Treatment of sewerage generated needs to be 100% and tertiary treatment needs to be done in all the STPs to reduce marine pollution and prevent water and vector borne diseases.
- **Reuse of Waste Water:** MCGM can use the treated wastewater for various purposes such as cleaning roads, watering gardens, traffic islands, road dividers etc. in the city. The corporation can also earn revenue by sale of treated waste water - Nagpur for example treats 90% of its sewerage and sells part of it to National Thermal Power Corporation and Maharashtra State Power Generation Company. Recycling of sewerage should also be incentivised where possible (for example: housing societies, large commercial establishments, industrial establishments) so that treatment of sewerage can be done locally and can reduce the water demand of that unit.
- **Budget:** Better utilisation of the budget can reduce the inequality persistent in the amount of water supplied, cost of water in non-slum and slum households and efficient sewerage and water treatment. By ensuring 100% metered connection, provisioning for appropriate quality checks to curb the problem of water borne diseases.
- Provisioning and executing the appropriate sewerage and water treatment plants with all levels (primary, secondary and tertiary) of treatment and resolving complaints related to these in a quickest manner will lower the risk of water contamination and hence, enabling the better environment and health.

## Section II: Solid Waste Management and Sanitation

### Part I. Solid Waste Management (SWM)

#### A. Key Highlights

Despite policy backing and Revenue Expenditure, there has been an increase in SWM's budget's (44% increase since 2021–22 from ₹2,537 Cr. to ₹3,653 Cr.), systemic issues persist. Though Mumbai's civic body BMC claims 100% door-to-door collection and 86% segregation, complaint data suggests source segregation is inadequate. Complaints about garbage not being lifted surged by 416% between 2020 and 2024 from 1,976 to 10,205. Though the time taken to resolve has decreased from 44 days to 11 days.

Legacy dumping continues at Deonar, and bio-mining at Mulund is progressing too slowly to meet the June 2025 target. Bulk Waste Generators have a 64% non-compliance rate, and inconsistent data reporting by wards hampers enforcement. Without stronger monitoring, decentralised processing, and transparency, effective management of waste remains out of reach.

Solid waste management is a pressing issue in most Indian cities. In Mumbai, the Brihanmumbai Municipal Corporation (BMC) is responsible for managing solid waste in the city. The BMC has prescribed 2006 bye-laws on the solid waste management (SWM) process, fines for violation, and other facilities required for effective waste management.

The Swachh Bharat Mission (SBM) was launched by the Central Government in 2014 to achieve a Clean India by October 2, 2019. SWM is one of the most important components of the mission, and the SBM Guidelines highlight the various strategies adopted to ensure the safe and scientific disposal of all kinds of waste.

The key strategies adopted for SWM under the SBM Guidelines are waste segregation at the source, collection and transportation, waste processing, and landfill management. Urban Local Bodies (ULBs) are responsible for implementing these strategies and ensuring that waste management is done efficiently.

The SBM 2.0, launched in 2020, aims to build on the successes of the first phase and further advance the mission of a clean and sustainable India. Effective and decentralised waste management is essential for the success of the SBM mission, and targeted reforms are needed to achieve this. The table below highlights the status of certain indicators as mentioned in BMC's bye-laws 2006 and SWM rules from data received through RTIs, BMC Website and other government/agencies' websites.

Indicators	Status as of 2024
Waste segregation at source, such as colour-coded bins, collection vehicles, and collection points.	According to the ESR 2023-24, 86% of waste is segregated. However, information from 46 dry waste segregation centers and landfill sites shows waste is not being effectively segregated at source, as prescribed by the SWM Rules, 2016.
Transportation systems with appropriate vehicles, equipment, and manpower for waste collection and transportation.	ESR 2023-24 claims 100% door-to-door waste collection. However, based on CCRS data, there were 10,205 complaints registered in 2024 for 'garbage not being lifted' from roads/various locations.
Processing units including the establishment of composting units, biogas plants, and waste-to-energy plants.	As of December 2024, BMC has 46 working dry waste segregation centers at ward level. Wet waste processing is carried out at the Kanjurmarg landfill processing unit, while the SWM rules 2016 guidelines aim to reduce waste sent to landfills.
Scientific Landfill sites for appropriate infrastructure and facilities at the landfill sites, such as weighbridges, landfill liners, and leachate collection systems.	BMC has four landfills/dumping ground located in Deonar, Kanjurmarg, Gorai, and Mulund. At present, scientific waste processing is carried out only at Kanjurmarg landfill, while Deonar is used for waste dumping purposes.
Creating an information system for waste management. It includes the provision of a database of waste generators, collection routes, and processing units.	Information is unavailable on BMC website.
Screening of Nallahs	As per CCRS data, citizens registered 15,701 complaints for Drainage Chokes and Blockages in 2024.
On-Site wet waste processing by bulk waste generator.	In BMC, 64% of bulk waste generator (BWG) societies are not processing waste as per the BWG norms set by the SWM rules 2016 guidelines and BMC's BWG guidelines <sup>23</sup>

## B. Third Party Inspection (TPI) report for Certification on Garbage Free City for Mumbai

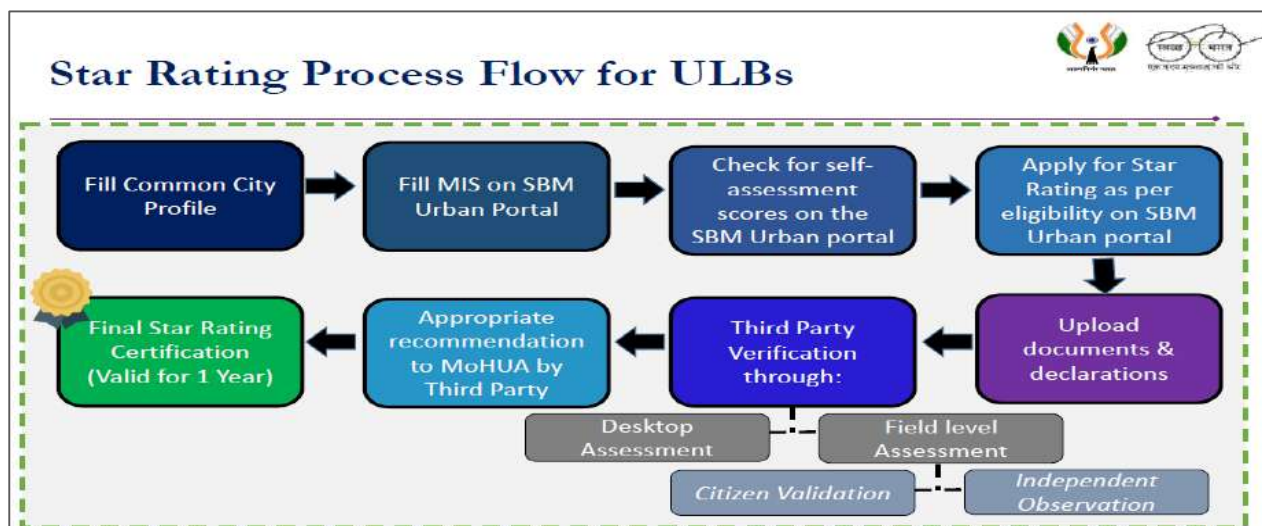
The SBM launched a protocol for Star Rating of Garbage Free cities. This rating consists of conditions designed to enable cities to evolve into a model (7-star) city, with progressive improvements in their overall cleanliness. It involves 25 key parameters across the SWM spectrum to help cities self-assess their status and encourage them to progress towards improving their cities' overall cleanliness and aesthetics.

The self-assessment is verified by an independent third-party agency, appointed by MoHUA (Ministry of Housing and Urban Affairs). "Garbage Free" status is awarded when at any point of time in the day, no garbage or litter is found in any public, commercial or residential locations (including storm drains and water bodies) in the city (except in litter bins or transfer stations), 100 percent of waste generated is scientifically managed, all legacy waste has been remediated and scientifically managing its municipal solid waste, plastic waste and construction & demolition waste.<sup>24</sup>

<sup>23</sup> <https://www.vermigold.com/resources-pdf/MCGM%20SWM%20Bulk%20Generator%20Circular.pdf>

<sup>24</sup> [SBM - Star Rating For Garbage Free Cities \(GFC\) \(sbmurban.org\)](https://sbmurban.org/)

• Figure 4: Star Rating Process Flow for ULBs<sup>25</sup>



In Swachh Survekshan's Garbage Free Cities (GFC) certification, the terms "Important" and "Aspiration" refer to two distinct scoring categories that assess a city's waste management performance.

**1. Important Indicator:** These are mandatory criteria that cities must meet to qualify for any GFC star rating (1-star to 7-star).

**2. Aspiration Indicator:** These are advanced indicators that encourage cities to go beyond compliance and adopt innovative/sustainable practices.

Category	Definition	Why It Matters	Key Parameters	BMC Score
<b>Important</b>	<i>Mandatory criteria</i> for basic certification (1★–7★). Ensures compliance with SWM Rules.	Ensures cities meet foundational cleanliness standards. Failure leads to disqualification.	100% door-to-door collection, Segregation & processing, Dump site remediation	<b>2,450</b>
<b>Aspiration</b>	<i>Advanced benchmarks</i> for excellence. Rewards innovation and sustainability.	Drives cities to adopt best practices and compete for higher ratings (5★–7★).	Zero-landfill policy, Waste-to-energy plants, Dump site remediation, Citizen engagement	<b>0</b>

Note: Any ward of the city failing (not achieving Level 1) in any applicable ward level components- the city will not achieve Star Rating Certification.

BMC applied for the **3-star Garbage Free City** rating in July 2022 but **failed to achieve it**.

<sup>25</sup> <https://smmurban.com/uploads/files/f9i6rs85t17n0hd.pdf>

## C. Status of Waste Generation and Composition as per Environment Status Report

- **Table 14: Percentage of Waste Generation and Waste Composition in Mumbai from 2019-20 to 2023-24 as per Environment Status Report**

Year	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Waste Generation</b>					
Waste Generated (MTD)	6,650	5,500	6,300	6,300	6,300
% change year on year	-10.74%	-17.29%	14.55%	-	-
<b>Domestic Waste Composition</b>					
Food Waste	4,828	3,993	4,574	4,574	4,574
Wood, Cloth	233	193	221	221	221
Sand, Stone, and Fine Earth	1,155	955	1,094	1,094	1,094
Plastic	215	178	204	204	204
Paper and other Recyclable Metals	218	180	207	207	207

**Note:** In 2019-20 to 2021-22, the figures indicate the average waste generated in MTD.

### Inference:

- From 2021–22 to 2023–24, waste generation stabilised at 6,300 metric tonnes per day, indicating a consistency in waste production levels.
- Food waste consistently constituted approximately 73% of total domestic waste.
- Categories like plastic, paper, and recyclable metals show little year-on-year change, suggesting stable consumption or limited segregation improvements.
- In recent years, there is a critical need to strengthen monitoring and tracking of waste data. Real-time data should be maintained and published on a public platform or municipal website to improve transparency, foster accountability, and raise public awareness.

- **Table 15: Waste Generation and Waste Composition in Mumbai from 2022 to 2024 as per RTI data**

Year	2022	2023	2024
<b>Waste Generation</b>			
Waste Generated (MTD)	6,385	6,597	6,656
% change year on year	-	3%	1%
<b>Domestic Waste Composition*</b>			
Food Waste	4,636	4,789	4,832
Wood, Cloth	224	232	234
Sand, Stone, and Fine Earth	1,109	1,146	1,156
Plastic	207	214	216
Paper and other Recyclable Metals	209	216	218

(\* Waste composition is based on waste type percentages from the ESR)

### Inference:

- Waste generation in Mumbai has steadily increased from 6,385 MTD in 2022 to 6,656 MTD in 2024, marking a total rise of 4% over two years. This trend contrasts with the stable waste generation figures reported in the Environment Status Report (ESR), suggesting that RTI data reflects more recent or accurate tracking.
- Since the ESR is a key tool for planning and monitoring, it should be regularly updated with real-time and reliable data to ensure better decision-making and public accountability.

■ **Table 16: Status of Key Solid Waste Management (SWM) Indicators from 2019-20 to 2023-24<sup>26</sup>**

Key SWM Indicators	2019-20	2020-21	2021-22	2022-23	2023-24
Collection door-to-door (%)	100%	100%	100%	100%	100%
Segregation (%)	82%	81%	81%	81%	86%
Number of bulk generators	3,367	3,367	2,825	-	-
Number of bulk generators composting at source	1,696	2,042	1,500	-	-
Extent of Municipal Solid Waste Recovered (80% target) <sup>27</sup>	35%	35%	35%	35%	35%
Extent of Scientific Disposal of Waste at Landfill Site (100% target)	75%	75%	88%	75%	88%
Number of transportation vehicles	5,946	5,126	7,759	5,962	6,055

(-) Bulk waste generator data for 2022-23 and 2023-24 is not available in the Environment Status Report

**Inference:**

1. As per BMC's ESR, there is an increase in waste being segregated from 82% in 2019-20 to 86% in 2023-24. However, this is not waste segregated at source, as prescribed in the SWM Rules 2016.
2. **Municipal Solid Waste Recovery** remains stagnant at 35%, well below the 80% target.
3. BMC Environment Status Report 2022-23 and 2023-24 does not mention number of bulk generators and Number of bulk generators composting at source.

■ **Table 17: Type of Vehicles used for Solid Waste Management Services from 2019-20 to 2023-24<sup>28</sup>**

Type of Vehicle	Number of Vehicles				
	2019-20	2020-21	2021-22	2022-23	2023-24
Compactors	1,584	1,432	1,926	1,547	1581
Skip Vehicles/Dumper Placers	1	0	0	0	0
Dumpers/Refuse Vehicle	126	192	315	88	83
Bulk Refuse Carriers	-	-	-	0	-
Tempo/Jeeps	4,092	3,358	5,294	4,179	4238
JCB Machines	63	61	127	51	58
Stationary Compactors	80	83	97	97	95
<b>Total</b>	<b>5,946</b>	<b>5,126</b>	<b>7,759</b>	<b>5,962</b>	<b>6,055</b>

**Inference:**

- Tempo/Jeeps were most frequently used for waste management, with 4,238 vehicles in 2023-24. Compactor vehicles were the second most frequently used vehicles for waste management, with 1,581 in 2023-24.
- In 2019-20, 5,946 total vehicles were available for waste management and 6,650 MT of waste was generated. In 2023-24, the number of vehicles increased to 6,055, while the amount of waste generated decreased to 6,300 MT.
- This suggests that even though the number of transportation vehicles has increased by 1.83%, there has been a decrease in waste generated by 5.26% from 2019-20 to 2023-24. This shows that the increase in vehicles is not compensating for a better collection of waste nor impact on complaints

<sup>27</sup> Waste recovered refers to amount of waste that is recovered to be used again for a productive purpose. Compost and waste to energy are examples of waste recovery.

<sup>28</sup> BMC Environment Status Report 2019-20 to 2023-24.

## D. Ward Wise Waste Generated and Processed as per RTI Data<sup>29</sup>

• Table 18: Ward wise Garbage Lifted from January 2024 to December 2024

Region	Ward	Population 2024	% Slum Population 2011	Avg. Total Weight (MT)	Average (Per Day MT)	Per Capita Waste Generated (in Kg)	Proportion of wards to total waste
Island City	A	1,94,210	34%	41,658	114	0.59	2%
	B	1,33,616	11%	26,840	73	0.55	1%
	C	1,74,419	0%	40,730	111	0.64	2%
	D	3,64,106	10%	35,475	97	0.27	1%
	E	4,12,833	20%	46,149	126	0.31	2%
	F/N	5,55,328	58%	58,747	160	0.29	2%
	F/S	3,78,913	26%	38,420	105	0.28	2%
	G/N	6,28,812	32%	79,328	217	0.34	3%
	G/S	3,96,524	21%	40,385	110	0.28	2%
Western Suburbs	H/E	5,84,934	42%	61,776	169	0.29	3%
	H/W	3,22,869	39%	68,717	188	0.58	3%
	K/E	8,64,834	49%	1,14,550	313	0.36	5%
	K/W	7,85,899	15%	1,12,711	308	0.39	5%
	P/N	9,88,154	54%	1,13,651	310	0.31	5%
	P/S	4,86,544	57%	70,367	192	0.39	3%
	R/C	5,90,102	19%	61,521	168	0.28	3%
	R/N	4,52,808	51%	40,461	110	0.24	2%
	R/S	7,25,585	58%	58,670	160	0.22	2%
Eastern Suburbs	L	9,47,067	54%	1,30,625	357	0.38	5%
	M/E	8,47,865	30%	1,42,411	389	0.46	6%
	M/W	4,32,365	53%	82,838	226	0.52	3%
	N	6,53,810	62%	69,830	191	0.29	3%
	S	7,80,751	72%	98,144	268	0.34	4%
	T	3,58,434	33%	59,094	161	0.45	2%
	Other			7,44,321	2,033		
	<b>Total</b>	<b>1,30,60,782</b>	<b>42%</b>	<b>24,37,420</b>	<b>6,656</b>	<b>0.51</b>	<b>100%</b>

MT - Metric tonnes; Population 2024 taken from Environment Status report 2023-24

### Inference:

- In 2024, the Island City region had a relatively low per capita waste generation compared to the Western Suburbs and Eastern Suburbs, with the Island City contributing 17% of the total waste, while the Western Suburbs and Eastern Suburbs accounted for 29% and 24%, respectively.
- In 2024, Average 24,37,420 MT of waste was collected from all 24 BMC wards and the average per day waste collected was 6,656 MT.
- Highest average per capita waste generates in ward C (0.64 Kg), A (0.59 Kg) and H/W Ward (0.58 kg) from the all 24 wards.
- K/E, K/W, P/N, and L wards each contribute 5% of the total waste, making them the top four individual contributors by proportion.
- The information for garbage collected by BMC should also include garbage segregated at source, which can help BMC to understand and formulate targeted reforms to achieve effective waste management.

<sup>29</sup> As per RTI Response.

**Bulk Waste Generators (BWG)** produce a large amount of waste, which can have a significant impact on the environment if not managed properly. By identifying and regulating these generators, cities can ensure that the waste is disposed of in an environmentally responsible manner. Realising the importance of BWGs in management of solid waste, Government of India revamped the Municipal Solid Waste (Management and Handling) Rules 2000 and notified the Solid Waste Management Rules, 2016 on April 8, 2016<sup>30</sup>. The Rules mandate for effective waste management by bulk waste generators at source. Further, they lay emphasis on the duties and responsibilities of waste generators including bulk waste generators with timeframe for implementation and monitoring by the Government/ ULB.

However, despite effective guidelines laid down by MoHUA for the implementation of the guidelines and required modifications in the local government's SWM bye-laws, BMC bye-laws were not revised to include these necessary provisions to monitor the waste processing for BWGs. In 2017, the BMC passed a circular (annexure:1) stating that all bulk generators i.e., units generating more than 100kg per day of waste will compulsorily set up biodegradable waste composting units and such waste will not be collected from bulk generators. However, the circular has not been effective in the management of BWG waste as seen in the data below.

■ **Table 19: Ward wise BWG Societies from January 2024 to December 2024**

Ward	No. of Buildings Generating >100 Kg Waste	No. of Buildings Treating Waste On-site	No. of Non-Compliances (Untreated Waste)	% of No. of Non-Compliances	Waste Generation MT/Per day	
					Wet Waste	Dry Waste
A	208	NP	NP	-	NP	NP
B	NP	NP	NP	-	NP	NP
C	43	NP	NP	-	NP	NP
D	85	NP	NP	-	NP	NP
E	38	24	14	37%	8.85	1.08
F/N	39	39	NP	-	11.9	4.56
F/S	59	37	22	37%	6.42	0.71
G/N	49	25	24	49%	16.89	4.22
G/S	151	NP	NP	-	NP	NP
H/E	89	NP	NP	-	NP	NP
H/W	NP	NP	NP	-	NP	NP
K/E	154	84	70	45%	42.45	11.64
K/W	565	79	486	86%	68.89	9.04
L	87	80	7	8%	10.34	2.6
M/E	NP	NP	NP	-	NP	NP
M/W	81	55	26	32%	NP	NP
N	156	NP	NP	-	30	5
P/N	315	35	280	89%	NP	NP
P/S	146	NP	NP	-	NP	NP
R/C	143	NP	NP	-	NP	NP
R/N	53	NP	NP	-	NP	NP
R/S	NP	NP	NP	-	NP	NP
S	103	68	35	34%	25.76	3.17
T	63	57	6	10%	12.76	3.44
<b>Total</b>	<b>2,627</b>	<b>583</b>	<b>970</b>	<b>64%</b>	<b>234.26</b>	<b>45.46</b>

NP: Data Not Provided/Maintained in the RTI response

<sup>30</sup> [https://smartnet.niua.org/sites/default/files/resources/bulk\\_waste\\_generator\\_book.pdf](https://smartnet.niua.org/sites/default/files/resources/bulk_waste_generator_book.pdf)

#### **Inference:**

- Maintaining BWG data is essential for monitoring compliance, planning waste management infrastructure, and ensuring buildings treat waste responsibly. It helps identify gaps, track non-compliances, and support informed decision-making at the ward level.
- As of December 2024, only 10 out of 24 wards have maintained comprehensive BWG data, covering the number of buildings under BWG, those treating waste on-site, and recorded non-compliances.
- In 2024, total number of BWG societies was 2,627, and in that data who is provide all the information about waste process and non-compliance out of which 583 societies were processing waste, and the remaining 970 societies were not processing waste. Out of total waste generated by BWG societies, 64% was not being processed.
- Wards P/N, K/W and G/N had the highest percentages of non-processing BWG societies with 89%, 86%, and 49% respectively.
- Out of the total wet waste generated by societies, only 38% was processed, which suggests a significant gap in waste management practices and highlights the need for stringent strategies to improve waste processing and management in these societies.

## E. Status of Landfills under BMC<sup>31</sup>

As of 2024, there are three landfill/dumping sites under the jurisdiction of BMC. They are Kanjurmarg Landfill Site, Deonar Dumping Ground, and Mulund Dumping Ground. Presently, waste generated within BMC is sent to the former two sites, while Mulund Dumping Ground has been closed and the process of bio-mining is being carried out. The predominant method of waste disposal followed until lately was the dumping and levelling of waste. With the inclusion of the bioreactor technology for generation of landfill gas and composting technology at Kanjurmarg since 2015, scientific treatment of waste has improved from 75% in 2019-20 to 88% in 2023-24.

Since Mulund (2018) and Gorai (2009) dumping grounds have been closed and Deonar is long due closure, it is important to focus on decentralised waste management practices that will reduce the waste going to a centralised landfill or dumping ground. This will be more sustainable since dumping grounds produce leachate that causes soil and marine pollution and emits methane into the atmosphere. Burning waste in dumping grounds to reduce the volume of waste is also a major cause of air pollution in the surrounding areas. This section aims to understand the method of waste processing carried out in each of these sites with the data received via an RTI.

### • Table 20: Disposal of Municipal Solid Waste in Mumbai<sup>32</sup>

Name	Year s of oper ation	Area (Ha)	Type of Waste Processing	Amount of waste disposed (MTD) <sup>33</sup>					Current Status
				2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	
Deonar	88	120	Dumping	1,200- 1,700	500- 700	500- 700	500- 700	500- 700	Operatio nal
Kanjurmarg	11	111.41	Bioreactor technology (3000-3500 MTD) and windrow composting technology (1000 MTD)	4,500- 5,500	4,500- 5500	4,500- 5,500	4500- 5500	4500- 5500	Operatio nal
Mulund	47	24	Dumping	Closed	Closed	Closed	Closed	Closed	Closed

- Deonar continues to operate using traditional dumping methods, disposing of 500–700 MTD of waste in recent years, reduced from earlier levels (1,200–1,700 MTD), likely due to diversion to other sites.
- Kanjurmarg is the primary active processing site, handling the largest volume (4,500–5,500 MTD) using modern bioreactor and composting technologies, reflecting a shift toward sustainable waste management. The adoption of bioreactor and composting technologies at Kanjurmarg reflects a move towards more sustainable waste treatment practices.
- Mulund landfill has been closed since 2018-19, indicating efforts to phase out older dumping grounds and reduce environmental impact.

<sup>31</sup> As per the RTI response.

<sup>32</sup> BMC Environment Status Reports 2019-20 to 2023-24.

<sup>33</sup> Approximate values given in the BMC Environment Status Report.

## 1. Deonar Dumping Ground

• **Table 21: Ward wise Garbage Sent to Deonar Dumping Ground from 2020 to 2024 (in MT)**

Ward	2020	2021	2022	2023	2024	Average Per day (2024)
A	14,063	16,325	12,216	15,733	12,458	34
B	7,547	7,498	6,505	5,231	6,061	17
C	7,816	7,537	5,276	4,792	3,782	10
D	13,159	15,197	14,329	13,472	8,353	23
E	21,462	22,619	20,047	21,799	15,230	42
F/N	26,852	21,757	19,280	19,931	14,590	40
F/S	16,304	15,958	11,935	16,574	11,893	33
G/N	30,386	29,675	33,842	65,886	47,569	130
G/S	15,967	15,925	12,834	14,146	9,879	27
H/E	33,496	28,226	34,153	31,891	29,697	81
H/W	15,136	20,091	19,359	26,689	20,175	55
K/E	39,903	31,934	30,540	28,515	26,173	72
K/W	22,468	24,242	30,515	35,406	61,609	169
L	70,833	53,414	42,046	38,294	41,606	114
M/E	1,49,964	1,33,914	1,43,555	1,47,906	1,67,069	458
M/W	53,538	94,502	99,008	84,864	84,827	232
N	17,483	32,524	25,735	21,695	21,909	60
P/N	5,404	5,750	8,186	13,170	4,151	11
P/S	5,310	4,225	4,107	4,310	1,172	3
R/C	3,756	1,864	6,035	5,431	7,373	20
R/N	2,883	1,655	3,246	2,901	3,498	10
R/S	1,847	3,975	13,187	14,366	17,799	49
S	17,806	36,982	29,339	22,893	21,009	58
T	1,635	6,820	5,250	2,646	2,204	6
Other	97,144	65,954	1,23,236	43,760	31,853	87
<b>Grand Total</b>	<b>6,92,162</b>	<b>6,98,563</b>	<b>7,53,761</b>	<b>7,02,302</b>	<b>6,71,937</b>	<b>1,841</b>

### Inference:

- Total waste transported to the Deonar dumping ground decreased from 6.92 lakh metric tonnes (MT) in 2020 to 6.71 lakh MT in 2024, an average per day decreased from 1,896 MT to 1,841 MT.
- Among all the wards, M/E ward transported the highest amount of waste in all five years, with 7,42,408 MT from 2020 to 2024. This could be due to the close proximity of Deonar to M/E Ward.
- Ward R/S had a significant increase of 864% in waste transported from 2020 to 2024, from 1,847 MT to 17,799 MT.
- There are several wards where the waste transported has decreased over the years, such as Ward P/S, which sent 5,310 MT of waste in 2020 to 1,172 MT in 2024, suggesting that the measures implemented to manage waste at the ward level have been successful.

## ▪ Kanjurmarg Landfill

**Bioreactor Landfill Technology (BLFT)** is a waste management technique that enhances the degradation of organic waste in landfills by controlling moisture, temperature, and other environmental conditions to accelerate the microbial decomposition process. Bio-reactor technology is mainly anaerobic technology in principle. In bioreactor technology, leachate is re-circulated to enhance the decomposition of biodegradable material and recover landfill gas generated to generate electricity, which in turn reduces emission of Green House Gases<sup>34</sup>. Bioreactor landfill technology can help to reduce the volume of waste in landfills and enhance the recovery of recyclable materials.

Landfill gas refers to the gas that is produced during the decomposition of organic waste materials at a landfill site. The gas is a mixture of mostly methane and carbon dioxide, with smaller amounts of other gases such as nitrogen, oxygen, and hydrogen.

• **Table 22: MSW received in Bioreactor Landfill (BLF) Technology in Kanjur Landfill from 2020 to 2024**

Year	Type	BLF Cell -3	BLF Cell -4	BLF Cell -5	BLF Cell -6	BLF
		MSW received in MT	MSW received in (MT)	MSW received in (MT)	MSW received in (MT)	Total MSW received in (MT)
2020	Non –CRZ Area	-	11,31,379	2,24,464	-	13,55,842
	CRZ Area	-	1,04,399	17,445	-	1,21,844
	<b>Total</b>	-	<b>12,35,778</b>	<b>2,41,908</b>	-	<b>14,77,686</b>
2021	Non –CRZ Area	-	1,87,749	12,93,699	-	14,81,448
	CRZ Area	59,161	38,350	15,106	-	1,12,617
	<b>Total</b>	<b>59,161</b>	<b>2,26,099</b>	<b>13,08,805</b>	-	<b>15,94,065</b>
2022	Non –CRZ Area	-	-	9,03,864	6,61,876	15,65,740
	CRZ Area	72,559	29,520	5,836	2,400	1,10,315
	<b>Total</b>	<b>72,559</b>	<b>29,520</b>	<b>9,09,700</b>	<b>6,64,277</b>	<b>16,76,056</b>
2023	Non –CRZ Area	-	-	9,11,909	7,65,596	16,77,505
	CRZ Area	-	-	57,259	25,079	82,338
	<b>Total</b>	-	-	<b>9,69,168</b>	<b>7,90,675</b>	<b>17,59,843</b>
2024	Non –CRZ Area	-	-	1,93,068	15,71,176	17,64,244
	CRZ Area	-	-	33,539	33,655	67,224
	<b>Total</b>	-	-	<b>2,26,608</b>	<b>16,04,830</b>	<b>18,31,438</b>

### Inference:

- The total Municipal Solid Waste (MSW) received in non-CRZ (Coastal Regulation Zone) areas increased by 30% from 13,55,842 MT in 2020 to 17,64,244 MT in 2024.
- The waste received at BLF Cell-6 increased a lot, from 6,64,277 MT in 2022 to 16,04,830 MT in 2024. But at BLF Cell-5, it went down from 9,09,700 MT to 2,26,608 MT during the same period.

<sup>34</sup> [https://portal.mcg.gov.in/iri/go/km/docs/documents/Circulars/01101506\\_Kanjur%20bioreactor%20project.pdf](https://portal.mcg.gov.in/iri/go/km/docs/documents/Circulars/01101506_Kanjur%20bioreactor%20project.pdf)

## ▪ Mulund Dumping Ground

### • Table 23: Year wise and Material wise Disposal Quantity on Mulund Dumping Ground from 2020 to 2024

Year	C & D Disposal Quantity	Soil Disposal Quantity	Stone Disposal Quantity	SFC Kind Material	Total Disposal Quantity
2020 (6 Month)	6,635	1,65,409	2,247	0	1,74,291
2021 (9 Month)	146	2,17,140	2,960	238	2,20,484
2022 (10 Month)	0	9,23,111	1,796	15,339	9,40,204
2023 (9 Month)	0	11,69,237	3,094	57,500	12,29,831
2024 (10 Month)	0	14,59,048	3,976	35,056	14,98,080
<b>Total Disposed</b>	<b>6,781</b>	<b>39,33,945</b>	<b>14,073</b>	<b>1,08,092</b>	<b>40,62,891</b>

P.N: In RTI data no information available of bio mining for 6 months in 2020, 3 months in 2021, 2 months in 2022, 3 months 2023 and 2 months in 2024

#### Inference:

- Total quantity of waste disposed in Mulund Dumping Ground from 2020 to 2024 was 40,62,891 MT which includes types of waste such as soil, stone, C&D waste, and SFC kind material.
- Soil disposal has increased from **1,65,409 MT in 2020** to **14,59,048 MT in 2024**. It contributes to 96.83% of the total waste by weight, indicating it is the dominant material.
- The year 2024 has seen a total disposal quantity of 14,98,080 MT which is highest among past five years.

• **Table 24: Status of Bio-Mining process at Mulund Dumping Ground as of December 2024**

<b>Total Legacy Waste</b>	<b>70,00,000 MT</b>
Waste Disposed from Jan 2020 to Dec 2024 (44 out of 60 months)*	40,62,933 MT
Avg. quantity disposed per month (Waste disposed/44 months)	92,339 MT/ Per Month
Avg. Quantity disposed from Oct 2019 to Dec 2019 (3 months)**	2,77,018 MT
<b>Total Waste Disposed from Oct 2019 to Dec 2024 (47 Month)</b>	<b>43,39,951 MT</b>
% of Waste Disposed till Dec 2024	62%
Remaining waste for bio-mining	26,60,049 MT
Target date for completion of bio mining	27-Jun-25
Month Remaining to meet target date for completion of bio mining	6 Months
<b>Quantity to treat per month for achieved target date of bio-mining</b>	<b>4,43,341 MT/ Per Month</b>
<b>Estimated months to dispose remaining legacy waste from December 2024 based on the current rate of disposal</b>	<b>29 Months</b>

\* In RTI data no information available of bio mining for 6 months in 2020, 3 months in 2021, 2 months in 2022, 3 months 2023 and 2 months in 2024.

\*\* According to SWM annual report (Form IV – MPCB) bio-mining work commenced in October 2019

**Inference:**

- The total waste disposed of from October 2019 to December 2024 is 43,39,951 MT out of 70,00,000 MT which is only 62% of **total legacy waste** (70,00,000 MT).
- It took 47 months to dispose of this waste, with an average quantity of 92,339 MT/month.
- The remaining waste for bio-mining at the Mulund dumping ground is 26,60,049 MT, and the target date for the completion of bio-mining is June 2025, which is 6 months from Dec 2024. To meet the **target date, 4,43,341 MT of waste needs to be treated per month.**
- To meet the target date of June 2025 for the completion of bio-mining at the Mulund dumping ground, the BMC needs to increase the monthly disposal rate by five times to achieve the goal on time which is **impractical** without drastic operational changes or capacity enhancements.

## F. Status of Complaints Registered and Resolution<sup>35</sup>

• **Table 25: Solid Waste Management Related Civic Complaints from 2020 to 2024**

Complaints Type	2020				2024				Complaints Registered from 2020 to 2024 (%)
	Complaints	Closed	Closed %	Avg Days*	Complaints	Closed	Closed %	Avg Days*	
Collection point not attended properly	684	634	93%	45	576	549	95%	17	-16%
Garbage lorry not reported for service/ Lorry not covered	326	291	89%	57	693	618	89%	20	113%
Garbage not lifted from House/ Gully	1,928	1,723	89%	40	2,000	1,874	94%	19	4%
Garbage not lifted from municipal market	39	33	85%	38	39	36	92%	22	0%
Garbage not lifted from road/ authorised collection point	1,976	1,761	89%	44	10,205	9,864	97%	11	416%
Lifting of Tree Cutting	1,590	1,513	95%	25	1,329	1,304	98%	17	-16%
Non-attendance of nuisance Detector	1,168	1,067	91%	52	1,203	1,113	93%	18	3%
Providing/ removing/ replacing dustbins	440	396	90%	43	641	610	95%	17	46%
Removal of dead animals	1,164	1,034	89%	54	661	638	97%	13	-43%
Removal of Debris	1,393	1,251	90%	44	4,560	4,427	97%	8	227%
Silt to be lifted from road	320	289	90%	47	942	742	79%	17	194%
Sweeping of roads	564	497	88%	48	1,841	1,765	96%	12	226%
<b>Grand Total</b>	<b>11,592</b>	<b>10,489</b>	<b>90%</b>	<b>43</b>	<b>24,690</b>	<b>23,540</b>	<b>95%</b>	<b>13</b>	<b>113%</b>

\* Average days to resolve a complaint

### Inference:

- While Greater Mumbai scored 97% in Door-to-Door (D2D) collection and was rated ODF+ with 90% toilet cleanliness in Swachh Survekshan 2023, the total number of SWM complaints more than doubled from 11,592 in 2020 to 24,690 in 2024, reflecting growing public dissatisfaction.
- Despite the increase in complaints, the closure rate improved from 90% in 2020 to 95% in 2024, suggesting better responsiveness and efficiency in grievance redressal mechanisms.
- Garbage not lifted from road/authorised collection point saw an increase in complaints, from 1,976 in 2020 to 10,205 in 2024 (an increase of 416%). The closure rate for this category improved from 89% to 97%, and the resolution time was reduced from 44 to 11 days.
- Removal of Debris complaints also saw a significant rise, from 1,393 in 2020 to 4,560 in 2024 (a rise of 227%), with an improvement in closure rates (from 90% to 97%) and a decrease in resolution time (from 44 to 8 days).
- Sweeping of roads complaints grew from 564 in 2020 to 1,841 in 2024, with an improvement in closure rate (from 88% to 96%) and a reduction in resolution time (from 48 days to 12 days).

<sup>35</sup>As per RTI Response.

## G. Municipal Budget Related to SWM Department<sup>36</sup>

• Table 26: SWM Department Revenue Expenditure from 2021-22 to 2025-26 (In Crore)

Solid Waste Management Department	2021-22		2022-23		2023-24		2024-25		2025-26	
	Budget Estimate	% Share	Budget Estimate	% Share	Budget Estimate	% Share	Budget Estimate	% Share	Budget Estimate	% Share
Establishment Expenses	1,516	60%	1,660	61%	1,905	62%	1,938	59%	2,032	56%
Administrative Expenses	17	1%	19	1%	42	1%	29	1%	58	2%
Operation And Maintenance Expenses	850	33%	905	33%	974	32%	1,185	36%	1,345	37%
Programme Expenses	154	6%	154	6%	140	5%	149	5%	156	4%
Revenue Grants, Contribution and Subsidies	0.47	0.02%	1.06	0.03%	1.00	0.03%	1.08	0.03%	12	0.03%
<b>Total SWM Budget</b>	<b>2,537</b>	<b>100%</b>	<b>2,739</b>	<b>100%</b>	<b>3,062</b>	<b>100%</b>	<b>2,739</b>	<b>100%</b>	<b>3,653</b>	<b>100%</b>
<b>Total BMC Budget</b>	<b>20,276</b>		<b>23,294</b>		<b>25,306</b>		<b>28,122</b>		<b>31,205</b>	
<b>% of Budget assign to SWM Dept.</b>	<b>13%</b>		<b>12%</b>		<b>12%</b>		<b>12%</b>		<b>12%</b>	

### Inference:

- The budget estimate for Solid Waste Management Department has increased every year from 2021-22 to 2025-26, with a significant increase of 44% between 2021-22 and 2025-26. However, the **share of the BMC budget allocated to SWM has remained stagnant at 12–13%**.
- Establishment expenses of the department have consistently been the largest share of the budget estimate, with decreasing slightly in percentage share from 60% in 2021-22 to 56% in 2025-26.
- Operation and maintenance expenses have increased in percentage share from 33% in 2021-22 to 37% in 2025-26.
- The percentage share of the BMC budget assigned to the Solid Waste Management Department has almost remain same over the Years to 12%.

<sup>36</sup><https://www.mcgm.gov.in/irj/portal/anonymous/qIBudgetapps>

• **Table 27: Budget Estimates under SWM Various Schemes from 2019-20 to 2025-26 (in crores)**

Years	Budget Estimates	Actuals	Percentage Utilised
<b>Zero Garbage Public Awareness Programme</b>			
2019-20	8	6	70%
2020-21	10	8	80%
2021-22	8	6	69%
2022-23	8	7	82%
2023-24	9	6	72%
2024-25	12		
2025-26	13		
<b>Swachh Mumbai Vasti Prabodhan Abhiyan</b>			
2019-20	87	72	83%
2020-21	87	76	87%
2021-22	90	74	82%
2022-23	90	77	86%
2023-24	85	80	94%
2024-25	90		
2025-26	93		
<b>Clean Area Scheme (Cleansing of Roads &amp; Collection of Refuse)</b>			
2019-20	90	47	52%
2020-21	79	43	55%
2021-22	55	40	74%
2022-23	55	41	74%
2023-24	45	41	92%
2024-25	45		
2025-26	48		

**Inferences:**

- The "Mumbai Vasti Prabodhan Abhiyan" has witnessed a rise in budget utilisation from 83% in 2019-20 to 94% in 2023-24.
- The "Clean Area Scheme" has witnessed a rise in budget utilisation from 52% in 2019-20 to 92% in 2023-24. However, in the subsequent years, the program has not been able to achieve its budget estimates, with a low of 52% utilisation in 2019-20. The program has also seen a downwards trend in budget allocation from 90 crores in 2019-20 to 48 crores in 2025-26.

## J. Recommendations

- **Effective Segregation and Processing of Waste at the Source:** There is a need to create awareness among the public about the importance of waste segregation, reuse, and recycling. This can be done through public campaigns, awareness programs, and outreach activities. Encourage the implementation of decentralised waste management systems and waste processing at source to reduce the burden on centralised facilities. This can be achieved through incentives and support from the government.
- **Zero Waste to Landfill:** Promote the circular economy model, where waste is treated as a resource and reused, recycled, or repurposed. Encourage government support for sustainable waste management practices and incentivise businesses and individuals to adopt zero waste practices.
  - **Composting:** Biodegradable waste processing units should be developed in each constituency. Different treatment methods used for waste segregation like Vermi-composting, Organic Composting for Biogas should also be carried out to ensure optimum recycling.

- For decentralised composting, Indore adopted mobile compost machines, for composting waste from markets. Vellore in Karnataka and Alappuzha in Kerala have adopted successful micro composting centres for composting biodegradable waste in every constituency. F/South Mumbai model has also aimed to make the constituency dustbin free through door-to-door collection and segregation and composting of biodegradable waste within the ward, through community involvement.
- **Introducing Bio Gas plants:** Taking the example of Pune Municipal Corporation and the PPP, setting a bio-gas plant for the creation of electricity can help reduce conventional usage. Since a large portion of waste generated in BMC is food waste (73%), a similar practice can be carried out in Mumbai.
- **Monitoring:** The process of monitoring SWM activities should be active to tackle issues. Firstly, there is a need to revise the BMC 2006 bye-laws in accordance to the SWM rules 2016 to ensure the duties of the waste generators and BMC is clearly mandated. In addition, with better implementation and data management of initiatives like ALMs and the SMPA can ensure effective measures to ensure proper waste management at the source. In addition, targeted solutions must be carried out to timely solve complaints received areas. A robust monitoring system can ensure a better ranking for Mumbai as well as amongst cities.
- **Strengthening institutional capacity:** Build the capacity of SWM officials to manage waste effectively by providing them with training and resources. Adequate staff should be hired to ensure that all aspects of the SWM process are covered, including collection, transportation, processing, and disposal. Incentives should be provided to motivate SWM personnel to perform their duties efficiently and effectively
- **Collaboration and partnerships:** Foster collaborations and partnerships among government agencies, NGOs, and private entities to promote sustainable waste management practices. In addition, map innovative learnings from other cities that can help BMC achieve effective waste management.
- **Waste Water Treatment:** Treatment of sewerage generated needs to be 100% and tertiary treatment needs to be done in all the STPs to reduce marine pollution and prevent water and vector-borne diseases.
- **Reuse of Waste Water:** BMC can use the treated wastewater for various purposes such as cleaning roads, watering gardens, traffic islands, road dividers etc. in the city. The corporation can also earn revenue by sale of treated waste water- Nagpur for example treats 90% of its sewerage and sells part of it to National Thermal Power Corporation and Maharashtra State Power Generation Company. Recycling of sewerage should also be incentivised where possible (for example: housing societies, large commercial establishments, industrial establishments) so that treatment of sewerage can be done locally and can reduce the water demand of that unit.
- **Ward-Level Performance Tracking:** Develop and publicly share a ward-level dashboard that displays segregation rates, composting data, and processing performance. This will improve transparency and foster competition and accountability among wards. The lack of ward-wise data in ESRs should be addressed immediately.
- **Climate-Smart Waste Management:** Given the climate crisis, waste management strategies must also contribute to emission reductions. Promote low-carbon waste technologies, introduce electric vehicles for waste transport, and encourage carbon audits for BMC's waste management operations.
- **Capacity Utilisation and Infrastructure Upgrade:** Ensure optimal functioning of existing infrastructure—composting plants, transfer stations, and MRFs. Existing facilities should be evaluated and upgraded with modern technology where needed. Equipment downtime and underutilisation should be tracked and addressed systematically.

## Part 2. Sanitation and Toilet Sewerage System

### A. Key Highlights

Toilets and its sewerage systems are as important as the water supply systems in urban areas since they act as complements for enabling sustainable and healthy cities. All major national policies that focus on SWM, also deal with sanitation. It directly impacts the health-related issues and exposure to human waste causes water borne and sanitation related diseases. Appropriate sanitation facilities are essential for clean & healthy communities and contribute to the social and economic development of country.

Sanitation access remains inadequate. Only one in four public toilets serve women, and toilet-to-population ratios are well below Swachh Bharat Mission norms. Two wards in Mumbai lack over 80% lack water and electricity connections. The absence of water in connections in toilets signifies poor hygiene, cleanliness, and the inability to provide a basic sanitation service to the public.

Over four lakh citizens reside in R/S and K/E wards, which constitute 58% and 49% of total slum populations in the metropolis. But shockingly, 82% of public toilets in R/S and 87% in K/E lack water and electricity connections.

It is outrageous that 60% of the toilet blocks had no electricity, which also poses a safety concern for women at night. In India's largest city, 69% of community toilets lack water connections, while only 31% are connected to piped water connections.

### 1. Status of Greater Mumbai according to Swachh Survekshan 2023

Unclean and unmaintained public and community toilets significantly contribute to environmental degradation. Leakage of untreated sewage from these facilities pollutes water bodies, harming aquatic ecosystems and contaminating drinking water sources. Accumulated waste releases harmful gases like methane and ammonia, contributing to air pollution and climate change. Additionally, unclean toilets are breeding grounds for disease-causing pathogens and vectors, leading to health crises that strain local healthcare systems.

**Swachh Survekshan** is a survey conducted by Swachh Bharat Mission (SBM) Urban where urban localities across India are surveyed with focus on sanitation and waste management in cities. It uses various parameters for ranking cities – service level progress of sanitation and solid waste management (SWM) as submitted by the local governments, direct observation, citizen feedback and various certifications such as Open Defecation Free (ODF) for sanitation and star ratings for SWM.

Mumbai, the financial capital of the country ranked 189 among 446 cities (with more than 1 Lakh Population) in the Swachh Survekshan Survey 2023.

In the ranking for sanitation (open defecation free),<sup>37</sup> that has three parameters ODF, ODF+ and ODF++. Which include various requirements for toilets, toilet facilities and sewerage systems; Mumbai achieved an ODF+ status as of Swachh Survekshan 2023.

<sup>37</sup> <https://www.pcmcindia.gov.in/marathi/swm2019/ODFPlus.pdf>

An ODF city/ward is defined as<sup>38</sup> 'A city/ward can be notified/declared as ODF city/ ODF ward if, at any point of the day, not a single person is found defecating in the open.' Under this definition, necessary conditions that are mandated to be achieved before declaring a city as ODF are:

- All households that have space to construct a toilet, have constructed one.
- All occupants of those households that do not have space to construct a toilet have access to a community toilet within a distance of 500 meters.
- All commercial areas have public toilets within a distance of 1 kilometre.
- The city has a mechanism in place through which fines are imposed on people found defecating in the open.

Under the 'Swachh Certificate for Open Defecation Free Status'<sup>39</sup> banner, Greater Mumbai had been declared 100% Open Defecation Free (ODF) as of 18-08-2018.

### C. Third Party Inspection (TPI) report for Certification of ODF++ to BMC.<sup>40</sup>

#### • Table 28: Summary report of Greater Mumbai in the Swachh Survekshan 2023<sup>41</sup>

ULB Name	Population	% D2D*	% Source Segregation	% Processing	Cleanliness of Water Bodies	Cleanliness of Public Toilet	ODF Status	State Rank	Absolute Rank	National Rank
BMC	> 10L	97%	65%	49%	100%	90%	ODF+	37/44	1112/4447	189/446

\*D2D: Door-to-door waste collection

- Absolute Rank: Overall Ranking of the city across all cities evaluated in India.
- State Rank: Ranking of the city within respective states and among all participating cities with population greater than ten Lakhs
- National Rank: Ranking of the city among all participating cities with a population greater than ten lakhs

#### • Table 29: Toilet Inspection report under ODF category in Swachh Survekshan 2023

Total No. of Toilets Inspected	Clean	Very Clean	Aspirational*	Not Functional**
33	3	20	4	6

\* Aspirational: These will have high-end features such as luxurious bath cubicles, touchless flushing, breast-feeding rooms, and automatic sanitary napkin incinerators.

\*\* Not Functional: Toilet not functional/working, in report use term "No Toilet"

Note: The Sample size of 33 toilets inspected is not segregated into community or public toilet

#### Inference:

- The total number of toilets inspected were only **33 out of which 20 were very clean and 3 were Clean category.**
- Only **0.4% of toilets** were inspected from the total (7,646) public and community toilets block. This is an extremely minuscule number and the inspection coverage of the toilets needs to be widened to reflect the grassroots reality.

#### Final Remark of Inspection Report:

*As of December 31<sup>st</sup> December 2023, Brihanmumbai Municipal Corporation can be declared as **Open Defecation Free+***

<sup>38</sup> <https://smartnet.niua.org/sites/default/files/resources/ODF%20Declaration%20booklet.pdf>

<sup>39</sup> <http://sbmodf.in/?metric=ALL&state=maharashtra&city=greater%20mumbai>

<sup>40</sup> As per an RTI Response.

<sup>41</sup> <https://ss2023.sbmurban.org/#/scorecard>

## D. Status of Public and Community Toilets in Mumbai city <sup>42</sup>

Sanitation facilities are integral to the development of cities for numerous reasons. Firstly, they are paramount for public health, as access to clean toilets reduces the spread of waterborne diseases and lowers healthcare costs. Moreover, they contribute to the overall liveability conditions of cities, enhancing their image and appeal.

In Mumbai, the provision and maintenance of sanitation services, particularly public and community toilets, involve multiple departments. The responsibility is divided among various authorities. Slum Sanitation Programme (SSP) Department and the Maharashtra Housing and Area Development Authority (MHADA) are responsible for community toilets while Solid Waste Management (SWM) Operation Department for public toilets. To gather information on the state of sanitation facilities, Praja initiated the process by filing Right to Information (RTI) requests to these respective departments. The aim was to obtain comprehensive data regarding the construction and maintenance of public and community toilets under their jurisdiction.

The findings from these RTI requests revealed significant challenges and deficiencies in the current system of sanitation facility management in Mumbai. Firstly, it was observed that there is no centralised data available across the city. Each department operates on a ward-level basis, resulting in fragmented data information management. This lack of centralised management of data complicates the allocation of resources and accountability. Moreover, data collection at the ward level showed inconsistencies and gaps. Many wards did not maintain separate records for male and female toilet seats, nor did they adequately account for facilities for specially-abled individuals. Additionally, details on utilities such as electricity, water supply, and sewerage connections were often missing. The absence of information on sewerage connections is particularly concerning as untreated wastewater can have significant environmental implications.

The involvement of multiple agencies further complicates the situation. MHADA, responsible for constructing community toilets, seems to lack accurate data management, as evidenced by the redirection of RTI requests to the SSP department and SSP, which in turn forwarded them to all ward offices. Moreover, MHADA's focus appears to be primarily on construction rather than maintenance, with maintenance responsibilities falling to the Brihanmumbai Municipal Corporation (BMC) after an initial period. This causes lack of accountability on Maharashtra Housing and Development Authority's end.

Establishing a single planning authority with centralised data management is essential to streamline operations, ensure effective budget allocation, and hold the responsible department accountable for sanitation infrastructure construction and maintenance.

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<sup>42</sup> As per an RTI Response

Under the Swachh Bharat Mission Urban Guidelines (2017)<sup>43</sup> for community and public toilets the prescribed norms for the number of toilet seats is as follows:

Type of Toilet Facility	Male Toilet Seat Norm	Female Toilet Seat Norm	Other facilities
Public Toilets	1 seat for 100-400 males	1 seat for 100-200 females	Water tap with drainage arrangements Separate seat for Transgenders Special arrangements for physically challenged
Community Toilets	1 seat for 35 males	1 seat for 25 females	Adequate bathing facilities

However, there are some serious assumptions made regarding the male-female parity under the SBM. The Guidelines state that 'it may be assumed that two-thirds of the number are males and one-third females' and provide for toilet seat guidelines accordingly. However, if we look at the Mumbai census data male to female ratio is almost half- 57% males and 43% females.

The BMC maintains two types of toilets; Public (Pay & Use) toilets and Community toilets. Community toilets are built by the BMC/State Agency in slum areas and generally handed over to a community/slum under a CBO (Community Based Organisation) initiative.

### **Public Toilet (PT) or Pay and Use**

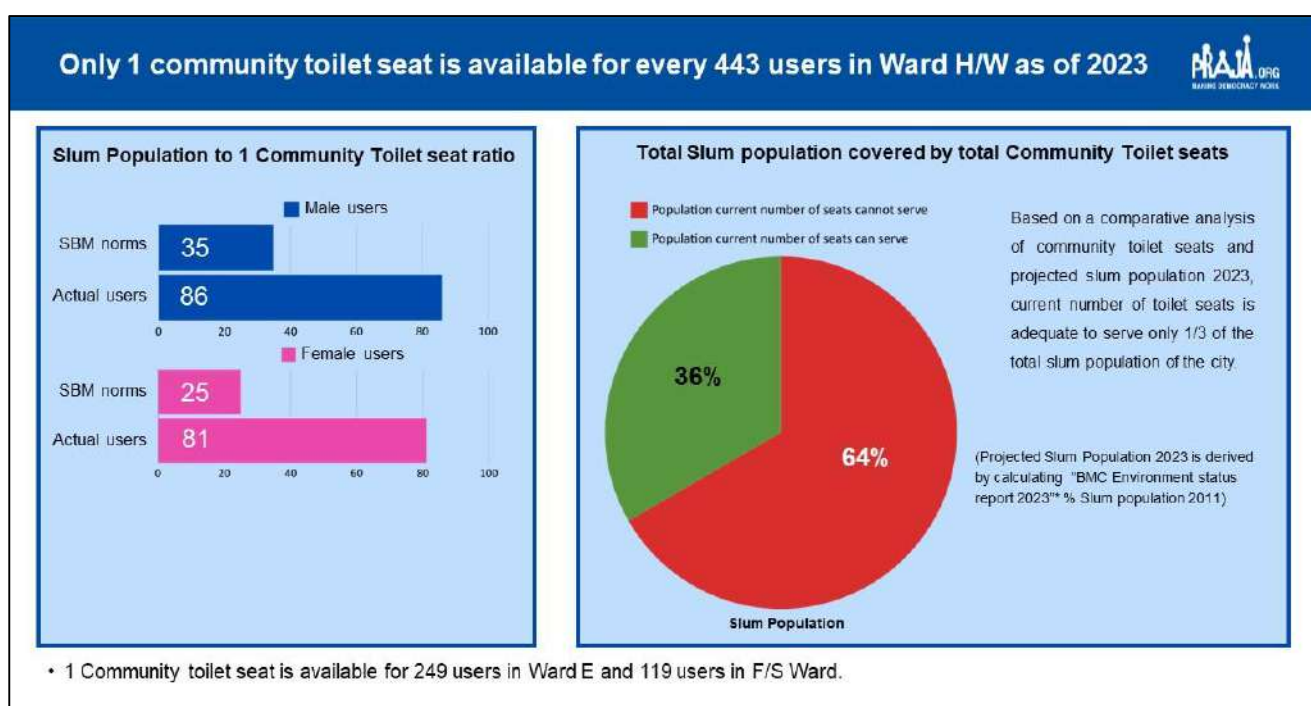
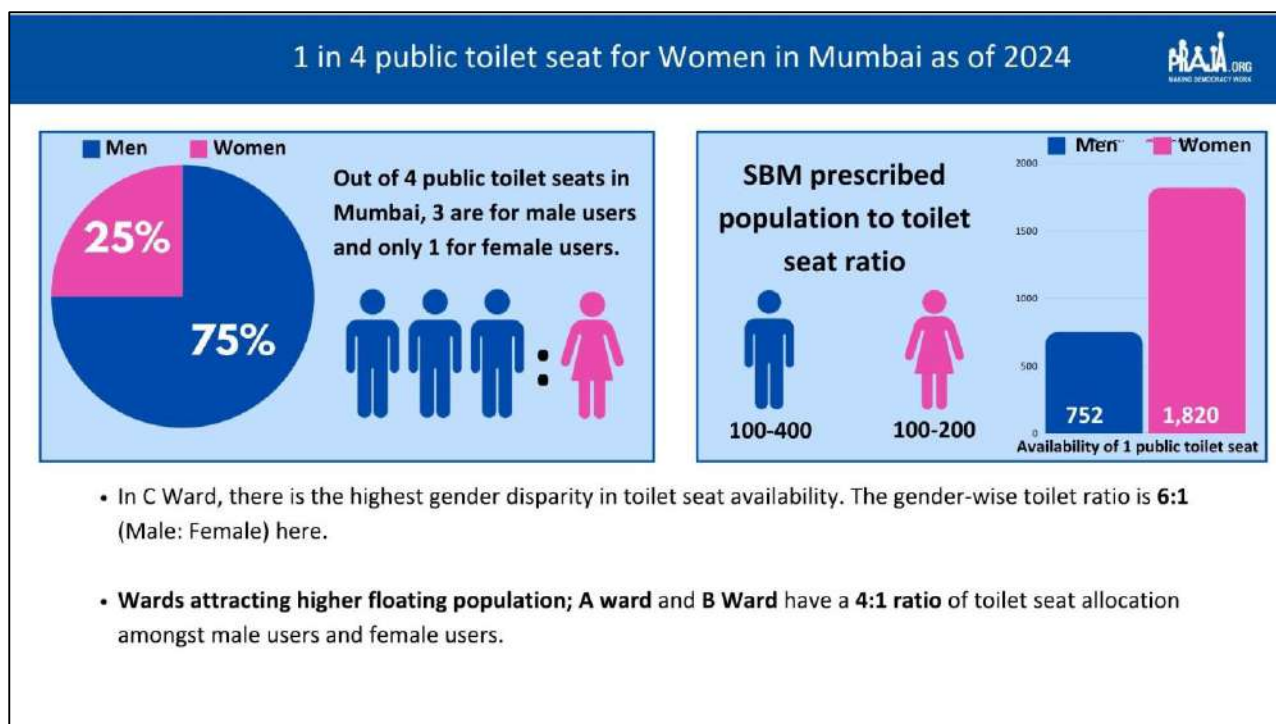
- Public toilets (PT) is a facility provided for the floating population / general public in places such as markets, train stations or other public areas.
- Public Toilets have an official time which may vary city to city. (6 A.M. - 10 P.M.)

### **Community Toilet (CT)**

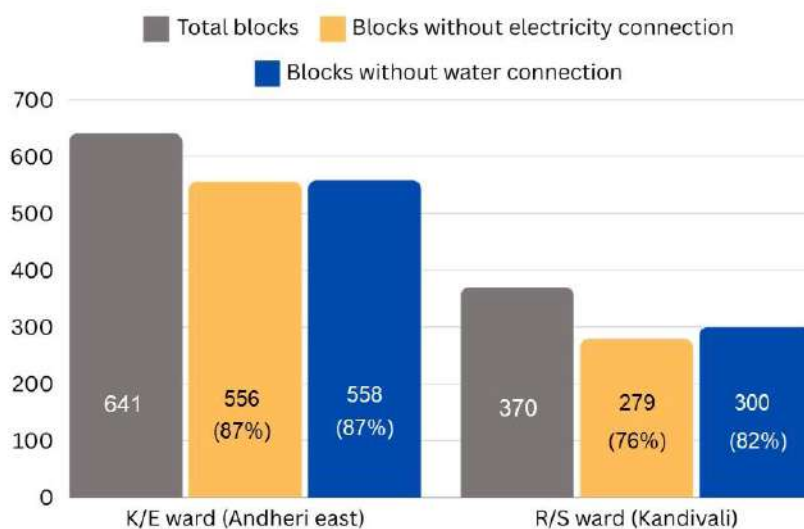
- Community toilets (CT) facility is a shared facility provided for a defined group of residents or an entire settlement / community.
- It is normally located in or near the community area and used by almost community members.

<sup>43</sup> [http://swachhbharaturban.gov.in/writereaddata/SBM\\_GUIDELINE.pdf](http://swachhbharaturban.gov.in/writereaddata/SBM_GUIDELINE.pdf)

## Key Findings:



**Out of total Community Toilet Blocks in Mumbai 69% lack water connection and 60% lack electricity connection.**



For more details on the data received regarding ward-wise facilities, refer to Table No. 8 on Page No. 18 of the white paper.

## a. Public Toilet

• Table 30: Number of Public Toilet Blocks and Seats in Mumbai (2018 to 2024)

Ward/Zone	No of Toilet Blocks 2018	No of Toilet Blocks in each year from 2019 to 2024	Total Seats		% of Change in Seats from 2018 to 2024
			2018	2024	
A	39	39	568	609	7%
B	42	43	487	487	0%
C	34	32	420	416	-1%
D	35	35	423	423	0%
E	45	42	585	558	-5%
F/N	36	39	530	528	0%
F/S	52	48	673	700	4%
G/N	117	115	2,203	2,109	-4%
G/S	33	34	516	504	-2%
H/E	25	27	372	428	15%
H/W	21	20	320	282	-12%
K/E	28	26	357	335	-6%
K/W	33	32	632	447	-29%
L	34	32	406	359	-12%
M/E	46	46	903	903	0%
M/W	31	37	474	584	23%
N	34	29	429	437	2%
P/N	34	28	461	438	-5%
P/S	16	19	247	353	43%
R/C	25	23	357	333	-7%
R/N	27	20	518	341	-34%
R/S	29	26	410	358	-13%
S	33	24	429	218	-49%
T	32	30	405	367	-9%
<b>Total</b>	<b>881</b>	<b>846</b>	<b>13,125</b>	<b>12,517</b>	<b>-5%</b>

### Inferences:

- From 2019 to 2024, public toilet seats remained same, showing that BMC did not add new toilet blocks during this period.
- From 2018 to 2024, the total number of toilet seats decreased by 5% (from 881 to 849), showing an overall decline in public sanitation capacity.
- K/W, R/N, and S wards saw major drops in public toilets by 29%, 34%, and 49% respectively, while H/E, M/W, and P/S showed improvements of 15%, 23%, and 43% respectively.
- Mumbai's population is increasing day by day, but instead of increasing public toilets for the general public, their numbers are actually decreasing. BMC should increase the number of public toilets to provide better sanitation services

• **Table 31: Number of Public Toilet Blocks and Gender-wise Seats in Mumbai as of December 2024**

Ward	Population 2024 <sup>44</sup>	No of Toilet Blocks	Total No. of seats*	No. of Seats			Ratio (Male : Female seats)
				Male	Female	Differently Abled (Handicapped )	
A	1,94,210	39	609	434	141	34	3 : 1
B	1,33,616	43	487	377	92	18	4 : 1
C	1,74,419	32	416	348	54	14	6 : 1
D	3,64,106	35	423	327	79	17	4 : 1
E	4,12,833	42	558	413	100	45	4 : 1
F/N	5,55,328	39	528	381	133	14	3 : 1
F/S	3,78,913	48	700	439	213	48	2 : 1
G/N	6,28,812	115	2,109	1,441	648	20	2 : 1
G/S	3,96,524	34	504	376	109	19	3 : 1
H/E	5,84,934	27	428	285	116	27	2 : 1
H/W	3,22,869	20	282	221	56	5	4 : 1
K/E	8,64,834	26	335	240	95	0	3 : 1
K/W	7,85,899	32	447	321	112	14	3 : 1
L	9,47,067	32	359	287	64	8	4 : 1
M/E	8,47,865	46	903	631	267	5	2 : 1
M/W	4,32,365	37	584	353	207	24	2 : 1
N	6,53,810	29	437	292	87	58	3 : 1
P/N	9,88,154	28	438	306	104	28	3 : 1
P/S	4,86,544	19	353	280	58	15	5 : 1
R/C	5,90,102	23	333	236	92	5	3 : 1
R/N	4,52,808	20	341	236	85	20	3 : 1
R/S	7,25,585	26	358	275	82	1	3 : 1
S	7,80,751	24	218	145	73	0	2 : 1
T	3,58,434	30	367	283	79	5	4 : 1
<b>Total</b>	<b>1,30,60,782</b>	<b>846</b>	<b>12,517</b>	<b>8,927</b>	<b>3,146</b>	<b>444</b>	<b>3 : 1</b>

**Note:** Data considered for Number of Seats: WC and Urinal).

#### Inference:

- In Mumbai, there are three toilet seats allocated for male and only one for female, resulting in a disproportionate distribution as of December 2024.
- C ward exhibits the highest imbalance in toilet seat allocation between genders, with a ratio of six seats for male and only one seat for female.
- Based on the census population figures, there is currently one public toilet seat per 752 males and 1,820 females, while the SBM prescribes one toilet for 100-400 males and 100-200 females respectively.
- Among the 24 wards in Mumbai, 6 wards (B, D, E, H/W, L & T) exhibit a significant gender disparity in toilet seat allocation, with 4 seats designated for male and while only 1 seat for female in C and P/S ward have the male female ratio are 6:1 and 5:1 respectively as of December 2024.

<sup>44</sup> Population data taken from Environment Status Report 2023-24

## b. Community Toilets<sup>45</sup>

• Table 32: Number of Community Toilet Blocks and Gender-wise Seats in Mumbai as of December 2023

Ward	% Slum Population 2011	No of Toilet Blocks	Total No. of seats#	Slum Population (2023) <sup>46</sup> /Toilet seat	Gender wise* toilet seats data available %	No. of Seats		Different Aabled (Handicapped)
						Male	Female	
A	34%	45	665	99	100%	298	367	-
B	11%	0	0	0	0	0	0	0
C	0%	0	0	0	0	0	0	0
D	10%	63	567	64	100%	318	232	17
E	20%	24	331	249	100%	170	145	16
F/N	58%	233	3,158	102	100%	1,740	1,418	0
F/S	26%	62	823	119	100%	484	326	13
G/N	32%	191	3,211	62	98%	1,841	1,370	0
G/S	21%	115	1,759	47	100%	948	811	0
H/E	42%	353	4,675	52	99%	2,622	2,051	0
H/W	39%	16	283	443	100%	141	127	15
K/E	49%	641	5,638	75	76%	2,206	1,907	0
K/W	15%	255	3,003	39	100%	1,541	1,454	8
L	54%	802	7,761	66	26%	1,545	1,211	0
M/E	30%	445	9,157	28	98%	4,619	4,161	377
M/W	53%	223	3,294	69	97%	1,770	1,524	-
N	62%	342	5,474	74	69%	2,089	1,935	0
P/N	54%	708	9,287	57	0%	-	-	-
P/S	57%	372	3,095	89	77%	1,665	1,430	0
R/C	19%	179	1,728	65	100%	695	598	25
R/N	51%	339	3,569	64	84%	1,572	1,397	0
R/S	58%	370	4,703	34	69%	1,799	1,452	0
S	72%	857	8,323	67	98%	4,417	3,900	6
T	33%	165	1,903	62	100%	885	854	4
<b>Total</b>	<b>42%</b>	<b>6,800</b>	<b>82,407</b>	<b>64</b>	<b>72%</b>	<b>33,365</b>	<b>28,670</b>	<b>481</b>

**Note:** As per SBM Norms one seat for 35 males and 1 seat for 25 females respectively but the census does not have ward wise gender bifurcated slum population.

(-) Data Not provided, (#) Data considered for Number of Seats: WC seats.

\*In response to the RTI received for 2023, it only showed the total number of community toilet seats, but gender-wise bifurcation is missing in some toilet blocks (i.e. 28% data not maintained as of 2023).

### Inference:

- F/N ward with 58% slum population, have 233 toilet blocks with 3,158 seats as of December 2023.
- As per the projected slum population for 2023, H/W (Khar) ward had one toilet seat for every 443 residents followed by Ward E (Byculla) had 249 and ward F/S (Parel) with one seat per 119 residents.
- Based on the census slum population of 2011 figures, there is currently one toilet seat per 86 males and 81 females, while the SBM prescribes 1 toilet for 35 males and 25 females respectively.
- Among the 21 wards providing gender-wise toilet seat data of community toilet, one ward allocates two seats for male and three for female, five ward allocate three seats for male and two for female while the remaining 15 wards maintain an equal distribution of toilet seats between genders as of December 2023.

<sup>45</sup> Data collect through RTI from all 24 wards.

<sup>46</sup> Projected Slum Population 2023 is derived by calculating "BMC Environment status report 2023" \* % Slum population 2011.

• **Table 33: Status of Facilities in Community Toilets in Mumbai as of December 2023 (in %)**

Ward	% Slum Population 2011	No of Toilet Blocks	Number of Block Where facility data provide	Electricity Connection		Water Connection		Sewer Connection (Yes)
				Yes	No	Yes	No	
A	34%	45	93%	71%	29%	71%	29%	-
B	11%	0	0	0%	0%	0%	0%	0
C	0%	0	0	0	0	0	0	0
D	10%	63	100%	95%	5%	70%	30%	100%
E	20%	24	100%	100%	0%	100%	0%	100%
F/N	58%	233	100%	28%	72%	27%	73%	100%
F/S	26%	62	100%	100%	0%	100%	0%	100%
G/N	32%	191	99%	56%	44%	33%	67%	-
G/S	21%	115	100%	74%	26%	80%	20%	100%
H/E	42%	353	99%	48%	52%	25%	75%	85%
H/W	39%	16	100%	100%	0%	100%	0%	100%
K/E	49%	641	100%	13%	87%	13%	87%	-
K/W	15%	255	92%	60%	40%	22%	78%	99%
L	54%	802	100%	39%	61%	32%	68%	-
M/E	30%	445	100%	65%	35%	65%	35%	-
M/W	53%	223	100%	24%	76%	23%	77%	-
N	62%	342	100%	34%	66%	35%	65%	-
P/N	54%	708	100%	32%	68%	21%	79%	-
P/S	57%	372	100%	35%	65%	16%	84%	-
R/C	19%	179	100%	25%	75%	31%	69%	100%
R/N	51%	339	89%	46%	54%	26%	74%	-
R/S	58%	370	100%	24%	76%	18%	82%	-
S	72%	857	100%	47%	53%	36%	64%	100%
T	33%	165	98%	40%	60%	38%	62%	99%
<b>Total</b>	<b>42%</b>	<b>6,800</b>	<b>99%</b>	<b>40%</b>	<b>60%</b>	<b>31%</b>	<b>69%</b>	<b>97%</b>

**Note:** (–) Data Not provided

#### Inference:

- 60% of the toilet blocks had no electricity - this is a safety concern rendering the community toilet unusable at night.
- In Mumbai, 69% of community toilets lack water connections, while only 31% are connected to piped water connections. The absence of water in connections in toilets signifies poor hygiene, cleanliness, and the inability to provide a basic sanitation service to the public. Water is particularly crucial in cases where toilet facilities also serve as a source of non-potable water.
- K/E ward stands out as the most problematic, with 87% of toilet blocks lacking both water and electricity connections. R/S ward faces challenges with 76% of toilet blocks lacking electricity and 82% lacking water connections.
- At some ward levels, facility data regarding sewerage connections is not maintained up to date. Maintaining accurate sewer connection data is important for effective urban planning, ensuring proper sanitation, and preventing public health issues.

## E. Human Resources for SWM & Sanitation Department<sup>47</sup>

• **Table 34: Designation-wise Human Resources in SWM & Sanitation Department as of December 2024**

Designation	2024			
	S	A	V	Vacant %
<b>Engineer Post</b>				
Chief Engineer (SWM Account)	1	1	0	0%
Chief Engineer (SWM Project)	1	0	1	100%
Deputy Chief Engineer	5	3	2	40%
Assistant Engineer	67	63	4	6%
Executive Engineer	22	13	9	41%
Junior Engineer	36	19	17	47%
<b>Total Engineer</b>	<b>132</b>	<b>99</b>	<b>33</b>	<b>25%</b>
<b>Administrator Post</b>				
Asst. Executive Director	37	9	28	76%
Asst. Chief Supervisor	30	23	7	23%
Deputy Chief Supervisor	8	1	7	88%
Asst. Chief Staff Officer	2	1	1	50%
Deputy Special Duty Officer	1	0	1	100%
Administrative Officer	41	36	5	12%
Clerk	270	164	106	39%
Overseer	65	52	13	20%
Nuisance Detector	103	2	101	98%
Report Bearer	47	17	30	64%
Other Administrative	10,310	9452	858	8%
Technical/Electrician/ Mechanical	229	112	117	51%
<b>Total Admin.</b>	<b>11,143</b>	<b>9,869</b>	<b>1,274</b>	<b>11%</b>
<b>Other/Labour Post</b>				
<b>Other Labour</b>	<b>24,197</b>	<b>19,515</b>	<b>4,682</b>	<b>19%</b>
<b>Total SWM Dept</b>	<b>35,472</b>	<b>29,483</b>	<b>5,989</b>	<b>17%</b>

S- Sanction, A – Available and V – Vacant

### Inferences:

- High vacancy in Junior Engineer as 47% and 100% vacancy of Chief Engineer (SWM Project) as of December 2024.
- The Assistant Executive Director position vacancy is 76% as of Dec 2024.
- As of 2024, the deputy chief supervisor position has a 88% vacancy rate, while the clerk, Assistance Chief Supervisor and technical/electrician/mechanical positions have vacancy rates of 39%, 23%, and 51%, respectively.
- The nuisance detector position, has a high vacancy rate of 98%. BMC's bye-laws of 2006 describe the importance of nuisance detector in maintained of cleanliness in the city, however, the lack of human resources shows major need for improvement.

<sup>47</sup>As per RTI Response.

## F. Sanitation related Budget, Citizens Complaints & Human Resources<sup>48</sup>

- Table 35: Budget Estimates and Actual Expenditure of Solid Waste management (SWM & Sanitation) in Crores

SWM, SSP and T*		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Budget Estimate	RE	2,709	2,746	2,896	3,147	3,522	3,771	4,126
	CE	562	925	1,154	1,835	1,677	1,605	1,938
	Total	3,270	3,671	4,050	4,983	5,199	5,376	6,065
Revised Estimate	RE	2,608	2,541	2,640	3,047	3,160	3,528	-
	CE	438	450	851	971	1,000	1,462	-
	Total	3,046	2,991	3,490	4,018	4,160	4,990	-
Difference (in %)	RE	-4%	-7%	-9%	-3%	-10%	-6%	-
	CE	-22%	-51%	-26%	-47%	-40%	-9%	-
	Total	-7%	-19%	-14%	-19%	-20%	-7%	-
Actuals	RE	2,363	2,720	2,604	3,081	3,267	-	-
	CE	207	318	643	551	875	-	-
	Total	2,570	3,039	3,247	3,632	4,143	-	-
Percentage Utilised	RE	91%	107%	99%	101%	103%	-	-
	CE	47%	71%	76%	57%	88%	-	-
	Total	84%	102%	93%	90%	100%	-	-

\*Includes Slum Sanitation Program (SSP); RE: Revenue Expenditure, CE: Capital Expenditure

### Inferences:

- The total budget estimates for Solid Waste Management (SWM) and Sanitation have increased by 85% from 3,270 crores in 2019-20 to 6,065 crores in 2025-26. Despite higher allocation, we find glaring gaps in terms of gender disparity and facilities in toilets.
- There has been a constant decrease in both revenue and capital expenditure from budget to revised estimates in the last six years.
- The total utilisation percentage has Increased from 84% in 2019-20 to 100% in 2023-24.

<sup>48</sup> As per an RTI Response

• **Table 36: Toilet related complaints registered in CCRS for the year 2020 & 2024**

Complaints Type	2020				2024				Complaints Registered from 2020 to 2024 (%)
	Complaints	Closed	Closed %	Avg Days*	Complaints	Closed	Closed %	Avg Days*	
Cleaning/ Repair of the P.S.C/ W.C Block/ Channels	107	84	79%	49	141	129	91%	34	32%
Non attendance at the Public Toilet/ urinals	225	198	88%	46	145	121	83%	30	-36%
Providing/ repairing doors, windows of P.S. blocks	59	38	64%	65	47	39	83%	90	-20%
Unhygienic conditions of Toilets/ Public urinals	227	207	91%	52	172	153	89%	23	-24%
<b>Grand Total</b>	<b>618</b>	<b>527</b>	<b>85%</b>	<b>50</b>	<b>544</b>	<b>442</b>	<b>81%</b>	<b>34</b>	<b>-12%</b>

\* Average days to resolve a complaint

**Inference:**

- Despite Greater Mumbai being rated ODF+, with 90% public toilet cleanliness in Swachh Survekshan 2023, CCRS data shows that toilet-related complaints remain persistent, 618 and 544 complaints were registered for unhygienic conditions of toilets and public urinals, in 2020 and 2024 respectively.
- The 12% decline in toilet-related complaints from 2020 to 2024 indicates a possible improvement in facilities or reduced reporting, although the slight drop in resolution rate from 85% to 81% highlights the need for stronger grievance redressal mechanisms.
- Complaints regarding non-attendance at public toilets/urinals fell by 36%, with resolution time reducing from 46 to 30 days, though the closure rate dipped slightly from 88% to 83%.
- Issues related to unhygienic conditions in public toilets reduced by 24%, with faster resolution (from 52 to 23 days), maintaining a high closure rate (91% in 2020 and 89% in 2024).
- Complaints on providing/repairing doors and windows of P.S. blocks decreased by 20%, and while the closure rate improved from 64% to 83%, the average resolution time increased significantly from 65 to 90 days, pointing to persistent challenges in infrastructure repair timelines.

• **Table 37: Comparison of Citizens Complaints, Time take to resolve Complaints, Budget Utilisation and Human Resources**

Department	Civic Complaints*			Average days to resolve a complaint			Budget Utilisation			Human Resources (Vacant Post)		
	2022	2023	2024	2022	2023	2024	2021-22	2022-23	2023-24	2022	2023	2024
SWM	12,351	24,690	25,031	28	15	22	93%	90%	100%	14%	14%	17%
Toilet	531	544	505	30	25	34						

**Inferences:**

- Complaints registered under CCRS have increased to 25,031 in 2024 from 12,351 in 2022 while 505 complaints were for issues related to toilets in 2024.
- At the same time utilisation of budgeted funds has Increased from 93% in 2021-22 to 100% in 2023-24.
- SWM and Toilets department still have a vacancy of 17% human resources in 2024.

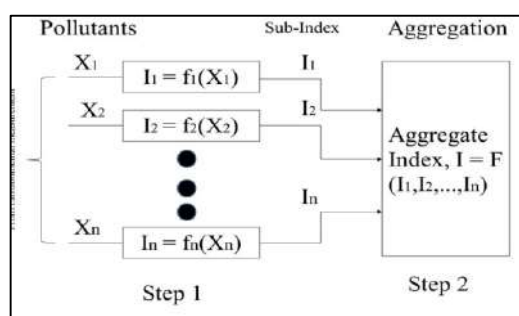
## Section III. Air Quality Index (AQI)

### A. Key Highlights

Mumbai saw improved air quality in 2024, with 97 “Good” and 108 “Satisfactory” days. However, improvements were uneven, with areas like two wards M/E and M/W still reporting “Poor” air days. Non-functional monitoring stations (e.g., Bandra, and Malad) for over 250 days undermined data accuracy and hindered response planning. Average Air Quality Index improved by 10% (from 97 in 2020 to 87 in 2024), yet air pollution complaints rose by 203% during the same period.

### B. Measuring AQI

An Air Quality Index (AQI) is defined as an overall scheme that transforms weighted values of individual air pollution related parameters (SO<sub>2</sub>, CO, visibility, etc.) into a single number or set of numbers. The result is a set of rules (i.e., set of equations) that translate parameter values into a simple form employing numerical manipulation:



*Note: This image has been taken from the ‘National Air Quality Index’ Report released by the Central Pollution Control Board (2014)*

### Air Quality Index Standards, According to the Central Pollution Control Board (CPCB)

Colour	AQI	AQI Range	Remark
	Good	0-50	Minimal Impact
	Satisfactory	51-100	May cause minor breathing discomfort in sensitive people
	Moderate	101-200	May make breathing difficult for people with lung diseases and cause discomfort in children, older adults and heart patients
	Poor	201-300	May make breathing difficult after prolonged exposure, and cause discomfort to people with heart diseases
	Very Poor	301-400	May cause respiratory illnesses in people on prolonged exposure. The effect may be more pronounced in those with lung and heart diseases.
	Severe	>400	May cause respiratory problems even in healthy people, and seriously affect those with lung/heart diseases. Even increased breathing during light physical activity can affect health.

## C. AQI Status in Mumbai

• Table 38: Average Month-wise AQI from January 2020 to December 2024<sup>49</sup>

Month	Average AQI				
	2020	2021	2022	2023	2024
January	151	187	173	186	114
February	160	154	160	180	119
March	107	161	160	140	97
April	64	103	115	99	97
May	55	78	128	70	77
June	34	59	51	65	51
July	30	54	58	66	42
August	33	51	63	51	40
September	60	50	46	54	44
October	94	95	91	144	77
November	145	135	162	131	140
December	160	158	191	141	143

### Inference:

- Overall air quality improved significantly in 2024, with most months recording the lowest AQI in five years—especially January (114) and February (119), which are typically high-pollution months.
- April to August consistently showed better air quality across all years, aided by favourable weather conditions like wind and rainfall.
- Peak pollution months (November and December) remain a concern, with high AQI values persisting in 2024 (140 and 143 respectively), although slightly improved compared to 2022.
- March showed a marked improvement in 2024 (AQI 97) after being consistently high in 2021 and 2022 (above 160), indicating a positive shift in pre-summer air quality.
- The five-year trend indicates a gradual reduction in extreme AQI levels, suggesting the effectiveness of pollution control measures and increased public/environmental awareness.

<sup>49</sup>All AQI data has been obtained from: <http://cpcb.nic.in/>, after approval from the Central Pollution Control Board (CPCB) through an RTI application.

• **Table 39: Ward wise Average Number of Days with Air Quality Level for the Year 2024**

Region	Ward	Good	Satisfactory	Moderate	Poor	Very Poor	Severe	NA <sup>50</sup>
Island City	A	108	142	110	5	0	0	1
	E	143	88	134	0	0	0	1
	F/N	80	111	162	8	2	0	3
	F/S	138	88	117	3	0	1	19
	G/S	86	132	142	4	0	0	2
Western Suburbs	H/E	56	135	172	3	0	0	0
	K/E	63	146	147	6	0	0	4
	P/N	140	100	102	5	0	0	19
	R/C	126	140	100	0	0	0	0
	R/S	96	130	137	3	0	0	0
Eastern Suburbs	L	58	150	151	3	0	0	4
	M/E	68	129	127	20	1	0	21
	M/W	120	102	138	3	0	0	3
	N	155	83	113	6	0	0	9
	S	137	110	118	1	0	0	0
	T	84	149	121	6	0	0	6

■ - Data not available or insufficiency for more than 50% of day in a year.

#### Inference:

- In 2024, Eastern Suburbs had the best air quality, Island City showed moderate consistency, while Western Suburbs had more variability and data gaps.
- Wards like H/E and K/E had a higher frequency of moderate air quality days, and M/E showed a concerning number of days with no available data.
- Wards like E and N having mostly good and satisfactory days, but M/E and F/N reported a noticeable presence of poor air quality.

<sup>50</sup>NA – Data not Available/Insufficient data for computing AQI.

• **Table 40: Station wise Number of Days with Air Quality Level for the Year 2024<sup>51</sup>**

Station	Good	Satisfactory	Moderate	Poor	Very Poor	Severe	None	Grand Total
Bandra Kurla Complex, Mumbai - IITM	0	0	0	0	0	0	366	366
Bandra Kurla Complex, Mumbai - MPCB	45	126	166	26	0	0	3	366
Bandra, Mumbai - MPCB	0	0	0	0	0	0	366	366
Borivali East, Mumbai - IITM	76	134	122	1	0	0	33	366
Borivali East, Mumbai - MPCB	163	152	34	0	1	0	16	366
Byculla, Mumbai - BMC	181	101	81	0	0	0	3	366
Chakala-Andheri East, Mumbai - IITM	30	74	71	9	1	0	181	366
Chembur, Mumbai - MPCB	120	102	138	3	0	0	3	366
Chhatrapati Shivaji Intl. Airport (T2), Mumbai - MPCB	69	149	143	2	0	0	3	366
Colaba, Mumbai - MPCB	103	157	93	1	0	0	12	366
Deonar, Mumbai - IITM	88	69	65	17	2	0	125	366
Ghatkopar, Mumbai - BMC	155	83	113	6		0	9	366
Kandivali East, Mumbai - MPCB	80	82	185	5	1	0	13	366
Kandivali West, Mumbai - BMC	185	81	81	7	0	0	12	366
Kherwadi_Bandra East, Mumbai - MPCB	87	114	162	3	0	0	0	366
Khindipada-Bhandup West, Mumbai - IITM	155	115	89	1	0	0	6	366
Kurla, Mumbai - MPCB	58	150	151	3	0	0	4	366
Malad West, Mumbai - IITM	2	14	72	14	1	0	263	366
Mazgaon, Mumbai - IITM	102	62	160	9	0	0	33	366
Mindspace-Malad West, Mumbai - MPCB	149	104	91	3	0	0	19	366
Mulund West, Mumbai - MPCB	84	149	121	6	0	0	6	366
Navy Nagar-Colaba, Mumbai - IITM	103	112	119	16	0	0	16	366
Powai, Mumbai - MPCB	112	114	136	1	0	0	3	366
Sewri, Mumbai - BMC	138	88	117	3	0	1	19	366
Shivaji Nagar, Mumbai - BMC	44	105	102	8	1	0	106	366
Siddharth Nagar-Worli, Mumbai - IITM	45	87	115	14	1	0	104	366
Sion, Mumbai - MPCB	80	111	162	8	2	0	3	366
Vile Parle West, Mumbai - MPCB	66	144	136	8	0	0	12	366
Worli, Mumbai - MPCB	86	135	117	4	0	0	24	366
<b>Average</b>	<b>97</b>	<b>108</b>	<b>116</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>63</b>	<b>366</b>

■ - Data not available or insufficiency for more than 50% of day in a year.

<sup>51</sup>All AQI data has been obtained from: <http://cpcb.nic.in/>, after approval from the Central Pollution Control Board (CPCB) through an RTI application.

#### Inference:

- In 2024, most stations had moderate air quality on average, with good and satisfactory air quality recorded on 97 and 108 days, respectively.
- Several stations, like Bandra, Mumbai – IITM, Bandra, Mumbai - MPCB (100% each) and Malad West, Mumbai – IITM (72%) data not mapping.
- Stations like Bandra Kurla Complex and Deonar, Mumbai reported higher instances of poor air quality.
- On average, air quality was moderate, with good and satisfactory levels seen in a significant portion of the year.

• **Table 41: Compared data of Air Quality Index with Pollution Complaints from 2020 to 2024**

Pollution Sub-Issues	2020	2021	2022	2023	2024	% Change from 2020 to 2024
Average Air Quality Index	97	115	125	108	87	-10%
Air Pollution	151	343	219	685	457	203%
Pollution due to Chemical Effluents	-	-	-	9	45	-
Nuisance due to Masala Mills/ Flour Mills	58	67	57	55	62	7%
<b>Total complaints</b>	11	14	16	11	22	100%

#### Inference:

- Air Pollution Complaints saw an increase of 203% from 2020 to 2024, with a significant rise in complaints from 151 in 2020 to 457 in 2024.
- The Average Air Quality Index has decreased by 10% from 2020 to 2024, reflecting a better air quality trend.
- Pollution due to Chemical Effluents emerged in 2023 and increased from 9 complaints in 2023 to 45 complaints in 2024.
- Nuisance from Masala Mills/Flour Mills remained relatively stable, with a slight increase of 7% from 2020 to 2024, indicating a consistent level of complaints.
- Overall, the total number of pollution complaints increased by 100% from 2020 to 2024, highlighting growing concerns about various pollution sources.

## D. Recommendations

- **Uniform Monitoring:** To improve the monitoring of AQI (Air Quality Index), CPCB and SAFAR (System of Air Quality, Weather Forecasting, and Research), which are separate agencies monitoring air quality in cities, should coordinate and calculate a single AQI using uniform stations to measure major pollutants.
- **AQI Stations:** Further, air quality stations need to be established in every administrative ward to correctly measure air quality, pollution is otherwise not reflected in the AQI, as seen from the complaints data. Moreover, all established air quality stations should work at full capacity to ensure the data on air quality is computed accurately.
- **Timely Data Availability:** Ensure real-time AQI data is made publicly accessible and updated frequently to enable timely action by authorities and informed decision-making by citizens.
- **Seasonal Action Plans:** Develop ward-level seasonal action plans—particularly targeting winter months (December–January) when AQI is worst—focusing on reducing vehicular emissions, controlling construction dust, and banning open waste burning.
- **Maintenance of Monitoring Equipment:** Conduct regular maintenance and calibration of air quality monitoring equipment to prevent data gaps, especially at underperforming stations like Bandra MPCB, Ghatkopar BMC, and Sewri BMC.
- **Green Buffers and Urban Forestry:** Promote plantation drives in pollution hotspots and near traffic corridors. Green buffers should be integrated into urban planning policies to improve long-term air quality.
- **Citizen Engagement and Behaviour Change:** Launch sustained public awareness campaigns around AQI, health impacts, and mitigation steps like using public transport, avoiding waste burning, and using masks on high AQI days

## Section IV: Climate Action Plan: Objectives, Goals, and Current Status

### Introduction to Mumbai Climate Action Plan (MCAP) 2022:

The Mumbai Climate Action Plan (MCAP) 2022 is a comprehensive plan published by Brihanmumbai Municipal Corporation (BMC) and Environment and Climate Change Ministry of Maharashtra State Government. Apart from city and state government various stakeholders, including experts, civil society organisations, and citizens contributed to the MCAP. The plan addresses climate change and its impact on the city of Mumbai. Mumbai is vulnerable to extreme weather events such as flooding and heatwaves. The plan sets out a roadmap to reduce greenhouse gas emissions, increase the city's resilience towards changing climate, and promote sustainable development.

MCAP is a key component of the city's efforts to achieve its sustainability goals and build a more resilient and sustainable future. It represents a significant step towards creating a more liveable, prosperous, and environmentally sustainable city for all its residents. The objectives and goals featured in the MCAP align to the Sustainable Development Goals (SDG's) and the Paris Climate Accords, which aim to limit global warming to well below 2°C above pre-industrial levels.

### The key objectives of the Mumbai Climate Action Plan include:

1. **Reducing greenhouse gas emissions:** The plan aims to reduce the city's greenhouse gas emissions by 35% by 2030. This will be achieved through various measures, such as promoting renewable energy, encouraging the use of public transport, and implementing energy-efficient building practices.
2. **Enhancing urban resilience:** The plan aims to enhance the city's resilience to the impacts of climate change, such as flooding and extreme heat. This will be achieved through measures such as improving drainage systems, increasing green cover, and promoting the use of green infrastructure.
3. **Promoting sustainable development:** The plan aims to promote sustainable development in the city by integrating climate considerations into urban planning, promoting sustainable transport, and encouraging the use of green technologies.
4. **Raising awareness:** The plan aims to raise awareness among citizens and stakeholders about the importance of taking action to address climate change and the role that they can play in this effort.

Overall, the MCAP represents a significant step towards building a more sustainable and resilient city that is better equipped to deal with the challenges posed by climate change.

■ **Table 42: Specific MCAP Indicators and its Status in 2024**

Sectors To Improve	Action Plan	Time Frame	Status
Sustainable Waste Management	<b>Designate ward-level waste management units/cells</b> to coordinate the handling of waste from households by ALMs, SMPA CBOs, BWGs, and other agencies.	2023	<p>Although no information is available of ward level unit's, effective open data portal can ensure effective coordination. BMCs website has information on waste processes by ALMs only for 2015 and no latest information on the website.</p> <p>The BMC website previously provided SMPA data on waste collection, processing, and composting in 2019, but it was later removed and no updates have been made since.</p> <p>BWG data has not been maintained centrally, and there is no mention of such data in the Environment Status Reports for 2022–23 and 2023–24.</p>
Sustainable Waste Management	<b>Discourage dependence on landfills and waste-to-energy plants</b> by setting up new centralised waste processing units to reduce water and soil pollution.	2030/2032	Only 46 dry waste processing centers established by BMC. No information on other types waste processing units.
Sustainable Waste Management	<b>Levy on non-compliance</b> of waste segregation at households.	2023	For effective enforcement, BMC bye-laws need to be revised as per SWM rules 2016 for non-compliance of waste segregation at households.
Sustainable Waste Management	<b>Develop a waste dashboard on consolidated ward-level data</b> (daily generation, segregation, waste recycled, % of segregation, location of community collection/ recycling centers/vendors), thereby making information publicly available and increasing accountability.	2024	No information available on BMC's website.
Sustainable Waste Management	<b>Promote decentralised wet waste management</b> by composting through citizen participation, biogas plants in mandis and hotels, and composting in all parks and gardens.	2024	<p>In 2024, only 36% BWG societies are managing waste at household level</p> <p>Only D ward has a Bio-methanation plant at Keshav Rao Khadye Marg with 2 MT capacity.</p>
Sustainable Waste Management	<b>Strengthened enforcement of C&amp;D rules 2016</b> through amendment of building bye-laws to include rules on segregated collection systems, disposal sites, tipping fees, use of waste in roads and landfilling, etc.	2024	For effective enforcement, BMC bye-laws need to be revised as per C&D Rules 2016. As of December 2024, approximately 64% (6.71 lakh MT) of the total waste sent to the Deonar dumping ground consists of C&D (debris) waste.
Sustainable Waste Management	<b>Divert daily waste dumped at the Deonar dumpsite</b> to the Kanjurmarg site and mandate remediation at Deonar after scoping study including NCV, emissions and environmental impacts.	Scoping study (2023), implementation (2025)	An average of 7 lakh MT of waste has been transported to the Deonar dumping ground each year from 2020 to 2024

Sectors To Improve	Action Plan	Time Frame	Status
Urban Flooding and Water Resource Management	<b>Introduce nature-based sewerage treatment solutions</b> at outfalls of selected sewerage zones to treat 25% of the sewerage generated.	2022 -2030	In 2024, the BOD outlet quality of Versova, Ghatkopar and Bhandup STP did not meet the prescribed limit as per the CPCB and MPCB norm <sup>52</sup> . There is no mention of nature-based sewerage treatment methods used.
Urban Flooding and Water Resource Management	<b>Ensure restoration of riparian zone of rivers and other water bodies</b> to reduce pollution.	2022 -2030	The Mithi river is heavily polluted due to untreated sewerage and waste disposal, which is evident from the high levels of BOD (up to 3mg/L) and Faecal Coliform (up to 2,500 MPN/100ml).
Air Quality	<b>Create an online grievance redressal portal</b> for citizens to log complaints.	2022-2023	Air pollution complaints are registered on CCRS. Number of complaints related to air pollution increased by 203% from 2020 to 2024.
Air Quality	<b>Strengthen and ensure timely monitoring of data on air quality</b> and dissemination of information aligned with NCAP; improved co-ordination amongst the relevant departments within BMC for data dissemination and proper operation, <b>maintenance and functioning of the Air Quality Monitoring Stations.</b>	2022 and continue annually	In the year 2024, on average, 17% of daily data was not available or could not be mapped by 29 AQI stations.
Air Quality	<b>Identify the local causes of air pollution</b> and their spatial concentration within a ward.	2022 and continue annually	The H/W, M/W, P/S, R/C and S wards have the highest number of complaints related to air pollution.
Air Quality	<b>Identify the local causes of air pollution</b> and their spatial concentration within a ward. <b>Increase the number of the monitoring stations</b> , such as CAAQMS, equipped with low -cost indigenous sensors and real-time monitoring technology, based on CPCB criterion for site location.	2022 and continue annually 2022- 2027	Bandra Kurla Complex, Deonar, Navy Nagar, Worli, and Malad AQI stations have recorded the highest number of days with poor air quality. The number of AQI monitoring stations has increased by 233% from 2019 to 2024, with the number of stations increasing from 9 in 2019 to 29 in 2024.
Urban Greening and Biodiversity	<b>Increase vegetation cover and permeable surface to 30-40%</b> of the city surface area by 2030 to tackle flood- and heat-related disaster risk.	2024	Number of gardens increased by 26% and tree plantations increased by 220% in Mumbai from 2017-18 to 2023-24.
Urban Greening and Biodiversity	<b>Update tree census</b> parameters to capture carbon sequestration and biodiversity aspect.	2024	Need for updated tree census as the numbers of trees remain same from 2017-18 to 2023-24 as per Environment Status Report (ESR).

<sup>52</sup> BOD (Prescribed limit is 20mg/lit. by CPCB and 10 mg/lit. by MPCB).

## Section V: Centralised Complaint Registration System (CCRS)<sup>53</sup>

### A. Key Highlights

For city governments to function effectively, collaboration and contact with citizens is essential, the most basic of which is a uniform complaint redressal mechanism where people can register complaints with the municipal corporation regarding civic issues in their locality and the city government is accountable to solve the same in a timely and structured manner.

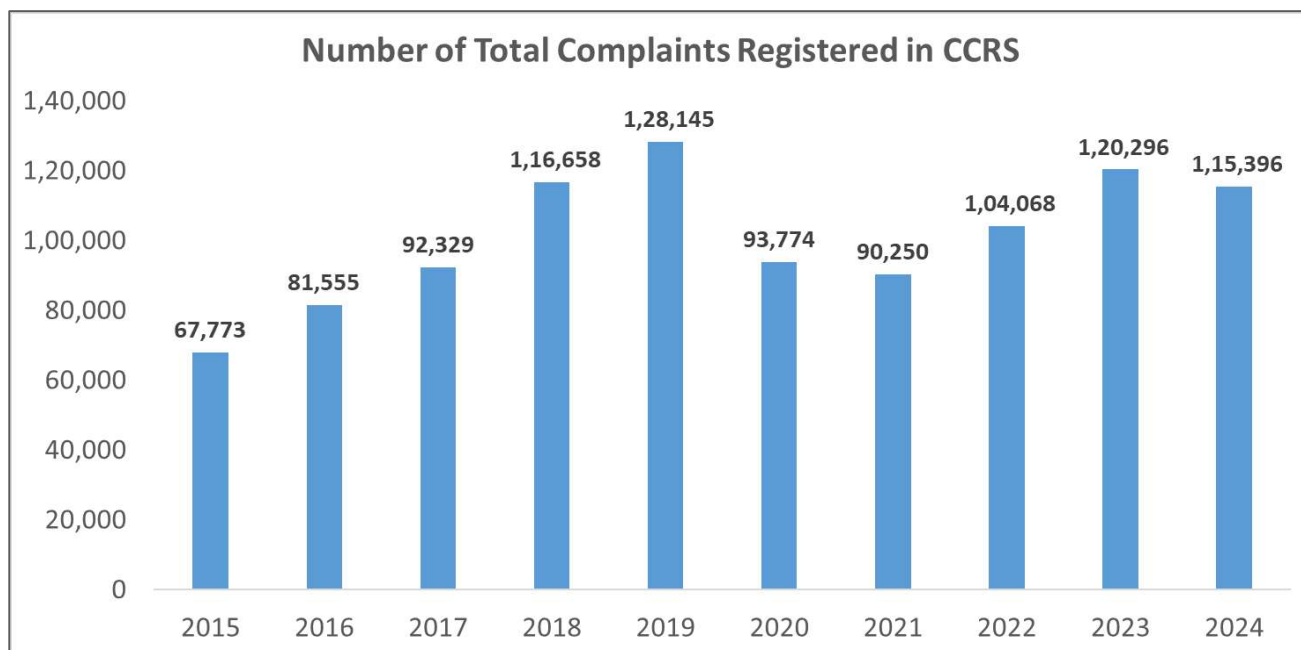
Complaints rose by 70% since 2015 (from 67,773 in 2015 to 1,15,396 in 2024), indicating greater civic engagement. Yet institutional response has weakened: only 77% (88,308) of complaints were resolved in 2024 (down from 86% in 2023). Escalated complaints rarely receive action, and councillor-level accountability is lacking.

Resolution times are long—over 46 and 49 days for water and drainage complaints in 2024. Ward-wise performance varies significantly, revealing inconsistent service quality and the need for a more accountable and responsive system.

### B. Issue Wise Details of Complaints Registered and Closed in the CCRS<sup>54</sup>

The Complaint Management System of BMC provides for a complaint number (1916), MyBMC 24X7 mobile app, an online portal on the BMC website, or a written complaint to the complaint officer in the ward, where complaints can be registered. The complaint is referred to the respective department for taking necessary action and if not solved within the stipulated time, it is escalated to the next level of administration. This is based on the 'Escalation Matrix' which has been adopted by the BMC to address the problem of complaints remaining stuck at the lower level of the civic administration, with no way to enforce accountability. Through this system, the higher administration is mandated to take note of and address complaints if they are not solved within a stipulated time. Once the complaint is solved, the complainant is notified of the same.

● **Figure 5: Overall Complaints Registered in CCRS from 2015 to 2024<sup>55</sup>**



<sup>53</sup>As per an RTI response.

<sup>54&76</sup> The complaints registered data is obtained through RTI from the Central Complaint Registration System (CCRS) of the BMC.

• **Table 43: Issue Wise Overall Complaints from 2015-2024**

Complaints	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	% Changes from 2015 to 2024
Buildings	14,999	16,257	19,267	21,014	20,317	14,712	17,063	16,883	14,572	14,451	-4%
Colony Officer	881	1,954	1,245	1,437	1,196	1,045	1,305	981	1,056	823	-7%
Drainage	9,904	12,269	15,940	20,641	24,267	15,508	14,006	17,121	18,752	15,701	59%
Estate	112	560	407	588	623	645	538	661	553	949	747%
Garden	1,307	1,658	1,844	2,936	3,367	4,522	3,323	3,529	3,644	3,293	152%
License	7,145	8,368	10,372	14,203	14,465	9,694	10,814	13,439	13,672	12,275	72%
MCGM Related	451	862	889	877	1,103	760	647	735	759	765	70%
Medical Officer Health (MOH)	549	1,111	1,595	1,743	1,480	1,343	1,087	1,384	1,652	1,752	219%
Nuisance due to vagrants/ stray Dogs,Monkey	-	1,856	2,849	2,653	2,057	952	1,383	1,599	2,533	3,233	-
Pest control	4,364	6,078	5,529	6,703	7,501	10,971	7,785	8,037	8,328	8,721	100%
Pollution	135	220	215	286	269	220	424	292	760	586	334%
Roads	13,539	13,475	11,606	13,458	15,239	6,908	7,475	11,161	10,549	9,800	-28%
School	56	74	42	58	78	31	43	70	72	73	30%
Shop and Establishment	401	561	1,478	878	778	986	763	647	695	612	53%
Solid Waste Management (SWM)	5,213	7,330	10,144	14,494	17,116	11,595	11,056	12,351	24,690	25,031	380%
Storm Water Drainage	830	1,386	1,532	1,548	2,155	1,409	1,068	1,550	2,713	2,304	178%
Toilet	159	290	416	494	627	618	489	531	544	505	218%
Water Supply	7,728	7,246	6,959	12,647	15,507	11,855	10,981	13,097	14,752	14,522	88%
<b>Grand Total</b>	<b>67,773</b>	<b>81,555</b>	<b>92,329</b>	<b>1,16,658</b>	<b>1,28,145</b>	<b>93,774</b>	<b>90,250</b>	<b>1,04,068</b>	<b>1,20,296</b>	<b>1,15,396</b>	<b>70%</b>

**Note (\*):** These complaints are generated in CCRS system by the above mentioned categories.

#### Inferences:

- The total number of complaints registered increased by 70% from 2015 (67,773) to 2024 (1,15,396), with a rise observed until 2019, followed by a drop during the pandemic, and again rising steadily post-2021.
- Drainage-related complaints showed a significant increase of 59%, from 9,904 in 2015 to 15,701 in 2024, indicating ongoing public concerns with urban drainage infrastructure.
- Solid Waste Management complaints rose by 88%, reaching 25,031 in 2024, making it the highest registered category in 2024, followed closely by buildings (14,451) and drainage (15,701).
- Water supply complaints also saw a 91% increase, suggesting persistent gaps in service delivery or increased awareness/reporting.
- Licensing-related complaints nearly doubled (72% increase), rising from 7,145 in 2015 to 12,275 in 2024, indicating a higher level of commercial activity or challenges in enforcement.
- Pollution-related complaints witnessed the most dramatic rise, 384%, from just 285 in 2015 to 1,380 in 2024, possibly reflecting heightened environmental awareness and deteriorating air quality.

• **Table 44: Issue-wise Comparison of Total Complaints and Complaints Closed in 2023 and 2024**

Complaint Type	Total complaints received		Closed Complaints				Average days to resolve a complaint	
	2023	2024	2023		2024		2023	2024
			In no.	In (%)	In no.	In (%)		
Buildings	14,572	14,451	9,181	63%	7032	49%	58	66
Colony Officer	1,056	823	697	66%	333	40%	46	86
Drainage	18,752	15,701	16,509	88%	12,393	79%	28	49
Estate	553	949	280	50%	628	66%	67	140
Garden	3,644	3,293	3,582	98%	3075	93%	23	27
License	13,672	12,275	12,410	91%	9785	80%	42	43
BMC Related	759	765	549	72%	491	64%	52	62
Medical Officer Health (MOH)	1,652	1,752	1,324	80%	1383	79%	56	63
Nuisance due to vagrants/ stray Dogs, monkey	2,533	3,233	1,112	44%	872	27%	58	70
Pest control	8,328	8,721	8,230	99%	8547	98%	16	18
Pollution	760	586	377	50%	286	49%	124	62
Roads	10,549	9,800	8,011	76%	6356	65%	54	59
School	72	73	19	26%	13	18%	84	151
Shop and Establishment	695	612	685	99%	593	97%	23	32
Solid Waste Management (SWM)	24,690	25,031	23,540	95%	21698	87%	15	22
Storm Water Drainage	2,713	2,304	1,905	70%	1484	64%	33	57
Toilet	544	505	503	92%	442	88%	25	34
Water Supply	14,752	14,522	13,999	95%	12897	89%	29	46
<b>Grant Total</b>	<b>1,20,296</b>	<b>1,15,396</b>	<b>1,02,912</b>	<b>86%</b>	<b>88,308</b>	<b>77%</b>	<b>32</b>	<b>41</b>

**Inference:**

- Average number of days to resolve a complaint increased from 32 days in 2023 to 41 days in 2024.
- Average time taken to resolve complaints increased in most categories, especially for estate (66 to 140 days) and school-related complaints (84 to 151 days).
- Despite a decrease of 341 SWM complaints from 24,690 in 2023 to 25,031 in 2024, the average time taken to resolve a complaint increased from 15 days to 22 days.
- In contrast, the average time taken to resolve a pollution-related complaint decreased from 124 days in 2023 to 62 days in 2024, while the number of complaints also fell from 760 to 586.
- In 2024, pest control had the highest rate of closed complaints at 98%, followed by shop and establishments at 97%, and garden at 93%.

➤ **Table 45: Ward-wise Comparison of Total Complaints and Complaints Closed in 2023 and 2024**

Ward	Total complaints received		Closed Complaints				Average days to resolve a complaint	
	2023	2024	2023		2024		2023	2024
			In no.	In (%)	In no.	In (%)		
A	2,468	3,207	1,431	58%	1,306	41%	40	64
B	3,324	3,019	2,248	68%	966	32%	46	79
C	3,306	3,864	2,983	90%	3,257	84%	39	32
D	4,022	3,748	3,989	99%	3,545	95%	10	20
E	4,178	4,939	3,716	89%	3,570	72%	50	81
F/N	4,672	4,229	4,406	94%	3,693	87%	44	43
F/S	2,742	2,781	2,547	93%	2,590	93%	33	37
G/N	5,545	5,151	4,318	78%	3,921	76%	32	52
G/S	3,134	3,299	2,919	93%	3,064	93%	27	37
H/E	4,414	4,317	3,835	87%	3,782	88%	25	40
H/W	5,199	5,048	3,942	76%	4,096	81%	35	48
K/E	8,577	8,145	7,920	92%	6,826	84%	32	59
K/W	9,251	7,945	7,743	84%	6,286	79%	44	64
L	7,965	7,047	6,274	79%	4,912	70%	23	20
M/E	4,711	4,060	4,199	89%	3,530	87%	27	28
M/W	4,026	4,032	4,004	99%	3,587	89%	19	28
N	6,604	5,428	6,427	97%	4,967	92%	20	33
P/N	7,830	7,327	3,831	49%	3,316	45%	53	68
P/S	4,521	5,156	3,784	84%	3,114	60%	59	35
R/C	5,942	5,372	5,843	98%	5,033	94%	15	23
R/N	2,954	3,166	2,952	100%	3,121	99%	8	15
R/S	5,445	4,840	5,316	98%	4,565	94%	17	14
S	6,649	6,221	5,676	85%	2,671	43%	50	50
T	2,817	3,055	2,609	93%	2,590	85%	31	39
<b>Total</b>	<b>1,20,296</b>	<b>1,15,396</b>	<b>1,02,912</b>	<b>86%</b>	<b>88,308</b>	<b>77%</b>	<b>32</b>	<b>41</b>

**Inference:**

1. The highest numbers of complaints were in K/E (8,145), K/W (7,945) and P/N (7,327) wards in 2024.
2. There has been a decline in the percentage of complaints closed in almost all wards i.e. by 11% from 2023 to 2024. The closed complaints numbers dipped from 1,02,912 in 2023 to 88,308 in 2024.
3. 68% complaints in B ward was not closed in 2024.
4. Average days to resolve the complaints increased from 32 days in 2023 to 41 days in 2024. B, E and P/N wards took maximum days for solving complaints- 79, 81 and 68 days respectively.

## C. Status of Action Taken Report (ATR) and Time Taken to Resolve Complaints in CCRS

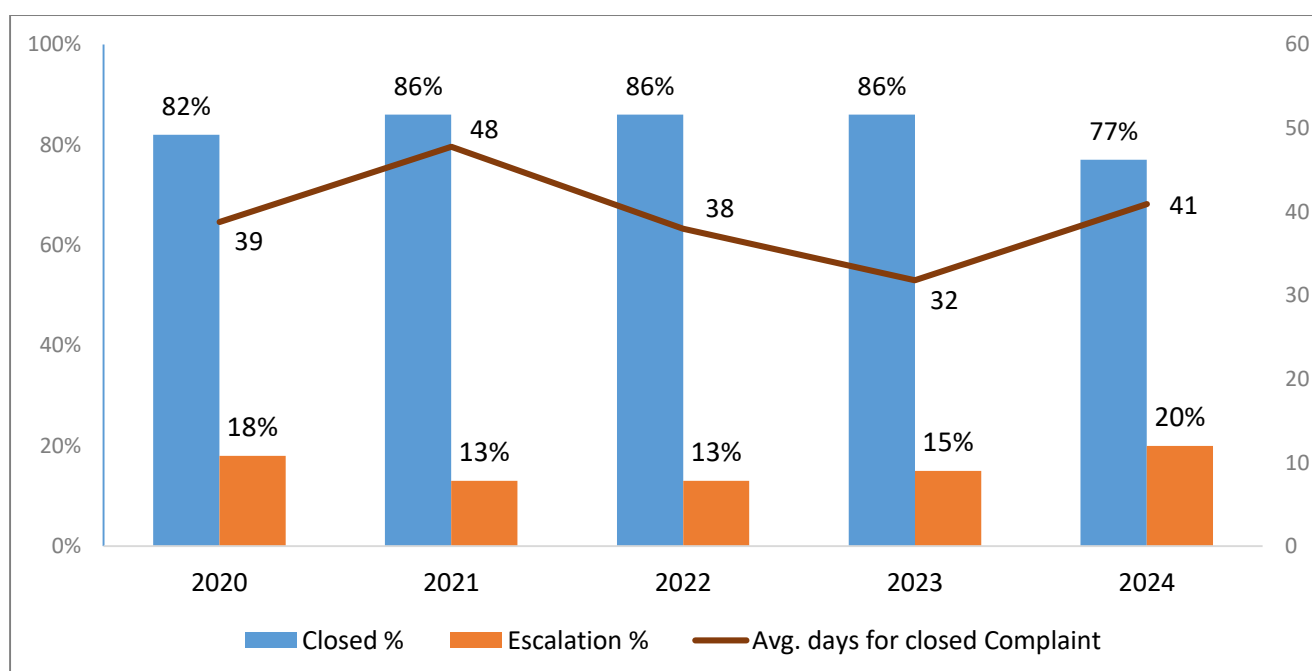
**Action Taken Report:** The process of generating an Action Taken Report (ATR) in CCRS was initiated in 2017. After a complaint is filed in CCRS, they generate an ATR. The ATR is a complaint redressal form that is generated by the CCRS telephone operator with primary details of the complaint including the nature of complaint, location, etc. After this, the complaint along with the ATR is forwarded to the concerned department to resolve the issue. The ATR is to be filled by the official who attends to the complaint and visits the complaint site. The ATR is required to be filled in detail with information of the type of action taken to resolve the complaint before they can close the complaint in the system.

**Escalation Matrix:** The CCRS mechanism includes an escalation process for unresolved complaints. These complaints are escalated to different levels under the 'escalation matrix' which has been adopted by the BMC. The escalation matrix is a computerised mechanism by which complaints which are not resolved within a stipulated time (seven days) are automatically shown as being placed before a higher authority within the BMC. The escalation matrix was developed to address the problem of complaints remaining stuck at the lower level of the civic administration, with no way to enforce accountability.

Level I	Level II	Level III
AMC/Chief Engineer	DMC	Additional Municipal Commissioner

Through this system, the higher administration is mandated to take note of and address complaints if they are not solved within a stipulated time. If a complaint is solved at the level at which it is filed, it is treated as being solved at Level 0.

- **Figure 6: Overall Complaints Closed, Escalated and Average days taken to closed complaint from 2020 to 2024 (in %)**



• **Table 46: Overall Civic Complaints Escalated from Level I to Level III from 2020 to 2024**

Year	Total Complaints Received	Level I (AMC/Chief Engineer)		Level III (Add. MC)				Total Unresolved Escalated Complaints after Level IV	Total Complaint closed after escalated (%)
		Number of Complaints Escalated	In (%) of Overall Complaints	Number of Complaints Escalated	In (%) of Overall Complaints	Closed Complaints	Average Days to Resolve		
2020	93,774	16,813	18%	16,105	17%	493	93	16,320	3%
2021	90,250	11,848	13%	10,417	12%	299	37	11,549	3%
2022	1,04,068	13,552	13%	13,138	13%	0	-	13,552	0%
2023	1,20,296	17,883	15%	17,882	15%	204	178	15,838	0%
2024	1,15,396	23,490	20%	22,470	19%	0	-	23,490	0%

**Inferences:**

- In 2024, 22,470 complaints were escalated to the Additional Municipal Commissioner (Level III), and none were resolved after escalation, reflecting continued challenges in the complaint redressal system.
- All 23,490 complaints escalated in 2024 remained unresolved after Level IV, highlighting a complete breakdown in final-level grievance resolution for the year.
- Over the last five years, only 5% or fewer escalated complaints have been resolved annually, with 0% resolution recorded in 2022, 2023, and 2024, indicating a persistent systemic issue in handling escalated complaints.
- Although the percentage of escalated complaints was lower in 2021 (13%) compared to 2020 (18%), unresolved escalated complaints remain a concern year after year, with no substantial improvements.
- The number of escalated complaints reached a five-year high in 2024, with 20% at Level I and 19% at Level III, suggesting growing dissatisfaction or inefficiency at initial resolution levels.

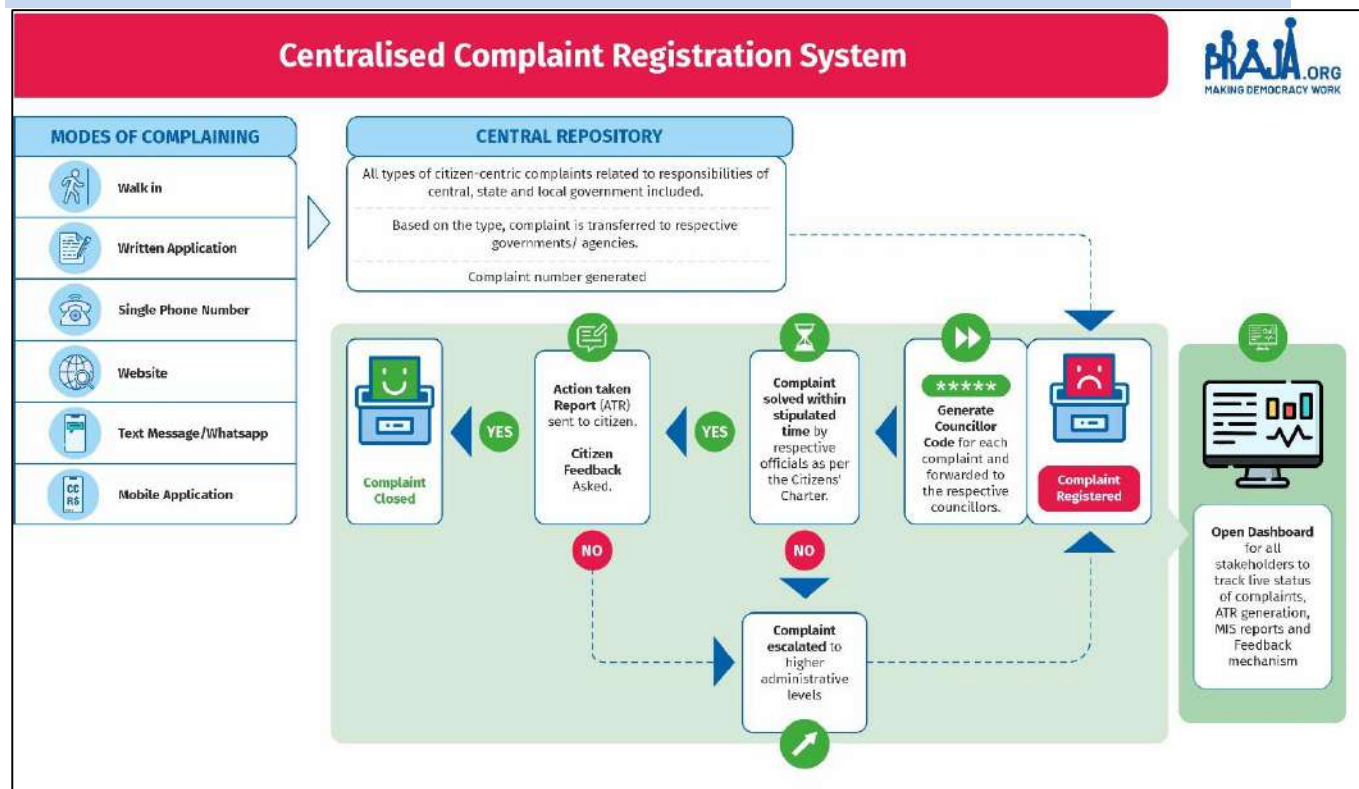
- **Table 47: Analysis of Complaints Attended (Closed) in Comparison with Days Mentioned in BMC's Citizen Charter**

Issues/Sub-issues	Escalation to Level 1 (Working Days)	Actual time taken to resolve (Average Day)			
		2022	2023	2024	% Change from 2022 to 2024
Pest control					
Fogging	7	17	13	17	0%
Mosquito Nuisance	7	17	14	19	12%
Rat Nuisance	7	16	14	18	13%
Unauthorised/ uncovered water storage tanks	7	19	14	26	37%
Roads/Footpath					
Bad Patches/ Potholes on the Roads	7	64	30	54	-16%
Digging of roads	7	81	37	67	-17%
Fallen Tree on road	5	23	25	21	-9%
Relaying and repairs of roads	7	69	39	66	-4%
Repair and reconstruction of footpath	7	63	32	66	5%
Water Supply					
Contaminated Water Supply	2	31	28	47	52%
Leakage near meter	7	26	24	54	108%
Leaks in Water Lines	4	32	24	48	50%
Providing water by tankers	7	29	17	37	28%
Shortage of water supply	4	30	22	46	53%

#### **Inference:**

- Although the citizen charter mandates resolution within seven days and escalation within 28 days, BMC took an average of 43 days in 2024 to resolve complaints related to pest control, roads/footpaths, and water supply.
- Pothole and footpath complaints took 54 and 66 days respectively in 2024—well beyond prescribed timelines—posing risks to pedestrians, especially the elderly and disabled.
- Contaminated water and water shortage complaints took over 45 days to resolve, raising health concerns due to potential reliance on unsafe water sources.
- Time to resolve leakage near meters more than doubled from 26 days in 2022 to 54 days in 2024, showing worsening efficiency.
- Resolution time for mosquito, rat nuisance, and water tank complaints increased in 2024, highlighting gaps in addressing public health-related issues.

## D. Recommendations



- **Open Dashboard:** For a government to take a step towards Open Government Data Portal to enable transparency, there should be, an openly available dashboard regarding complaints set up by the city government. This will increase citizen awareness, enable feedback, and allow elected representatives and administration officials to better monitor and evaluate the corporation's performance on a real-time basis.

- **Councillor code:** Proper implementation of mandatory entry of councillor code for every complaint must be done for better accountability in the system. Recently, entering the name of the administrative ward in the online form has been made compulsory. However, instead of using the address entered by the complainant of the ward, the councillor code should be automatically detected in the CCRS (Annexure 3, table no.59).

- **Citizen Feedback:** The complaint management system must incorporate a feedback and suggestion mechanism whereby complainants can express their satisfaction. This will also enable more accountability within the system so that the concerned officers can better perform their functions. Also, the Action Taken Report (a report generated by CCRS with details about the action taken to address a complaint) mechanism must be detailed for effective tracking and monitoring by citizens and then administration officials.

- **Citizen Participation Forum:** A platform that allows citizens to express their needs and wants. The platform can be regularly monitored by all stakeholders to ensure citizen-centric approach when planning for service delivery and infrastructure provisions in cities. Adding this aspect will bring the citizen journey to completion.

## Section VI: Analysis of Municipal Budget Related to Civic Issues<sup>56</sup>

### A. Key Highlights

The Budget allocations and actual expenditures of the Municipal Corporation reflect the priority areas of the local government and highlight whether revenue generated has been effectively spent on the development of the city and its people, especially on the core functions of local governments - provision of key civic services.

Moreover, in Mumbai, the budget is prepared and presented by the Municipal Commissioner, a bureaucrat and an executive official appointed by the Chief Minister through the Urban Development Ministry. The budget is presented to the Standing Committee on or before 5th of February, who then debates, makes necessary changes, and frames the budget on or before 1st of March. This budget is then tabled in the Council and deliberations are carried out for any required modifications. After approval of the Council (by 20th of March), the budget goes into effect for the financial year.

This year, the Brihanmumbai Municipal Corporation's (BMC) Municipal Commissioner not only framed the city budget but also presented and approved it in the capacity of a state-appointed administrator running the civic body. As the tenure of the elected representatives ended last March in 2022, and elections are yet to be held, there is no Council and the Corporation is currently functioning under an administrator. The budget making process should be participatory and inclusive such that wards committees should be able to make recommendations on project priorities, etc. However, due to the absence of a corporation, ward-level citizen needs were not represented during this budget process.

The BMC budget grew by 142% (₹30,689cr in 2019-20 to ₹74,366 cr in 2025-26) between 2019–20 and 2025–26, but spending on capital projects has often lagged allocations. While departments like Water Supply "Operation and Project" saw large increases (155 and 242%), service delivery remained inconsistent. The Roads and Traffic budget grew despite falling complaint resolution (₹2,280 Cr in 2020-21 to ₹6,519 Cr. in 2025-26).

SWM's budget share declined from 10% to 7% (₹3,291 Cr out of ₹33,435 Cr in 2020-21 to ₹5,548cr out of ₹74,366cr in 2025-26) despite operational challenges. The lack of elected representatives has reduced citizen input into budgeting and oversight, raising concerns about transparency, planning, and efficient fund utilisation.

<sup>56</sup>All figures are in crores unless specified otherwise. All figures have been taken from the Municipal Commissioner's speeches from 2019-20 to 2025-26, available on BMC website: [www.mcgm.gov.in](http://www.mcgm.gov.in).

Note: 'RE' stands for Revenue Expenditure and 'CE' stands for Capital Expenditure.

## B. Overall Budget Analysis

- Table 48: Overall BMC Budget from 2019-20 to 2025-26 (in crores)

Overall BMC Budget			
Financial Year	Budget Estimates	Revised Estimate	Difference (in %)
2019-20	30,685.99	30,025.39	-2%
2020-21	33,434.50	31,168.16	-7%
2021-22	39,027.32	39,611.35	1%
2022-23	45,940.78	43,491.20	-5%
2023-24	52,553.74	49,949.15	-5%
2024-25	59,896.53	64,167.33	7%
2025-26	74,366.76		

**Inference:**

The revised estimates have always been lower than budget estimates from 2019-20 to 2023-24 and in 2022-23. However, in 2021-22, the R.E. was higher than the B.E. by 1.47% & in 2024-25, 7.13% showing larger expenditure during that year.

- Table 49: Budget Estimates in Revenue Expenditure from 2019-20 to 2025-26 (in crores)

Revenue Expenditure			
Financial Year	Budget Estimates	Revised Estimates	Difference (in %)
2019-20	19,205.57	19,240.31	0%
2020-21	18,796.74	20,264.58	8%
2021-22	20,276.33	22,744.87	12%
2022-23	23,294.05	22,632.33	-3%
2023-24	25,305.94	24,633.34	-3%
2024-25	28,121.94	26,835.25	-5%
2025-26	31,204.53		

**Inference:**

The revised revenue expenditure estimates for the years 2019-20 to 2021-22 were exceeded the budget estimates, while for the years 2022-23 to 2024-25, the revised revenue expenditure estimates were Lower than the budget estimates.

- Table 50: Budget Estimates Under Capital Expenditure from 2019-20 to 2025-26 (in crores)

Capital Expenditure			
Financial Year	Budget Estimates	Revised Estimates	Difference (in %)
2019-20	11,480.42	10,785.08	-6%
2020-21	14,637.76	10,903.58	-26%
2021-22	18,750.99	16,866.48	-10%
2022-23	22,646.73	20,858.87	-8%
2023-24	27,247.80	25,315.81	-7%
2024-25	31,774.59	37,332.08	17%
2025-26	43,162.23		

**Inference:**

The revised estimates of capital expenditures from 2019-20 to 2022-23 are consistently lower than the budget estimates showing the required budget estimate amount has been over-estimated throughout these

years except the last year of 2024-25. It also raises a question on budget making process and planned activities under capital expenditure for this significant difference in budget and revised estimates.

### C. Budget Analysis of Key Civic Departments

- **Table 51: Budgetary Allocation of Departments Related to Civic Issues from 2020-21 to 2024-25 (in crores)**

Department	Budget 20-21		Budget 21-22		Budget 22-23		Budget 23-24		Budget 2024-25		Budget 2025-26		Change in (2020-21 to 2024-25) %
	B.E.	BE %	B.E.	BE %	B.E.	BE %	B.E.	BE %	BE	BE %	BE	BE %	
Disaster Management Cell	50	0.15%	39	0.10%	27	0.06%	52	0.10%	51.21	0.09%	351.24	0.47%	599%
Fire Brigade Department	374	1.12%	541	1.39%	746	1.62%	666	1.27%	689.99	1%	736.63	0.99%	97%
Solid Waste Management Department	3,291	9.84%	3,659	9.38%	4,531	9.86%	4,710	8.96%	4878.37	8%	5548.14	7.46%	69%
Storm Water Drains Department	1,339	4.00%	1,699	4.35%	2,133	4.64%	3,266	6.21%	2674	4%	3039.25	4.09%	127%
Roads & Traffic Department	2,280	6.82%	2,232	5.72%	2,869	6.25%	3,631	6.91%	4350.96	7%	6519.11	8.77%	186%
Water Operation Department	1,713	5.12%	1,677	4.30%	2,044	4.45%	2,336	4.44%	2785.41	5%	4372.13	5.88%	155%
Water Supply Project Department	1,185	3.55%	702	1.80%	1,094	2.38%	1,414	2.69%	2448.43	4%	4056.58	5.45%	242%
Sewerage Operation Department	611	1.83%	655	1.68%	735	1.60%	1,048	1.99%	1273.89	2%	1972.08	2.65%	223%
Sewerage Project Department	347	1.04%	303	0.78%	270	0.59%	333	0.63%	460.73	0.77%	439.54	0.59%	27%
Mumbai sewerage Disposal Project	424	1.27%	1,974	5.06%	2,093	4.56%	3,592	6.83%	5072.03	8%	6532.57	8.78%	1442%
<b>Total</b>	<b>11,613</b>	<b>35%</b>	<b>13,481</b>	<b>35%</b>	<b>16,543</b>	<b>36%</b>	<b>21,048</b>	<b>40%</b>	<b>24,685</b>	<b>41%</b>	<b>33,567</b>	<b>45%</b>	<b>113%</b>
Others	21,822	65.27%	25,546	65.46%	29,398	63.99%	31,506	59.95%	35,212	59%	40,799	55%	87%
<b>Overall</b>	<b>33,435</b>	<b>100%</b>	<b>39,027</b>	<b>100%</b>	<b>45,941</b>	<b>100%</b>	<b>52,554</b>	<b>100%</b>	<b>59,897</b>	<b>100%</b>	<b>74366.76</b>	<b>100%</b>	<b>79%</b>

**Note: R.E. is Revised Estimate and B.E. is Budget Estimate, RE %: Revenue Estimate share to total (R.E. Total)**

#### Inference:

1. Solid Waste Management Department: The budgetary allocation share has dropped 9% from 2020-21 to 7 % in 2025-26. Despite Drop in Percentage Share of Budget Allocation the average days to solve SWM-related complaints Decreased from 43 to 13 days.
2. Roads and Traffic Department: The budget share Increased from 7% in 2020-21 to 9% in 2025-26, even though road-related complaints increased. Simultaneously, complaint closure efficiency dropped, with closed complaints decreasing from 82% in 2021 to 65% in 2024.
3. Water Operation Department: The Budget estimates rose by 155% over the budget in 2020-21, potentially due to improved turnaround time. However, the average days to solve water-related complaints Increased from 29 to 46 days. The Number of complaints from 11,855 in 2020 to 14,522 in 2024.
4. Water Supply Project Department: The budget allocation increased by 242%, from 1,185 in 2020-21 to 4,057 in 2025-26, highlighting growing investments in water infrastructure.
5. Allocations for Sewerage Operation, Sewerage Project, and Slum Sewage Disposal Project remain under 8% of the total budget.
6. The overall BMC budget has increased by 79% over the last six years, while the budget allocation for the Disaster Management Cell rose by 600%. However, the percentage of closed complaints decreased from 82% in 2020 to 77% in 2024.

## Section VII: Human Resources in MCGM

**Table 52; Department-Wise MCGM Human Resources as of 2024**

Department	Sanctioned	Available	Vacant	Vacant (%)
Accounts Department	1,808	1,396	412	23%
Assessor and Collector Department	2,239	1,085	1,154	52%
Bai Yamunabai Nair Hospital and Topiwala National Medical College	4,032	2,141	1,891	47%
Bridges Department	168	111	57	34%
Building Maintenance Department	267	172	95	36%
Central Procurement Department	130	78	52	40%
City Engineer's Department	4,261	2,053	2,208	52%
Civic Training Institute and Research Centre	72	47	25	35%
Coastal Road Project	30	18	12	40%
Deonar Abattoir	599	256	343	57%
Development Planning Department	499	313	186	37%
Disaster Management Department	111	62	49	44%
Dr. R.N. Kapoor Medical College and H.B. Thackeray Medical College	450	249	201	45%
Education Department	21,948	9,094	12,854	59%
Enquiry Department	121	91	30	25%
Estate Department	1,521	1,177	344	23%
Garden Department	1,625	669	956	59%
Information Technology Department	60	32	28	47%
KEM Hospital and Seth G.S. Medical College	5,644	3,128	2,516	45%
L. T. General Hospital and Medical college	4,514	2,594	1,920	43%
Labour Department	218	34	184	84%
Legal Department	355	262	93	26%
License Department	971	732	239	25%
Markets Department	1,110	525	585	53%
Mechanical & Electrical Department	964	420	544	56%
Mumbai Fire Brigade	3,024	2,060	964	32%
Mumbai Sewerage Disposal Project	87	54	33	38%
Municipal Auditor's Department	985	324	661	67%
Municipal Commissioner office	1,071	603	468	44%
Municipal Printing Press	463	170	293	63%
Municipal Secretary Department	455	250	205	45%
Nair Hospital Dental College	313	183	130	42%
Planning Department	71	27	44	62%
Public Health Department	12,147	6,940	5,207	43%
Public Relations Department	52	39	13	25%
Removal of Encroachments	91	62	29	32%

Roads & Traffic Department	6,349	2,926	3,423	54%
Security Department	4,257	1,954	2,303	54%
Sewage Operation Department	7,682	3,682	4,000	52%

Department	Sanctioned	Available	Vacant	Vacant (%)
Sewerage Project Department	449	151	298	66%
Shops & Establishment Department	233	133	100	43%
Solid Waste Management Department	35,472	29,483	5,989	17%
Storm Water Drains Department	3,378	1,459	1,919	57%
Suburban Hospitals	9,154	4,803	4,351	48%
Water Operation Department	10,582	6,211	4,371	41%
Water Supply and Sewerage Department	472	330	142	30%
Water Supply project Department	550	208	342	62%
Zoo	201	73	128	64%
<b>Total</b>	<b>1,51,255</b>	<b>88,864</b>	<b>62,391</b>	<b>41%</b>

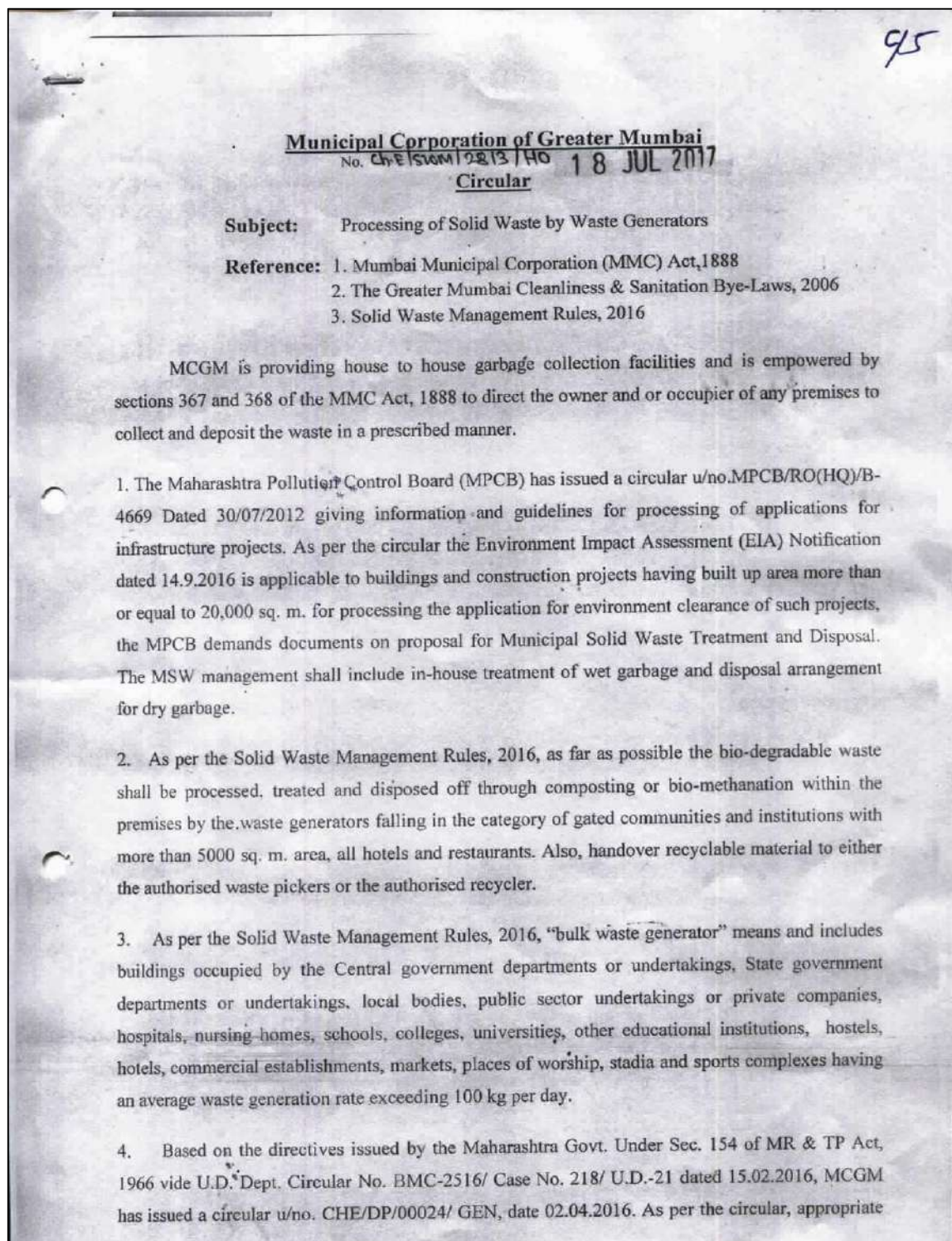
**Inference:**

1. For the effective functioning of the government, it is essential to have adequate human resources. Overall 41% of the posts in MCGM were vacant in 2024.
2. In 2024, labour department had the highest vacancy (84%) followed by Municipal Auditor's Department (67%).
3. In key departments of civic services, the vacancy is as follows; Education 59%, Storm Water Drains 57%, Roads & Traffic 54% and SWM 17%.

## Section VIII: Annexures

### Annexure 1: Solid Waste Management (SWM) section related data tables

- Figure 7: Circular of Bulk Waste Generator



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conditions are incorporated in the I.O.D. regarding the treatment of wet garbage generated in the building, on the same plot, having area more than 2000 sq. m. in the jurisdiction of Mumbai Municipal Corporation.

In view of above, as per approval of Hon. M.C. u/no. MGC/F/4032, Dtd. 14.07.2017, Assistant Commissioner of wards are directed to act on above points respectively as under.

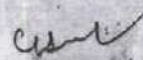
- 1) **For all complexes having built up area of 20,000 sq.mtr and above:-** All types of garbage is to be processed on site and is to be disposed in such cases. The garbage of all types shall not be lifted from such premises from 2<sup>nd</sup> October, 2017 and cases of non compliance shall be taken up with appropriate authority for taking penal action under the provisions of Environment (Protection) Act, 1986.
- 2) **For all complexes having built up area 5,000 sq.mtr and above:-** The waste generators must segregate waste at source and the dry waste generated by them shall not be lifted. It shall be ensured that the recyclable material is handed over to either the authorised waste pickers or the authorised recycler of dry waste. The wet waste as far as possible shall be processed in phased manner i.e. 99% bio-degradable waste processing like composting, bio-methanation, etc. by the end of three months at the rate of at least 33% waste processing per month for next three months.
- 3) Although, there is no provision for action to be taken by **bulk waste generators / housing complexes generating waste of average more than 100 kgs per day** elsewhere in the Rules, but, in view of limited capacity of dumping ground, the generators of waste shall be informed to segregate waste at source and the dry waste generated by them shall not be lifted. It shall be ensured that the recyclable material is handed over to either the authorised waste pickers or the authorised recycler of dry waste. The wet waste as far as possible shall be processed in phased manner i.e. 99% bio-degradable waste processing like composting, bio-methanation, etc. to comply with the provisions within three months period.
- 4) **For all complexes having built up area of 2,000 sq.mtr and above for building being constructed after 02.04.2016:-** Treat wet garbage in-situ, as per, the conditions incorporated in the I.O.D. regarding the treatment of wet garbage generated in the building

Against defaulting owners and occupiers, there wet waste will not be lifted 2<sup>nd</sup> October, 2017 onwards. Further the action should be taken for offences as following,

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A) Section 471 & 472 of the MMC Act provide for penalties punishable with fine for offences committed under various specified sections of MMC Act. Action for offences under section 368 of MMC Act is covered in these sections.

B) The Greater Mumbai Cleanliness & Sanitation Bye-Laws, 2006 prepared as per section 461 of the MMC Act specify various penalties under Schedule-I in it.

  
A.M.C. (E.S.)

All AC (A to T) Ward / Zonal DMC (Zone 1 to 7)

CC:

Hon. M.C., Sir

AMC (W.S.) ✓

AMC (City)

## Annexure 2: Centralised Complaint Registration System (CCRS) related data tables

➤ Table 53: Ward-wise Total Complaints from 2015 to 2024

Ward	Population 2024	Total Complaints									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
A	1,94,210	1,418	1,972	1,840	2,474	2,896	1,763	1,764	2,061	2,468	3,207
B	1,33,616	1,326	1,916	2,341	3,972	3,959	2,461	2,901	3,047	3,324	3,019
C	1,74,419	1,525	1,899	2,895	3,696	3,596	2,888	2,632	2,826	3,306	3,864
D	3,64,106	3,282	4,081	4,053	4,815	5,159	3,730	3,191	3,566	4,022	3,748
E	4,12,833	2,414	2,992	3,183	4,337	4,642	3,660	3,438	3,792	4,178	4,939
F/N	5,55,328	2,318	2,765	2,944	4,425	5,304	3,597	3,094	3,799	4,672	4,229
F/S	3,78,913	1,305	1,628	1,624	2,369	2,857	2,444	2,270	3,102	2,742	2,781
G/N	6,28,812	3,094	4,416	4,840	6,241	5,954	4,657	4,859	5,158	5,545	5,151
G/S	3,96,524	1,495	1,983	2,471	3,160	4,192	2,658	2,264	2,847	3,134	3,299
H/E	5,84,934	2,245	2,774	2,937	3,518	4,397	3,519	2,851	3,733	4,414	4,317
H/W	3,22,869	2,715	3,093	3,430	4,763	4,774	3,481	3,623	4,713	5,199	5,048
K/E	8,64,834	4,323	5,901	6,725	8,146	9,724	6,847	6,667	7,529	8,577	8,145
K/W	7,85,899	4,328	6,374	8,349	9,465	10,399	7,456	6,845	8,667	9,251	7,945
L	9,47,067	7,799	7,498	7,282	7,242	7,560	5,862	6,310	6,575	7,965	7,047
M/E	8,47,865	3,338	3,468	3,391	4,232	4,334	3,525	3,807	4,023	4,711	4,060
M/W	4,32,365	1,966	2,709	3,123	4,331	4,387	3,438	4,086	4,027	4,026	4,032
N	6,53,810	2,966	3,559	6,088	6,570	6,843	4,981	4,045	4,400	6,604	5,428
P/N	9,88,154	4,702	4,955	5,374	6,586	8,019	6,073	6,177	6,910	7,830	7,327
P/S	4,86,544	3,095	3,450	3,227	4,855	5,133	3,168	3,133	3,471	4,521	5,156
R/C	5,90,102	3,088	4,092	4,368	5,315	6,398	4,506	4,641	5,178	5,942	5,372
R/N	4,52,808	1,339	1,542	1,792	2,171	2,729	2,185	2,017	2,367	2,954	3,166
R/S	7,25,585	3,290	3,855	4,079	6,249	6,008	4,341	4,064	4,712	5,445	4,840
S	7,80,751	2,936	3,040	3,923	5,115	6,144	4,480	3,820	5,351	6,649	6,221
T	3,58,434	1,466	1,593	2,050	2,611	2,737	2,054	1,751	2,214	2,817	3,055
<b>Total</b>	<b>1,30,60,782</b>	<b>67,835</b>	<b>81,555</b>	<b>92,329</b>	<b>1,16,658</b>	<b>1,28,145</b>	<b>93,774</b>	<b>90,250</b>	<b>1,04,068</b>	<b>1,20,296</b>	<b>1,15,396</b>

➤ **Table 54: Ward-wise Comparison of Total Complaints and Complaints Closed in 2023 and 2024**

Ward	Total complaints received		Closed Complaints				Average days to resolve a complaint	
	2023	2024	2023		2024		2023	2024
			In no.	In (%)	In no.	In (%)		
A	2,468	3,207	1,431	58%	1,306	41%	40	64
B	3,324	3,019	2,248	68%	966	32%	46	79
C	3,306	3,864	2,983	90%	3,257	84%	39	32
D	4,022	3,748	3,989	99%	3,545	95%	10	20
E	4,178	4,939	3,716	89%	3,570	72%	50	81
F/N	4,672	4,229	4,406	94%	3,693	87%	44	43
F/S	2,742	2,781	2,547	93%	2,590	93%	33	37
G/N	5,545	5,151	4,318	78%	3,921	76%	32	52
G/S	3,134	3,299	2,919	93%	3,064	93%	27	37
H/E	4,414	4,317	3,835	87%	3,782	88%	25	40
H/W	5,199	5,048	3,942	76%	4,096	81%	35	48
K/E	8,577	8,145	7,920	92%	6,826	84%	32	59
K/W	9,251	7,945	7,743	84%	6,286	79%	44	64
L	7,965	7,047	6,274	79%	4,912	70%	23	20
M/E	4,711	4,060	4,199	89%	3,530	87%	27	28
M/W	4,026	4,032	4,004	99%	3,587	89%	19	28
N	6,604	5,428	6,427	97%	4,967	92%	20	33
P/N	7,830	7,327	3,831	49%	3,316	45%	53	68
P/S	4,521	5,156	3,784	84%	3,114	60%	59	35
R/C	5,942	5,372	5,843	98%	5,033	94%	15	23
R/N	2,954	3,166	2,952	100%	3,121	99%	8	15
R/S	5,445	4,840	5,316	98%	4,565	94%	17	14
S	6,649	6,221	5,676	85%	2,671	43%	50	50
T	2,817	3,055	2,609	93%	2,590	85%	31	39
<b>Total</b>	<b>1,20,296</b>	<b>1,15,396</b>	<b>1,02,912</b>	<b>86%</b>	<b>88,308</b>	<b>77%</b>	<b>32</b>	<b>41</b>

➤ **Table 55: Issue-wise and ward-wise status of complaints escalated in 2024**

Complaint Type	Total Complaints Received	Escalated Complaints		
		Level I (AMC/Chief Engineer)	Level II (DMC)	Level III (Add. MC)
Buildings	14,451	6,839	6,712	6,572
Colony Officer	823	489	489	478
Drainage	15,701	3,091	3,083	2,944
Estate	949	201	201	190
Garden	3,293	209	204	191
License	12,275	2,415	2,404	2,211
MCGM Related	765	261	261	254
Medical Officer Health (MOH)	1,752	358	353	323
Nuisance due to vagrants, animals	3,233	2,350	2,350	2,332
Pest control	8,721	126	113	75
Pollution	586	290	288	276
Roads	9,800	3,254	3,231	3,105
School	73	59	59	59
Shop and Establishment	612	16	16	14
Solid Waste Management (SWM)	25,031	3,082	3,071	3,015
Storm Water Drainage	2,304	387	380	371
Toilet	505	62	62	59
Water Supply	14,522	1	1	1
<b>Total</b>	<b>1,15,396</b>	<b>23,490</b>	<b>23,278</b>	<b>22,470</b>
<b>In (%)</b>		<b>20%</b>	<b>19%</b>	<b>19%</b>

Complaint Type	Total Complaints Received	Escalated Complaints		
		Level I (AMC/Chief Engineer)	Level II (DMC)	Level III (Add. MC)
A	3,207	1,859	1,857	1,835
B	3,019	1,720	1,713	1,657
C	3,864	534	527	502
D	3,748	168	164	144
E	4,939	1,266	1,245	1,201
F/N	4,229	437	436	400
F/S	2,781	164	160	144
G/N	5,151	1,182	1,174	1,131
G/S	3,299	223	219	189
H/E	4,317	434	425	364
H/W	5,048	782	773	728
K/E	8,145	1,037	1,030	991
K/W	7,945	1,498	1,490	1,451
L	7,047	1,946	1,912	1,878
M/E	4,060	303	295	266
M/W	4,032	281	280	262
N	5,428	383	377	337
P/N	7,327	3,229	3,208	3,171
P/S	5,156	1,995	1,989	1,957
R/C	5,372	261	257	226
R/N	3,166	33	31	23
R/S	4,840	220	220	208
S	6,221	3,188	3,184	3,121
T	3,055	347	312	284
<b>Total</b>	<b>1,15,396</b>	<b>23,490</b>	<b>23,278</b>	<b>22,470</b>
<b>In (%)</b>		<b>20%</b>	<b>20%</b>	<b>19%</b>

➤ **Table 56: Ward-wise Number and Percentage of Complaints with Councillor Code filled in 2024**

Ward	Total Complaints	Complaints where Councillor code was filled	
		No.	In (%)
A	3,207	2,669	83%
B	3,019	1,953	65%
C	3,864	2,854	74%
D	3,748	2,950	79%
E	4,939	3,736	76%
F/N	4,229	3,249	77%
F/S	2,781	2,116	76%
G/N	5,151	3,953	77%
G/S	3,299	2,657	81%
H/E	4,317	3,325	77%
H/W	5,048	3,675	73%
K/E	8,145	6,406	79%
K/W	7,945	6,451	81%
L	7,047	4,872	69%
M/E	4,060	3,235	80%
M/W	4,032	3,184	79%
N	5,428	3,835	71%
P/N	7,327	5,865	80%
P/S	5,156	4,140	80%
R/C	5,372	4,161	77%
R/N	3,166	2,251	71%
R/S	4,840	3,877	80%
S	6,221	4,653	75%
T	3,055	2,205	72%
<b>Total</b>	<b>1,15,396</b>	<b>88,272</b>	<b>76%</b>

### Annexure 3: Number of Days for Escalation time frame According to Citizen's Charter by BMC

Complaint Type	1st level
<b>Buildings</b>	<b>13</b>
Change of user Res to Commercial	5
Grant Authority u/ s 449 MMC Act - Repair	5
Heavy Leakage From Ceiling	5
Other (Buildings)	7
Permission for Temporary Monsoon Shed	7
Private Land/ Building/ Society/ Factories	5
Regularisation of Balcony Enclosures	7
Repair Perm-Tolerated/ Unauthorised Structure	30
Unauthorised Alteration of Bldg., Flat etc.	30
Unauthorised Construction/ Development	30
<b>Colony Officer</b>	<b>5</b>
Delay in transfer case	5
Municipal Colony/ Slum	5
Others (COL)	5
Unauthorised Commercial Activity	5
Unauthorised Construction in Slum	5
Unauthorised Extension/ Construction	5
Unauthorised Repairs/ Renovations in Slum	5
<b>Drainage</b>	<b>6</b>
Cleaning of Septic Tank	3
Drainage Chokes and Blockages	3
Odour (Foul Smell) from Drains	7
Others (DRN)	7
Overflowing drains of manholes	3
Raising of manhole (except in monsoon)	15
Repairs to pipe sewers/ main sewers	7
Replacement of Missing/ Damaged Manhole	3
<b>Drainage (AEM 2)</b>	<b>5</b>
Cleaning of Septic Tank	5
Drainage Chokes and Blockages	5
Odour (Foul Smell) from Drains	5
Others (Drainage)	5
Overflowing drains of manholes	5
Raising of manhole (except in monsoon)	5
Repairs to pipe sewers/ main sewers	5
Replacement of Missing/ Damaged Manhole	5
<b>Encroachment</b>	<b>5</b>
Others (ENCR)	5
<b>Estate</b>	<b>5</b>
Extension in the premises without permission	5
Non-maintenance of Premises	5
Others (Estate)	5
Pending Transfer cases	5
Pertaining to rent	5
Slab Fallen down	5
Transfer of tenancy	5
Unauthorised addition/ alteration in the premises/ Building/ Open Space/ Market	5

Complaint Type	1st level
<b>Roads</b>	<b>6</b>
Bad Patches/Potholes on the Roads	7
Fallen Tree on road	5
Municipal Land - Road/Footpath/SWD	5
Others (RNT)	7
Permission for tree cutting	5
Providing Name Plates to the Road	7
Reinstatement of Trenches	7
Removal of Rank Vegetation on Roads	7
Repairs/re-surfacing of roads/footpaths	7
Signals	7
Speed Breakers	7
Street Lighting	7
Trimming of Branches	5
Unauthorised Digging of roads	7
Unauthorised Stalls on roads	5
<b>Roads (AEM 2)</b>	<b>5</b>
Bad Patches/ Potholes on the Roads	5
Fallen Tree on road	5
Others (RNT)	5
Permission for tree cutting	5
Providing Name Plates to the Road	5
Reinstatement of Trenches	5
Removal of Rank Vegetation on Roads	5
Repairs/Resurfacing of Road/footpaths	5
Signals	5
Speed Breakers	5
Street Lighting	5
Trimming of Branches	5
Unauthorised Digging of roads	5
Unauthorised Stalls on Road	7
<b>School</b>	<b>5</b>
Bad Quality of material given to student	5
Choke in main drain	5
Door/Window/staircase etc. found broken	5
Drinking Water not available	5
Found encroachment in the school premise	5
Furniture found broken in the classes	5
Lamp, Tube light etc. to be replaced	5
No electricity supply	5
No Teacher	5
No warning/ alarm system	5
Others (School)	5
Overflow of waste material	5
Pan/ Gutka hawker near school premises	5
Short supply of water	5
Toilet not cleaned	5

<b>Estate</b>	<b>5</b>
Unauthorised Construction on the Plot/ Reserve plot	5
Unauthorised Materials/ Furniture Found/ kept on Footpath and Road	5
Unauthorised shed on building in premise	5
Unauthorised use of Room	5
<b>License</b>	<b>5</b>
Hawkers	5
Others (LIC)	7
Storage and sale of plastic bags	5
Trade without License	5
Unauthorised Banners/ Advt. on Road	7
Unauthorised Stalls on roads/ Footpaths	5
Unauthorised Storage of Explosives	2
Unauthorised workshop or Garage	5
<b>BMC Related</b>	<b>6</b>
Maintenance of Electric Pumps in Municipal Colonies	7
Maintenance of municipal property, school, dispensaries, maternity home, gardens	7
Major Repairs to Municipal Property	5
Minor Repairs to Municipal Property	5
Municipal Plot	5
Others (RMP)	7
Proper Electric Supply to Municipal Property	7
Protection of Municipal Play grounds/ Gardens	7
Providing tar before monsoon to municipal property to avoid leakage	7
Providing/repairing doors, windows of P.S. blocks	7
<b>BMC Related (AEM 2)</b>	<b>5</b>
Maintenance of Electric Pumps in Municipal Colonies	5
Maintenance of municipal property, school, dispensaries, maternity home, gardens	5
Major Repairs to Municipal Property	5
Minor Repairs to Municipal Property	5
Others (RMP)	7
Proper Electric Supply to Municipal Property	5
Protection of Municipal Play grounds/ Gardens	5
Providing tar before monsoon to municipal property to avoid leakage	5
Providing/repairing doors, windows of P.S. blocks	5
<b>Medical Officer Health (MOH)</b>	<b>5</b>
Issue of Birth/Death Certificate	3
Others (MOH)	5
Unauthorised Food Selling/Preparation (MOH)	5
Unauthorised Flour Mill	5
<b>Miscellaneous complaints</b>	<b>5</b>
Miscellaneous complaints	5
<b>Pest control</b>	<b>7</b>
Fogging	7
Mosquito Nuisance	7
Nuisance due to cockroaches	7

<b>Sewerage Operation Control (City) E.S.) (W.S.)</b>	<b>5</b>
Drainage Chokes and Blockages	3
Odour (Foul Smell) from Drains	7
Others	7
Overflowing drains of manholes	3
Repairs to pipe sewers/ main sewers	7
Replacement of Missing/ Damaged Manhole	3
<b>Shop and Establishment</b>	<b>5</b>
Employing children (below 14) in the org	5
found staff working more than on muster	5
Non observance of Holidays	5
Not providing minimum wages	5
Open beyond permissible hours	5
Others Shop and Establishment (S & E)	5
Running without license	5
Shop open on weekly holiday	5
<b>Solid Waste Management (SWM)</b>	<b>3</b>
Cleaning of P.S.C. block/channels	2
Collection point not attended properly	2
Garbage lorry not reported for service/Lorry not covered	2
Garbage not lifted from House/Gully	2
Garbage not lifted from municipal market	2
Garbage not lifted from road/ authorised collection point	2
Lifting of Tree Cutting	5
No attendance at public toilets	2
Non-attendance of nuisance Detector	2
Others (SWM)	7
Providing/ removing/ replacing dustbins	5
Removal of dead animals	1
Removal of Debris	5
Silt to be lifted from road	7
Sweeping of roads	1
<b>Storm Water Drainage</b>	<b>7</b>
Cleaning of open SWD	7
Cleaning of Water Entrance	3
Cleaning/ Removal of silt from nullah/ cross culverts etc.	7
Flooding during Monsoon	1
Others (SWD)	7
Pre-monsoon works halted, terminated	7
Providing damage/missing gratings, manhole cover over SWD	7
Repair to damaged open SWD	15
Unauthorised Stalls and huts on nallas	5
<b>Water Supply</b>	<b>5</b>
Burst water main lines	4
Contaminated Water Supply	2
Leaks in Water Lines	4

<b>Pest control</b>	<b>7</b>
Nuisance due to white ants	7
Others (PCO)	7
Rat Nuisance	7
Unauthorised/ uncovered water storage tanks	7
<b>Pollution</b>	<b>7</b>
Air Pollution	7
Nuisance due to Masala Mills/ Flour Mills	7
Others (FAC)	7
Pollution due to Chemical Effluents	7
Unauthorised Factory, Workshop or Garage	7

<b>Water Supply</b>	<b>5</b>
Others (WAS)	7
Providing water by tankers	7
Removal of water meters	7
Shortage of water supply	4
Unauthorised tapping of water connections	4
Unauthorised use of water-Change of User	7
Use of Booster Pump	7