WHITE PAPER

Report on Status of Civic Issues in Mumbai

June 2020

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I. Foreword

While the entire world is grappling with the COVID-19 pandemic, Water, Sanitation and Hygiene (WASH) have gained immense importance in the prevention of the disease. It is however unfortunate, that provision of water supply, proper sanitation and Solid Waste Management (SWM), which are not just key determinants of health but also the most basic services provided to the public, are brought to importance only at the time of a crisis.

And this is not just about the pandemic. A high number of infections and deaths are regularly reported due to water contamination, poor sanitation and mismanaged waste. For example, the water quality tests of the Municipal Corporation of Greater Mumbai (MCGM) showed 1% unfit water samples in 2018-2019, but there were 1,03,509 reported cases of diarrhoea, 21 cases of cholera, and 4,280 cases of typhoid in the same period.

These services are therefore the most basic requirements of good health and of a good quality life. Praja has in the current report, thus attempted to analyse the status of water, sanitation and SWM in Mumbai, benchmarked with existing policy targets and compared with data on citizen's complaints to better understand ground realities of service provision.

In Mumbai, the city with the highest number of COVID-19 cases, a major concern is the inequity in provision of these basic services. More than density, it is the lack of adequate services such as water, sanitation and SWM that leads to poor living conditions, and aggravates the spread of diseases like COVID-19.

In the case of **water supply** for example, although the MCGM launched a 24x7 water supply project in 2014, the average timing of water supply in the city in 2018 was only 6 hours. Further, out of the 273 zones, 180 zones (66%) received only upto 4 hours of water supply. Top 4 wards (K/E, K/W, P/N and R/S) in complaints related to 'shortage of water supply' in 2019 were also wards, which had average water timings of less than 5 hours per day. Of this K/E, P/N and R/S have 49%, 54% and 58% of their population living in slums, respectively, which bear a larger brunt of poor accessibility due to shared connections and lack of proper storage facilities. 25 zones across the city received 24-hour water supply, these were mostly industrial areas, hospitals, education institutes, etc. which can serve as an example of providing adequate water to other zones as well.

In **sanitation services** as well, results of an MCGM toilet survey in 2015 highlight the grave inequity in facilities provided in public and community toilets. 28% of toilets were connected to the piped sewerage system, worst being in M/E (3%), S (4%) and H/W (7%) wards, which have high proportion of slum population- 30%, 72% and 39% respectively. In 78% of toilets, there was no proper information of water connection available. 58% of the toilet blocks surveyed had no electricity- a safety concern rendering the public toilet unusable at night. Again, the inequity was highest among wards with a high proportion of slum population- F/N, H/W and P/N where 99%, 88% and 80% toilets had no electricity.

In addition to water and sanitation, lack of proper **SWM** also contributes to poor hygiene and increases the incidences of diseases. While the SBM prescribes and MCGM claims 100% door-to-door collection of waste, citizens' complaints show otherwise. Of the total 17,116 SWM complaints in 2019, 36% were related to garbage not being collected. 41% of the total SWM complaints in 2019 were from 9 wards (F/N, P/N, P/S, R/N, R/S, M/W, N, L, and S) which have a slum population of more than 50%. In all of these wards the number of days taken to solve complaints related to 'garbage not lifted from collection point' (average 20 days), 'collection point not attended properly' (average 19 days), 'garbage vehicle not arrived' (average 26 days), was more than the prescribed time in the Citizen's Charter which was one day. L ward for example, which has 54% slum population, took the highest time among all wards in solving complaints related to 'garbage vehicle not arrived' (85 days).

From the above examples, it is evident that the adverse impact of this inequity in basic service provision is heavily borne by the lower economic sections of the city, residing in inadequate housing, such as slums. In the

case of COVID-19 for example, precautions to maintain hygiene do not hold valid when adequate water and sanitation facilities are not available to all.

While numerous efforts are being made by various governments to manage the pandemic situation in the city, this firefighting could have been prevented if the need for equitable provision of basic services as well as diseases and deaths of so many individuals over the years due to poor living conditions was valued.

However, all is not lost, even if it takes a crisis such as this to learn. What is important now, is to not repeat past mistakes. Policy and its implementation need to focus on three main aspects, when it comes to water, sanitation and SWM- equity, sustainability and public involvement.

Equity in adequacy and accessibility can be ensured by delinking basic services from the type of housing, and in the long term ensuring adequate housing for all, which is currently a major determinant of quality of basic services. Along with improved infrastructure for equity in basic service provision, **sustainability** aspects need to be considered for conservation and reuse of scarce resources. Finally, these two aspects can be enabled only if **people are actively involved** in decision-making and implementation of these services through a mechanism of localised community management of resources.

NITAI MEHTA
Founder Trustee, Praja Foundation

II. Acknowledgement

Praja has obtained the data used in compiling this white paper through Right to Information 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 & government officials, the Civil Society Organizations (CSOs) and the journalists who utilize and publicize 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, A.T.E Chandra Foundation, Narotam Sekhsaria Foundation, Madhu Mehta Foundation and numerous other individual supporters. Their support has made it possible for us to conduct our study & publish this white paper.

We would also like to thank our group of Advisors & Trustees and lastly but not the least, we would like to acknowledge the contributions of all members of Praja's team, who worked to make this white paper a reality.

Note: Due to the COVID-19 pandemic and the subsequent difficulty in receiving complete data from the related MCGM departments the paper suffers from the limitation of not including certain data points. Attempt is however made to portray the holistic situation of Mumbai using published data from online sources and to suggest changes in strengthening civic services in the city.

Section I: Water Supply

A. Key Highlights

Amount of Water Supply:

- As on 2018-19, amount of water at source (source yield) for Mumbai was 4,173 Million Litres per Day (MLD) while the ***overall water supplied to the city was 3,850 MLD with a 7.74% conveyance loss.***
- The Bureau of Indian Standards (BIS) prescribes an average of 135 litres per capita per day (lpcd) of water required for residential purposes[1] whereas ***the average amount of water supplied in Mumbai was calculated to be 188lpcd***[2].
- Although the average amount calculated as 188lpcd is higher than the prescribed 135lpcd, not all households receive this amount. A disparity in per capita water supply is evident from an MCGM report titled 'Towards Equitable and 24x7 Water Supply for Greater Mumbai' cited in various reports[3] which mentions that ***non-slum areas in Mumbai receive much more water (150lpcd) while slum areas receive only 45lpcd***.
- 29% of 15,507 water related complaints were of ***shortage of water*** in 2019.

Water Supply Timings:[4]

- The MCGM launched a 24x7 water supply project in 2014, but the ***average timing of water supply in the city in 2018 was only 5.9 hours.***
- However, out of the 273 zones, 180 zones ***(66%) receive only upto 4 hours of water supply.***
- ***Top 4 wards (K/E, K/W, P/N and R/S) in complaints*** related to 'shortage of water supply' in 2019 were also wards, which ***had average water timings of less than 5 hours*** per day. Of this K/E, P/N and R/S have 49%, 54% and 58% of their population living in slums, which bear a larger brunt of poor accessibility due to shared connections and lack of proper storage facilities.

Water Quality:

- MCGM's water quality tests based on BIS norms showed ***1% unfit samples in 2018-19***.
- However, ***13% of 15,507 water complaints in 2019 were related to contamination***.
- Further, in 2018-19, the number of ***reported diarrhoea cases were 1,03,509,*** 21 cases of cholera, and 4,280 cases of typhoid.

Water Metering:

- MCGM's water metering policy of 2019, Atal Mission for Rejuvenation and Urban Transformation (AMRUT)[5] and the National Water Mission[6] have ***100% metering*** as a goal.
- However, in Mumbai the ***island city has unmetered connections*** and pays a lump sum 'cost for service' as a component of the property tax while metered connections in rest of the city pay 'cost for amount of water' according to the Water Charges Rules, 2015.
- In the water costing for metered connections, ***slum households pay Rs 3.59/1000lt. only marginally less (Rs. 0.73/1000lt) than non-slum households which pay Rs.4.32/1000lt***. This highlights that non-slum areas benefit more from the water subsidy than slum residents.

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[1] https://law.resource.org/pub/in/bis/S03/is.1172.1993.html

[2] According to data on number of metered connections, 83% are residential, if this figure were assumed for the entire city the per capita consumption is calculated by subtracting non-revenue water from the source yield (taken as 30% according to a report on 'Economics of Mumbai Water Supply' by Mr. S.N. Patankar, Former MCGM City Engineer and current Member of Mumbai Vikas Samiti), and dividing 83% of the remainder by the population.

[3] The full report is not available in the public domain, but is cited by various published articles: https://www.hindustantimes.com/mumbai-news/mumbai-civic-body-s-water-plan-pay-more-if-you-exceed-usage-cap/story-TUFJgoqRGXdLhzcLqu4UuM.html

[4] https://portal.mcgm.gov.in/irj/portal/anonymous/qlhedocs

[5] http://amrut.gov.in/content/innerpage/the-mission.php

[6] http://nwm.gov.in/?q=goal-4

- 100% metering faces ***implementation issues,*** especially in slum areas. For example, S ward, which has the highest proportion of slum population in Mumbai (72%), also had the highest number of complaints in leakages near meters and second highest complaints in non-receipt of water bills. Similarly, F/N ward (58% slum population) had the highest complaints in unauthorised use of water.

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

Mumbai city is largely dependent upon fresh water 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 pipe lines and tunnels to water treatment facilities at Bhandup Complex (2810 MLD) and Panjrapor (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.[7]

Table 1: Water Supply and Conveyance Losses in Mumbai from 2015-16 to 2018-19[8]

Years	2015-16	2016-17	2017-18	2018-19
Overall				
Overall Water Yield from source (MLD)	3,900	4,200	4,173	4,173
Overall Water Supply (MLD)	3,750	3,750	3,850	3,850
Conveyance Losses (MLD)	150	450	323	323
Conveyance Losses in %	3.85%	10.71%	7.74%	7.74%

Inference:

- Overall source yield of water has increased by 7% from 2015-16 to 2018-19 whereas the overall water supply to the city has increased by 2.6% in the same period.
- This is because conveyance losses increased from 2015-16 to 2018-19 although it has reduced after 2016-17.
- Conveyance losses as on 2018-19 were 7.74% of the total water yield at 323 MLD which considering the average per capita requirement of 135lpd (as per BIS norms) could otherwise serve 23,92,593 persons' water requirements.

[7] MCGM Environment Status Report 2018-19.

[8] MCGM Environment Status Reports 2015-16 to 2018-19. 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.

Table 2: Sources of Drinking Water in Mumbai (Census 2011)

Source	Within premises		Near premises		Away		Total number of households	
	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%
Total	**21,06,359**	**100%**	**4,76,445**	**100%**	**82,677**	**100%**	**26,65,481**	**100%**

Inference:

- Although the central government's **Jal Jeevan Mission** has set a target of piped water connections for all households by 2024 this is applicable only to rural areas in line with the targets adopted by the central government under **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 proportion of population using safely managed drinking water services. Further, under WHO norms [9] for improved water source, vender provided water including water tankers/carts, unprotected wells, and surface water sources are considered unimproved sources of water. Mumbai's census data shows overall 2.2% of such unsafe water sources apart from another 2.4% 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.

[9] https://www.who.int/water_sanitation_health/monitoring/jmp2012/key_terms/en/

Table 3: Water Supply Ward Wise Average Timings per Day (2018)[10]

Ward	Number of Supply Zones	Average Number of hours of Water Supply
A*	14	4.13
B*	6	1.50
C	5	1.60
D	18	5.06
E*	14	7.27
F/N	5	5.60
F/S	9	3.08
G/N	4	4.25
G/S	9	5.39
H/E	10	3.50
H/W	10	3.38
K/E	15	4.88
K/W	17	3.15
L	8	9.83
M/E	19	7.93
M/W	5	14.42
N	6	14.38
P/N*	27	4.32
P/S	12	4.62
R/C	6	2.08
R/N	9	2.24
R/S*	22	4.39
S	19	13.93
T	4	19
Total	**273**	**5.99**

Note (*): A ward has 4 zones for which water supply timing was not available, B ward has 3 zones, E ward has 2 zones, P/N and R/S wards have 1 zone each for which water supply timing was not available.

Inference:

- 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.
- B, C and R/C wards have the least average time for which water is supplied while T, M/W and N wards have the highest supply time.

[10] https://portal.mcgm.gov.in/irj/portal/anonymous/qlhedocs?guest_user=english

Table 4: Ward wise Number of zones with water supply duration (2018)

Ward	Number of Supply Zones	<=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	14	8	0	1	0	0	1	0	4
B	6	3	0	0	0	0	0	0	3
C	5	5	0	0	0	0	0	0	0
D	18	7	5	3	1	1	0	1	0
E	14	9	0	0	0	0	0	3	2
F/N	5	0	3	1	0	1	0	0	0
F/S	9	0	9	0	0	0	0	0	0
G/N	4	0	2	2	0	0	0	0	0
G/S	9	1	5	2	0	0	0	1	0
H/E	10	0	10	0	0	0	0	0	0
H/W	10	0	10	0	0	0	0	0	0
K/E	15	0	12	1	0	2	0	0	0
K/W	17	4	11	2	0	0	0	0	0
L	8	0	0	2	5	1	0	0	0
M/E	19	5	6	3	1	0	0	4	0
M/W	5	0	0	2	0	2	0	1	0
N	6	0	0	3	0	0	0	3	0
P/N	27	6	14	4	1	0	0	1	1
P/S	12	1	9	1	0	0	0	1	0
R/C	6	3	3	0	0	0	0	0	0
R/N	9	3	6	0	0	0	0	0	0
R/S	22	5	10	2	4	0	0	0	1
S	19	1	3	2	3	3	0	7	0
T	4	0	1	0	0	0	0	3	0
Total	**273**	**61**	**119**	**31**	**15**	**10**	**1**	**25**	**11**

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

Inference:

- Out of the 273 zones, 180 zones (66%) receive upto 4 hours of water supply, while 25 zones (9%) receive water supply for 24 hours.
- Data on water timings across the city shows that of 273 zones, in 22 zones water is supplied at timings starting before 6am and upto after 12midnight for <=2 hours and in 37 zones for >2 to <=4 hours.
- MCGM had started its 24 hour water supply project in 2014, for 24x7 water in all wards, in 2018 it started a pilot in 2 wards –H/W and T but even in these wards it is able to provide water for only for 'longer hours and not for the entire day'. Data shows that in T ward, 3 of 4 zones receive 24x7 water, whereas in H/W all 10 zones receive only upto 4 hours of water. Across Mumbai out of the 25 zones, 15 zones that received 24-hour water supply were in industrial areas, hospitals and education institutes, etc.

Table 5: Ward Wise Metered Connections in Mumbai (2019)[11]

Ward	Total Water Connections	Commercial	Residential	Industrial
A	5,379	3,324	1,942	113
B	1,973	1,627	325	21
C	3,042	2,542	419	81
D	8,817	3,689	4,923	205
E	4,917	2,757	1,489	671
F/N	14,529	2,108	12,377	44
F/S	5,218	1,784	3,198	236
G/N	11,347	2,987	8,179	181
G/S	5,821	1,802	3,677	342
H/E	31,431	1,952	29,406	73
H/W	20,160	4,008	16,139	13
K/E	33,654	4,615	28,248	791
K/W	28,001	5,007	22,763	231
L	29,937	2,562	26,864	511
M/E	27,038	963	25,922	153
M/W	23,816	2,087	21,632	97
N	18,969	2,397	16,385	187
P/N	35,126	3,472	31,445	209
P/S	15,675	2,530	12,342	803
R/C	17,995	3,774	14,189	32
R/N	14,101	2,149	11,840	112
R/S	25,249	2,548	22,260	441
S	25,714	2,185	23,191	338
T	12,635	2,546	9,964	125
Total	**4,20,544**	**65,415**	**3,49,119**	**6,010**

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 goal. However, as outlined in the MCGM policy as well, old connections in the island city continue to be unmetered.
- Data of metered connections shows that 83% of the connections are residential while 16% were commercial and 1% was industrial.

[11] https://portal.mcgm.gov.in/irj/portal/anonymous/qlhedocs?guest_user=english

Table 6: Affordability of Water Supply (Residential)

Type of Connection	Metered Tap (Other Residential)	Metered Tap (Slum)	Non-metered Tap(Water Tax)	Tanker (Other Residential)	Tanker (Slum)
Cost criteria	Rs. 4.32/1000lt[12]	Rs. 3.59/1000lt	% of property tax	Rs. 236/1000lt	Rs. 210/1000lt
Average expense per month based on per day norm (135lpcd)	Rs. 17.5	Rs.14.54	NA	Rs. 955.8*	Rs. 850.5*
Average expense per month based on Mumbai's per capita average(188lpcd)	Rs. 24.36	Rs. 20.25	NA	Rs. 1,331.04*	Rs. 1,184.4*
Average expense per month based on Mumbai's slum (45lpcd) and non-slum (150lpcd) per capita average	Rs. 19.44	Rs. 4.85**	NA	Rs. 1,062*	Rs 567**

Note: (**) Cost of water for slum households is calculated based on the following consideration- if 45 lpcd is received from the metered connections it costs Rs. 4.85 per month; while the rest 90lpcd (considering daily norm requirement of 135lpcd) is met through tanker water, which would cost Rs. 567. The total monthly cost for a slum household to use 135lpcd would therefore be Rs. 571.85.

(*) Cost of water calculated considering the entire amount received from tanker.

NA: Since the percentage amount is not available and charges vary according to property size the cost cannot be calculated for non-metered connections.

Inference:

- Currently in Mumbai there are two methods followed for water costing- cost for service and cost for amount of water.
- The former is applicable to old connections in the island city that are unmetered and pay water charges as a component of the property tax according to Section 141 of MCGM Act.
- Whereas the metered connections and water supply through tankers is based on amount of water consumed, charges of which are based upon the Water Charges Rules[13], last revised in 2015.
- However, water subsidy clearly benefits the non-slum households, as is evident from the fact that slum households pay only Rs. 0.73/1000lt. less than non-slum households.
- Further, considering the inequity in amount of water received per capita in slum and non-slum areas, slum dwellers often end up spending much more for their water through other means such as water tankers, which are much more expensive than the metered connections. For example, if a slum household receives an average of 45lpcd as mentioned in the MCGM report 'Towards Equitable and 24x7 Water Supply for Greater Mumbai', the metered connection per month would cost Rs. 4.85 per capita. But for meeting its water needs, the family would need to access other sources such as tankers which would cost an exorbitant Rs. 567 per capita for the remainder 90lpcd (considering the per capita requirement of 135lpcd).
- Considering an average family size of 4.58 per family, average expense per month (based on Mumbai's slum (45lpcd-metered, 90lpcd-tanker) and non-slum (150lpcd) per capita average) would be Rs. 89 for a non-slum household and Rs. 2,619 for a slum household. If the entire 135lpcd is provided through metered tap for slums then the cost would be Rs. 67.

[12] This rate is applicable for usage of 150litres per capita per day (lcpd). Thereafter it is progressive as follows: 150-200lpcd is Rs. 8.64/1000lt, 200-250lpcd is Rs. 12.96/1000lt and above 250lpcd is Rs. 17.28/1000lt.

[13] https://portal.mcgm.gov.in/irj/go/km/docs/documents/MCGM%20Department%20List/Hydrallic%20Engineer/DOCS/Water%20Charges%20Rules%20effective%20from%2001.04.2015_English.pdf

C. Quality of Water Supply 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 portable water and water for domestic use, which is regularly monitored by the MCGM.[14] 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 source point, prior and after treatment.

Table 7: Ward Wise Drinking Water Quality Testing Results from 2015-16 to 2018-19

Ward	% of unfit samples			
	2015-16	2016-17	2017-18	2018-19
A	7%	9%	5%	1.3%
B	8%	5%	4%	2.1%
C	2%	3%	1%	1.2%
D	6%	3%	2%	1.5%
E	3%	3%	1%	0.8%
F/N	5%	3%	1%	1.2%
F/S	6%	6%	2%	0.8%
G/N	2%	2%	3%	0.9%
G/S	3%	3%	1%	0.6%
H/E	2%	3%	1%	0%
H/W	10%	6%	2%	1.3%
K/E	2%	1%	1%	0.6%
K/W	2%	2%	<1%	0.1%
L	4%	4%	2%	1.2%
M/E	5%	3%	2%	1.9%
M/W	5%	5%	2%	2.4%
N	3%	2%	1%	0.7%
P/N	2%	1%	<1%	0.2%
P/S	4%	3%	1%	0.8%
R/C	4%	3%	5%	1.8%
R/N	6%	4%	2%	2%
R/S	3%	0%	1%	0.4%
S	3%	2%	1%	0.1%
T	13%	7%	1%	0.4%
Average	**4.6%**	**3.5%**	**1.9%**	**1%**

Inference:

- Percentage of unfit testing samples has reduced considerably from 4.6% in 2015-16 to 1% in 2018-19.
- M/W (2.4%), B (2.1%) and R/N (2%) wards had the highest % of unfit samples in 2018-19.
- 13 out of 24 wards had less than 1% unfit samples in 2018-19.

[14] https://cpcb.nic.in/wqstandards/

D. Sustainability

Sustainability is an important factor in water supply in urban areas. It has been an emerging theme of all major water policies, and rightly so. A Niti Aayog report on Composite Water Management Index[15] 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 last year. It is therefore of utmost importance to focus on the sustainability of water, given that even in Mumbai the demand for water is estimated to double in the next 20 years.

The recently launched national **Jal Shakti Mission**[16] lays 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**[17] 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 plot area 500 Sq. Mts. & more.
However, inspite of the policy there is no available data of the number of rainwater harvesting units in Mumbai, in the public domain.

E. Recommendations

- **Amount and Timing:** The required BIS standard of 135lpcd should be supplied to every connection with atleast 6-hour water supply in all areas.

- **Quality:** MCGM tests for drinking water quality check 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.

- **Metering/Costing:** Water metering should be adopted for residential connections per household to accurately track the amount of water used.

- **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 implementation of RWH projects. RWH will also enable meeting the future water demand and reduce the transmission wastage of water.

- **Monitoring:** 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.

[15] https://niti.gov.in/sites/default/files/2019-08/CWMI-2.0-latest.pdf
[16] http://nwm.gov.in/
[17] https://portal.mcgm.gov.in/irj/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

Section II: Sanitation and Sewerage System

A. Key Highlights

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.

Coverage:

- The AMRUT policy[18] of the central government declares providing a ***sewerage connection to every household*** as one of its mission statements.
- Mumbai census data however shows that ***42% of the total households did not have access to toilet within the premises***, majority of which (94.8%) use public/community toilets, highlighting the importance of coverage and equity factors of public/community toilets.

Public Toilets:

- Although the Swachh Bharat Mission (SBM) has focussed on construction of toilets, ***only 1 in 4 public toilets were for women*** in 2018.
- Based on the census population figures, there is currently *1 public toilet seat per 696 males and 1,769 females,* while the SBM prescribes 1 toilet for 100-400 males and 100-200 females respectively.

Community Toilets:

- In c*ommunity toilets*, that are generally built for slum pockets the ***male to female ratio is equal***.
- However, the numbers of toilet seats are still lesser than the prescribed norms. Based on the census slum population figures, there is currently ***1 toilet seat per 42 males and 34 females,*** while the SBM prescribes 1 toilet for 35 males and 25 females respectively.

Toilet Facilities:

- Results of an MCGM toilet survey highlight the grave inequity in facilities provided in public and community toilets.
- ***28% of toilets were connected to the piped sewerage system***, worst being in M/E (3%), S (4%) and H/W (7%) wards, which also have high proportion of slum population- 30%, 72% and 38% respectively.
- In ***78% of toilets, there was no proper information of water connection*** available.
- ***58% of the toilet blocks surveyed had no electricity***- a safety concern rendering the public toilet unusable at night. Again, the inequity was highest among wards with a high proportion of slum population- F/N, H/W and P/N where 99%, 88% and 80% toilets had no electricity.

[18] http://amrut.gov.in/content/innerpage/the-mission.php

Sewage Treatment:

- Mumbai currently generates ***2,279MLD of sewage*** of which 2,052.1MLD is treated in MCGM's ***8 Sewage Treatment Plants (STPs)*** at Malad, Versova, Bhandup, Colaba, Bandra, Worli, Charkop and Ghatkopar.[19]
- However, as of 2019, ***4 of 8 STPs conduct only preliminary treatment***, 3 conduct primary and secondary treatment while one has primary, secondary and tertiary treatment.[20]
- Highest Biochemical Oxygen Demand (BOD) in 2018-19 was at Colaba and Malad STPs at 90mg/lt.[21], much higher than the prescribed limit of 20mg/lt. by the Central Pollution Control Board (CPCB) and 10mg/lt. by the Maharashtra Pollution Control Board (MPCB).
- As a result, ***major sea outlets and beaches in Mumbai are polluted***[22] from untreated sewerage and/or surface pollution including solid waste. The average maximum BOD recorded in all the major beach outlets was 20mg/lt. in 2016, much higher than the prescribed norm for beaches by the CPCB of <3mg/lt.
- Similarly the maximum BOD of ***Mithi river*** was 80mg/lt. (compared to the norm of <3mg/lt.) showing that it is highly polluted from untreated sewerage and waste disposal.

[19] Maharashtra Pollution Control Board 2018-19 Annual Report
[20] As per an RTI response.
[21] Maharashtra Pollution Control Board 2018-19 Annual Report
[22] https://cpcb.nic.in/nwmp-data/

B. Coverage

Table 8: Type of toilet and sewerage facilities in Mumbai (Census 2011)

Type of Facilities			Mumbai District	Mumbai Suburban District	Total	%
Number of households with latrines facility in the premises	Flush/Pour Flush Latrine	Piped sewer system	3,61,541	8,66,917	12,28,458	80%
		Septic tank	38,060	1,64,599	2,02,659	13.2%
		Other systems	6,813	18,899	25,712	1.7%
	Pit Latrine	With slab/ ventilated improved pit	8,904	20,298	29,202	1.9%
		Without slab/ open pit	168	1,651	1,819	0.1%
	Night soil disposed into open drain		9,819	27,064	36,883	2.4%
	Service Latrine	Night soil removed by human	309	828	1,137	0.1%
		Night soil serviced by animal	1,594	8,367	9,961	0.6%
	Total		**4,27,208**	**11,08,623**	**15,35,831**	**100%**
Number of households with no latrines facility in premises	Public Latrines		2,01,190	8,70,222	10,71,412	94.8%
	Open		9,340	48,898	58,238	5.2%
	Total		**2,10,530**	**9,19,120**	**11,29,650**	**100%**

Inference:

- 42% of the total households did not have access to toilet within the premises, majority of which (94.8%) use public/community toilets, highlighting the importance of coverage and equity factors of public/community toilets.
- 58,238 households in Mumbai reported to practice open defecation while 36,833 households reported disposal of night soil into an open drain.
- Of the 58% households with toilet 80% are connected to the piped sewer system while 13.2% are connected to the septic tank.
- 95% of household toilets have flush services, 2% have pit latrines, 2% night soil disposed in open drain and 1% service latrines.
- The census data also highlights that the type of toilets built and policy choices that support particular type of toilets have a direct impact on human right issues. For example, the Swachh Bharat Mission Urban Guidelines, 2017[23] prescribe for 4 types of toilet constructions (two-pit latrines, septic tanks, bio digester anaerobic and aerobic tanks, of which the first two have to be cleaned manually if there is no proper equipment to pump out the sewage. The Guidelines have no mention of any such equipment. The above data shows that apart from the 1,137 households that reported manual scavenging of night soil, septic tanks and pit latrines of 2,33,680 households are likely to be manual cleaned if proper equipment is not available/used.

[23] http://swachhbharaturban.gov.in/writereaddata/SBM_GUIDELINE.pdf

Swachh Sarvekshan under the SBM surveys urban centres across India on sanitation and waste management. 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 ODF for sanitation and star ratings for SWM.

Mumbai's 2019 rank was 49 among 100 cities (with more than 1 lakh population) fallen from 19 in 2018. The fall can be attributed to the change in methodology, which added weightage for certifications such as Star Rating (for SWM) and ODF (for sanitation).

In the ranking for sanitation (open defecation free), [24] that has three parameters ODF, ODF+ and ODF++. Which include various requirements for toilets, toilet facilities and sewerage systems; Mumbai had an ODF status as of Swachh Sarvekshan 2019.

An ODF city/ward is defined as[25] '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 toilet, have constructed one.
- All occupants of those households that do not have space to construct 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.
- City has a mechanism in place through which fines are imposed fine on people found defecating in the open.

Under the 'Swachh Certificate for Open Defecation Free Status'[26] banner, Greater Mumbai had been declared 100% Open Defecation Free (ODF) as of 18-08-2018.

Further under the Swachh Bharat Mission Urban Guidelines, 2017 for community and public toilets the prescribed norms for 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 Trans genders 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- 54% males and 46% females.

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

[24] https://www.pcmcindia.gov.in/marathi/swm2019/ODFPlus.pdf
[25] https://smartnet.niua.org/sites/default/files/resources/ODF%20Declaration%20booklet.pdf
[26] http://sbmodf.in/?metric=ALL&state=maharashtra&city=greater%20mumbai

Table 9: Number of Public Toilet Seats in Mumbai upto 2018

Ward	Population	Ladies	Gents	Specially Abled	Disparity (between Male and Female toilets)
A	1,85,014	102	449	17	77%
B	1,27,290	92	377	18	76%
C	1,66,161	55	356	9	85%
D	3,46,866	79	327	17	76%
E	3,93,286	105	435	45	76%
F/N	5,29,034	130	388	12	66%
F/S	3,60,972	155	517	1	70%
G/N	5,99,039	675	1,507	21	55%
G/S	3,77,749	106	406	4	74%
H/E	5,57,239	95	277	0	66%
H/W	3,07,581	70	243	7	71%
K/E	8,23,885	98	258	1	62%
K/W	7,48,688	162	467	3	65%
L	9,02,225	104	292	10	64%
M/E	8,07,720	267	631	5	58%
M/W	4,11,893	135	327	12	59%
N	6,22,853	98	331	0	70%
P/N	9,41,366	101	328	32	69%
P/S	4,63,507	54	184	9	71%
R/C	5,62,162	96	255	6	62%
R/N	4,31,368	170	340	8	50%
R/S	6,91,229	95	315	0	70%
S	7,43,783	103	325	1	68%
T	3,41,463	90	311	4	71%
City Zone total	30,85,411	1,499	4,762	144	69%
Western Suburbs	55,27,025	941	2,667	66	65%
Eastern Suburbs	38,29,937	797	2,217	32	64%
Total	**1,24,42,373**	**3,237**	**9,646**	**242**	**66%**

Note: In response to an RTI for 2019 public toilets data, 2018 data was given since 2019 data has not been compiled.

Inference:

- The disparity between number of toilet seats for males and number of toilets for females is shocking in Mumbai- only one in four toilets were for females.
- C ward has the largest disparity with 85%, while R/N ward has the lowest disparity of 50%.
- H/E, R/S and N wards also has no provision for differently abled people to use toilets. This means that three entire wards in Mumbai do not have sanitation facilities for differently abled people.

Table 10: Number of Community Toilets[27] Seats in Mumbai by Gender upto 2019

Type of Toilets	Toilet Seats				Toilet Blocks
	Male	Female	Specially Abled	Total	
Community Toilets	68,796	68,599	2,192	1,39,587	9,861

Inference:
Compared to public toilets, the gender parity of community toilets is much better with the number of toilet seats almost equal. However, only 1.5% of the total toilet seats were dedicated for specially abled.

[27] Community Toilets include toilets built by MHADA and MCGM.

Table 11: Survey[28] Results of Facilities in Toilets in Mumbai (in %)

Ward	Toilet Blocks	Type of Sewerage					Water connection					Electricity connection	
		Sewage line	Septic Tank	Open drainage/Nallah	Aqua privy/pit latrine	Not Given	MCGM connection	Stand post connection	Water tank	Well/bore well	NA	No	Yes
A	93	73	2	20	0	4	54	0	10	4	32	29	71
B	40	90	10	0	0	0	90	0	8	3	0	0	100
C	35	80	3	17	0	0	80	0	0	14	6	9	91
D	91	80	3	15	0	1	38	0	0	4	57	46	54
E	78	24	72	4	0	0	76	0	8	0	17	29	71
F/N	201	55	44	0	0	0	1	0	31	0	68	99	1
F/S	135	100	0	0	0	0	0	0	65	1	34	62	38
G/N	239	51	47	2	0	0	46	0	2	3	49	48	52
G/S	110	80	20	0	0	0	34	0	0	0	66	55	45
H/E	357	55	45	0	0	0	16	0	0	1	82	77	23
H/W	173	7	93	0	0	0	19	1	1	0	79	88	12
K/E	791	16	79	3	1	1	6	0	0	2	91	61	39
K/W	215	14	70	0	9	7	24	0	0	1	75	64	36
L	777	41	57	0	0	2	19	1	1	0	79	64	36
M/E	429	3	96	0	1	0	13	0	6	19	62	47	53
M/W	217	17	83	0	0	0	17	0	0	3	79	42	58
N	524	55	45	0	0	0	23	0	2	4	71	54	46
P/N	1,268	18	81	1	0	0	7	0	1	1	91	80	20
P/S	335	34	66	0	0	0	7	0	0	4	89	61	39
R/C	254	13	87	0	0	1	13	0	2	4	81	85	15
R/N	399	9	91	0	0	0	17	0	0	3	80	57	43
R/S	395	30	70	0	0	0	15	1	2	1	81	44	56
S	1043	4	96	0	0	0	7	0	1	4	88	25	75
T	216	42	57	0	1	0	29	0	4	15	52	57	43
Total	**8,415**	**28**	**70**	**1**	**0**	**1**	**16**	**0**	**3**	**3**	**78**	**58**	**42**

Inference:

- Only 28% of toilets were connected to the piped sewerage system, worst being in M/E (3%), S (4%) and H/W (7%) wards. Septic tank toilet was the preferred type of toilet (70%) which is likely to be cleaned manually if there is no proper equipment to pump out the sewage.
- In 78% of toilets, there was no proper information of water connection available, and in 16%, water was provided by the MCGM, 3% through tanker and 3% through wells. Lack of water in toilets reflects poor hygiene, cleanliness and inability to provide a basic sanitation service to the public. Water is especially important in cases when the toilet facilities are also used as a source of non-portable water.
- 58% of the toilet blocks surveyed had no electricity- this is a safety concern rendering the public toilet unusable at night.

[28] Survey of Municipal Corporation of Greater Mumbai Toilet blocks surveyed by M/s Cybertech system & Software LTD, 2015. Includes public and community toilets. https://portal.mcgm.gov.in/irj/portal/anonymous/qlmsdp. Summary of this data was also received in a 2019 RTI reply.

C. Treatment

There are various national level policies related to sewerage. The Atal Mission for Rejuvenation and Urban Transformation **(AMRUT)** policy[29] of the central government declares providing a sewerage connection to every household as one of its mission statements. Similarly, the **National Water Mission**[30] aims at incentivising recycling of water including wastewater and development of an eco-friendly sanitation system. The **Jal Shakti Abhiyan**[31] of the ministry has increase in 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) in Mumbai, which treat 2,052 MLD out of the total 2,279 MLD of sewage generated in 2018-19.[32] However, it is important to note that most STPs in Mumbai are only undertaking primary treatment.[33] This is evident from the table below where only few STPs on an 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 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 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 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/lt. MPCB has adopted a stricter norm of 10mg/lt. The CPCB norm followed for BOD of waterbodies is 3mg/lt.

2. **Total Suspended Solids (TSS)**: Refers to the dry weight of undissolved solid particles in water. The prescribed limit for STP outlet is 50mg/lt. by CPCB and 20mg/lt. 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[34]/100ml and for drinking water, detectable faecal coliform has to be nil.

[29] http://amrut.gov.in/content/innerpage/the-mission.php
[30] http://nwm.gov.in/
[31] http://geourbanmissions.gov.in/
[32] http://www.mpcb.gov.in/about-us/annual-report
[33] 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.
[34] Most Probable Number (MPN) is a method to estimate concentration of microorganisms in liquid.

Table 12: Status of Mumbai's Sewage Treatment Plant's Waste Water Quality from 2015-16 to 2018-19[35]

Criteria			2015-16	2016-17	2017-18	2018-19
BOD (Prescribed limit is 20mg/lt. by CPCB and 10 mg/lt. by MPCB)	Colaba	Inlet	42	NA	59.14	124
		Outlet	59	123.4	42	89.6
	Worli	Inlet	114	NA	114	118
		Outlet	87	139.16	87.14	71.5
	Bandra	Inlet	NA	110	NA	110
		Outlet	35	70	42	18
	Versova	Inlet	52	70	60	110
		Outlet	36	7	32	45
	Bhandup	Inlet	NA	NA	NA	NA
		Outlet	36	8	15	15
	Ghatkopar	Inlet	NA	90	NA	NA
		Outlet	50	44.25	40	40
	Malad	Inlet	88	120	250	250
		Outlet	73	60	90	90
	Charkop	Inlet	135	78	80	80
		Outlet	85	80	78	78
TSS (Prescribed limit is 50mg/lt. by CPCB and 20mg/lt. by MPCB)	Colaba	Inlet	46	NA	46	82
		Outlet	38	41	37.71	64
	Worli	Inlet	144	NA	142	65
		Outlet	136	56.8	98	41.6
	Bandra	Inlet	NA	240	NA	60
		Outlet	24	18	28	18
	Versova	Inlet	53	38	55	90
		Outlet	26	22	31	28
	Bhandup	Inlet	NA	NA	NA	NA
		Outlet	30	10	22	22
	Ghatkopar	Inlet	NA	62	NA	NA
		Outlet	45	66.5	30	30
	Malad	Inlet	120	40	35	35
		Outlet	75	15	18	18
	Charkop	Inlet	135	110	115	115
		Outlet	78	76	16	16

Note: Light green refers to MPCB criteria met, Dark green is CPCB criteria met, Red is where average outlet quality is worse than inlet.

Inference:

- None of the STPs in Mumbai has achieved the prescribed levels of biochemical oxygen demand in the last 4 years. Only in 2016-17 the average BOD of Versova and Bhandup plants were lower than the prescribed limit of MPCB (10mg/lt.) while in 2017-18 and 2018-19 Bhandup STP and Bandra STP in 2018-19 met the CPCB's higher limit of 20mg/lt.

[35] http://www.mpcb.gov.in/about-us/annual-report

- Highest BOD in 2018-19 was at Colaba and Malad STPs at 90mg/lt., much higher than the prescribed limit, reflecting that even after primary treatment the water is highly polluted. If water is to be reused in the long run for sustainability of the water-sewerage system, it will be important to improve the treatment facilities.
- As for total suspended solids, the STPs have fared better, highlighting that primary treatment is able to tackle suspended solids in the sewerage.

Table 13: Quality of Water Bodies in Mumbai in accordance with CPCB norms (2016)[36]

Station name	Type of Water Body	B.O.D. (mg/l)		Faecal Coli form (MPN/100ml)	
		<3 mg/l		<2500MPN/100ml	
		Min	Max	Min	max
Source					
Bhatsa U/S Of Liberty Oil Mills, Satnel, Shahapur, Thane	Minor River	2.4	4	7	430
Bhatsa D/S Of Liberty Oil Mills, Satnel, Shahapur, Thane	Minor River	2.6	4	11	920
Bhatsa D/S Of Pise Dam Near Pise Village (Ulhas)	Minor River	2.6	4.8	2	46
Tansa Near Road Bridge, Village Dakewali, Wada, Thane	Minor River	2.8	6	4.5	49
Vaitarna Near Road Bridge, Gandhare Village, Wada, Thane	Minor River	2.6	4	4	34
Outlet					
Sea Water At Nariman Point, Colaba, Mumbai	Marine	8.2	20	220	920
Sea Water At Malabar Hill, Walkeshwar, Mumbai	Marine	8	20	110	1600
Sea Water At Haji Ali, Worli, Mumbai	Marine	7.2	20	130	1600
Sea Water At Shivaji Park, Dadar, Mumbai	Marine	7.8	20	280	1600
Sea Water At Juhu Beach, Juhugaon, Santacruz, Mumbai	Marine	8.2	22	220	1600
Mithi	Minor River	16	80	220	1600
Mahim Creek At Mahim Bay	Creek	7.4	19	94	920

Inference:

- The above table indicates that Mumbai's water sources even before treatment are not highly polluted.
- 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/lt. Although faecal coliform is within prescribed limits it is still high at most beaches (maximum 1600MPN/100ml)
- Mithi river pollution from untreated sewerage and waste disposal is evident from the high BOD (maximum 80mg/lt.)

To improve sewage facilities, MCGM has planned a total capacity of 2,544 MLD with BOD norms of 20mg/lt., TSS at <50mg/lt. and FC at <1000mpn/100ml.

[36] https://cpcb.nic.in/nwmp-data/

D. Recommendations

- **Policy Changes:** Policies related to sanitation need to have a holistic approach and take into consideration the entire sanitation cycle including management of sewage systems and treatment of sewage. Bias (male to female public toilet norm) and lack of clarity (no proper norms mentioned for toilet facilities) in the SBM Guidelines, needs to be rectified. Sanitation policies need to incentivise use of sustainable toilet blocks and those that connect to the piped sewerage system.

- **Coverage and Mechanisation:** To eliminate human-faeces contact and prevent diseases caused due to poor sanitation, all toilet blocks must be connected to the sewerage system and use of septic tanks/pit latrines should be reduced. Use of human labour in cleaning of sewerage must be eliminated by complete mechanisation of the process of cleaning sewerage pipes/tanks, etc.

- **Equity:** Male-female disparity in toilet seats needs to be corrected for public toilets, and toilet facilities for transgenders and for the specially abled needs to be provided. Unisex toilets (such as eco-toilets) can also be promoted, which can be used by all genders.

- **Facilities:** Water and electricity in public and community toilets is essential for ensuring cleanliness, hygiene, safety, and prevention of diseases- it must be ensured that these facilities are available and functioning in all toilets.

- **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 of 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 sewage should also be incentivised where possible (example: housing societies, large commercial establishments, industrial establishments) so that treatment of sewage can be done locally and can reduce the water demand of that unit.

Section III: Solid Waste Management

A. Key Highlights

Segregation:

- The Municipal Solid Waste (Management and Handling) Rules, (MSW rules) 2016[37] provide for 100% segregation of waste at source. Mumbai ***segregates 83% of its waste***- this is however not only segregation at source, as mandated by the rules.

Door-to-Door Collection:

- SBM[38] prescribes for 100% door-to-door collection as a primary indicator. ***MCGM claims 100% door-to-door collection*** of waste as on 2018-19.[39]
- However, of the total 17,116 SWM complaints in 2019, ***36% were related to garbage not being collected.***
- What is also an important factor is ***frequency of collection***, in order to ensure pubic hygiene and cleanliness. While the MCGM citizen charter prescribes ***1 day*** to solve issues of collection of garbage, it took ***17 days on an average to solve complaints of 'garbage lifting', 20 days for 'collection point not attended' and 22 days for 'garbage vehicle not arrived'.***

Scientific Disposal of Waste:

- MSW rules provide for ***100% waste to be scientifically disposed***.
- Approximately 2,500MTD to 3,100MTD of waste was dumped in Deonar in 2018-19, which has been functional for the past 88 years, way beyond the prescribed active landfill lifespan of 10 to 25 years.[40]
- 4,500MTD of waste was processed in the newly established (4 years) Kanjur Municipal Solid Waste (MSW) Processing Facility with bioreactor and windrow composting technologies***. Given the new Kanjur facility, waste scientifically disposed increased from 30% in 2015-16 to 63% in 2018-19.*** It is still however significantly lower than the prescribed norm of 100%.

Waste Recovery:

- The MSW rules and SBM indicators, both stress on waste recovery, through various practices such as ***waste to energy and waste to compost.***
- According to the MSW rules, atleast ***80% of the waste generated by local bodies needs to be recovered.***
- Mumbai as of 2018-19 ***recovered only 35% of its waste***.
- Mumbai generated an average of 7,450 Metric Tonnes per Day (MTD) of waste as of 2018-19, of which ***73% was food biodegradable waste***, which can be easily recovered through composting.
- Various initiatives were started by MCGM to increase waste recovery. ***Advanced Locality Management (ALM)[41] and policy of bulk generators***[42] both aimed to promote segregation and localised composting.

[37] http://bbmp.gov.in/documents/10180/1920333/SWM-Rules-2016.pdf/27c6b5e4-5265-4aee-bff6-451f28202cc8
[38] http://swachhbharaturban.gov.in/
[39] MCGM Environment Status Report 2018-19
[40] http://cpheeo.gov.in/upload/uploadfiles/files/chap17(1).pdf
[41] Formed in formal housing societies/groups to incentivise segregation and composting:https://portal.mcgm.gov.in/irj/go/km/docs/documents/Circulars/ALM%20manual.pdf
[42] Units generating more than 100kg per day will be called bulk generators and will compulsorily set up biodegradable waste composting units, and biodegradable waste will not be collected from bulk generators.

However, currently there are 614 ALMs in Mumbai, but only 454 are segregating waste and ***only 39 are composting waste***.[43] By the end of 2018-19, 49% bulk generators were composting their waste.[44]

- Further, in spite of Swachh Mumbai Prabodhan Abhiyan for providing effective SWM services in Mumbai's slums, these areas still suffer from a poor management of solid waste. For example, ***41% of the total SWM complaints in 2019 were from 9 wards*** (F/N, P/N, P/S, R/N, R/S, M/W, N, L, and S) ***which have a slum population of more than 50%.***

B. Coverage

Management of municipal solid waste is one of the primary duties of urban local governments and a large proportion of their budgetary expenditures. It is also a major challenge in terms of complete collection coverage, segregation at source and scientific disposal and reuse.

Rules related to Solid Waste Management are detailed in the **Municipal Solid Waste (Management and Handling) Rules (MSW rules), 2016.**[45] These rules and the MSW rules, 2000 that preceded them focus on segregation and scientific management of different kinds of waste. The latest rules include provision for 100% source segregation, user fees for bulk generators, composting and waste to energy plants.

The MCGM has in consonance with these rules, prescribed its own **SWM byelaws**[46] detailing on the SWM management process, fines for violation etc. In 2018, the MCGM also passed an order stating that all bulk generators i.e. units generating more than 100kg per day will compulsorily set up biodegradable waste composting units; and such waste will not be collected from bulk generators.[47]

At the central government level, **SBM**[48] also has solid waste management as its major component focussing on the following coverage and reuse indicators- 100% door to door collection, increase in waste to energy and waste to compost practices by ULBs.

As a part of Swachh Sarvekshan, **Star Rating for Garbage Free cities**[49] started in 2017, aimed at certifying cities based upon 12 major parameters of waste management. Urban Local Bodies have to self-declare their star rating based upon the parameters, of which 3, 5 and 7 star ratings are independently evaluated by the central government.

Mumbai had a two star garbage free rating in 2019, and had applied for five star rating for 2020. However, in the third party survey of the central government for star rating, it failed to qualify for any stars. Reports suggest it failed in one of the parameters of 100% sweeping of public areas, due to which it lost all its stars and was given a rating of zero.[50]

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[43] https://portal.mcgm.gov.in/irj/go/km/docs/documents/Circulars/Dry%20Waste%20Collection%20route%20for%20ALM.pdf

[44] MCGM Environment Status Report, 2018-19

[45] http://bbmp.gov.in/documents/10180/1920333/SWM-Rules-2016.pdf/27c6b5e4-5265-4aee-bff6-451f28202cc8

[46] https://portal.mcgm.gov.in/irj/go/km/docs/documents/MCGM%20Department%20List/Solid%20Waste%20Management/Docs/Bye%20laws/02%20Greater%20Mumbai%20Cleanliness%20Byelaws%20-%202006.pdf

[47] MCGM Environment Status Report, 2018-19

[48] http://swachhbharaturban.gov.in/

[49] https://www.pcmcindia.gov.in/marathi/swm2019/Final-GARBAGE%20FREE%20CITIES%20Flyer.pdf

[50] https://www.hindustantimes.com/mumbai-news/bmc-cries-foul-over-zero-stars-in-swachh-survekshan-league-2020-s-garbage-free-city-rating/story-wYIh7PN8sNnRdwQTlTKc8J.html

Table 14: Waste generation and waste composition in Mumbai from 2015-16 to 2018-19[51]

Year	2015-16	2016-17	2017-18	2018-19
Waste Generation				
Waste Generated(MTD)	8,600	9,400	7,350	7,450
% change year on year	NA	9.30%	-21.81%	1.36%
Domestic Waste Composition				
Food Waste	73%	73%	73%	73%
Wood, Cloth	3%	3%	4%	4%
Sand, Stone and Fine Earth	17%	17%	17%	17%
Plastic	3%	3%	3%	3%
Paper and other Recyclable Metals	4%	4%	3%	3%

Note: In 2017-18 and 2018-19, the figures indicate the average waste generated in MTD

Inference:

- Waste generated has reduced from 8,600 Million Tonnes per Day (MTD) in 2015-16 to 7,450 MTD in 2018-19, which is indicative of better waste management at source.
- The composition of waste in Mumbai has been almost constant in the last four years, with 73% biodegradable food waste. This ordains more focus on tackling food waste through composting at source to reduce the pressure on landfills, and adopt a decentralised waste economy by incentivising by-products from waste processing.

[51] MCGM Environment Status Report 2018-19

Table 15: Status of Key Solid Waste Management (SWM) Indicators from 2015-16 to 2018-19[52]

Key SWM indicators	2015-16	2016-17	2017-18	2018-19
Collection door-to-door (%)	80%	95%	99%	100%
Segregation (%)	27%	53%	65%	83%
Number of bulk generators[53]	NA	NA	3,364	3,380
Number of bulk generators composting at source	NA	NA	1,064	1,671
Extent of Municipal Solid Waste Recovered (80% target)[54]	3%	35%	35%	35%
Extent of Scientific Disposal of Waste at Landfill site[55] (100% target)	30%	32%	32%	63%
Number of transportation vehicles	3,465	3,985	5,369	4,379

Inference:

- Although the MCGM claims 100%, door-to-door collection in 2018-19 this is a highly unlikely number given that waste is not regularly collected from slum areas in the city and waste collection points are not properly managed. This is evident from the MCGM complaints- of the total 17,116 SWM complaints in 2019, 36% were related to garbage not being collected.
- 83% of the waste is being segregated as of 2018-19. This is not however waste segregated at source, as prescribed in the MSW rules. The increase in segregation from 27% in 2015-16 to 83% in 2018-19 can be partly attributed to the establishment of 45 dry waste segregation centres in Mumbai where waste is separated into plastic, paper, glass and metal; and sent accordingly for recycling- 788 rag pickers have been organised for this and 188.5MTD of waste was handled in 2019.[56]
- 49% of the bulk generators identified by MCGM are composting waste at source.
- Inspite of policies like Advanced Locality Management (ALM) and guidelines for bulk generators, the total extent of waste recovered is still low at 35%. The MCGM has proposed various initiatives to improve recovery, including a 600MT waste to energy plant at Deonar that will generate 4 Mega Watt (MW) of electricity. MCGM Budget 2020-21 also proposed to incentivise segregation of waste followed by composting of wet waste and management of dry waste through tie ups to recyclers, rebate up to 10% on Property Tax for housing societies upon compliance. Decentralised Community level composting and biomethanation facility of 10 to 20 MTD capacity is also planned at the ward level.
- 63% of the waste was scientifically managed as on 2018-19.

[52] MCGM Environment Status Report 2018-19

[53] In 2018, the MCGM passed an order 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.

[54] 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.

[55] Scientific disposal at landfill refers to elimination of the risk of waste seeping underground by effective collection of leachate. Scientific landfilling also means reducing and channelizing the production of methane without causing air pollution.

[56] https://portal.mcgm.gov.in/irj/go/km/docs/documents/MCGM%20Department%20List/Solid%20Waste%20Management/Docs/DWSC%20-%20List%20of%20Centres%20PDF.pdf

Table 16: Disposal of Municipal Solid Waste in Mumbai[57]

Name of Dumping ground	Years of operation	Area (Ha)	Type of Waste Processing	Amount of waste disposed (MTD)[58]				Current Status
				2015-16	2016-17	2017-18	2018-19	
Deonar	88	120	Dumping	2,100	3,200	2,200-2,500	2,500-3,100	Operational
Kanjurmarg	4	65.96	Bioreactor technology (3000-3500MTD) and windrow composting technology (1000MTD) at Kanjur MSW Processing Site	3,000	3,000	3,600	4,500	Operational
Mulund	47	24	Dumping	4,300-4,500	2,800-3,200	1,700-1,800	Closed	Closed

Inference:

- The predominant method of waste disposal followed until lately was dumping and levelling of waste. With the starting of Kanjurmarg bioreactor and composting technology in 2015, the amount of waste processed has improved. In 2018-19, 63% of the waste was scientifically treated.
- Since Mulund (2018) and Gorai (2009) dumping grounds have been closed and Deonar is long due closure, it is relevant to focus on decentralised waste management practices that will reduce the waste going to the dumping ground. It will also be more sustainable since dumping grounds produce leachate that causes soil and marine pollution. The dumping grounds in Mumbai where burning is carried out to reduce the volume of waste is also a major cause of air pollution in those areas.

[57] MCGM Environment Status Reports 2015-16 to 2018-19

[58] Approximate values given in the MCGM Environment Status Report

C. Community Based Initiatives

The MCGM has adopted two major policies for community involvement in waste management. Advanced Locality Management refers to a system whereby residents in a particular area or locality form an association to act as a mediator between the MCGM and residents. The major functions of the ALM were to inculcate segregation habits in residents, and to device ways of composting biodegradable waste within the ALM area, and only dry waste would be separately collected by the MCGM.[59] The ALMs were largely formed in formal housing societies/groups of buildings and was not implemented in slum areas. Currently there are 614 ALMs in Mumbai, however only 454 are segregating waste and 39 are composting waste.

Table 17: Details of Ward Wise Advanced Locality Management in Mumbai (2019)[60]

Ward	No. of ALMs	No. of Buildings	No. of Flats / Shops	No. of ALMs carrying out Segregation	No. of ALMs carrying out Vermiculture / Composting	Waste Generated In Tonnes per Day		
						Total Waste	Wet Waste	Dry Waste
A	6	292	5,396	6	1	16	13	2
B	2	7	72	1	1	0	0	0
C	18	101	1,052	18	0	3	1	2
D	16	552	6,965	13	0	17	5	12
E	12	71	2,350	0	0	0	0	0
F/N	22	1,126	16,355	21	0	45	45	3
F/S	15	91	4,097	15	0	0	0	0
G/N	19	438	18,975	19	0	11	10	1
G/S	10	110	3,716	7	2	10	9	1
H/E	7	49	450	6	1	1	1	0
H/W	155	3,164	15,861	114	7	377	321	57
K/E	43	103	5,648	35	3	9	6	2
K/W	33	975	21,363	33	0	40	38	2
L	4	64	3,219	4	0	3	11	1
M/E	10	197	2,612	10	5	4	1	3
M/W	54	621	5,802	18	0	12	8	3
N	51	1,572	17,550	51	0	48	34	15
P/N	26	596	5,381	14	0	6	6	1
P/S	39	562	21,578	3	0	42	30	13
R/C	9	443	10,240	3	2	32	30	2
R/N	16	1,534	28,744	16	16	15	9	6
R/S	26	347	9,594	26	0	7	60	0
S	19	44	3,022	19	0	24	18	6
T	2	8	2,746	2	1	1	1	0
Total	**614**	**13,067**	**2,12,788**	**454**	**39**	**723**	**657**	**131**

Inference:

- There are 614 ALMs in Mumbai, with R/N, P/S, K/W, G/N and N wards having the highest number of household/commercial units as part of the ALM, while B, H/E, C, E and M/E have the least.

[59] https://portal.mcgm.gov.in/irj/go/km/docs/documents/Circulars/ALM%20manual.pdf
[60] https://portal.mcgm.gov.in/irj/go/km/docs/documents/Circulars/Dry%20Waste%20Collection%20route%20for%20ALM.pdf

- Overall 74% of the ALMs have achieved waste segregation. ALMs that have not achieved segregation are in B, D, E, F/N, G/S, H/E, H/W, K/E, M/W, P/N, P/S and R/C wards.
- Only 6% ALMs are composting their wet waste, highest being in R/N where all of its 16 ALMs are composting. Others include 7 in H/W, 5 in M/E, 3 in K/E, 2 each in G/S and R/C and 1 each in A, B, H/E and T wards. The poor rate of composting by ALMs reflects a failure of the ALM scheme and highlights the importance of incentivising composting in these areas by the MCGM. If all the ALMs compost their waste, almost 657 tonnes of waste per day can be reduced from being transported and sent to the dumping grounds.

The MCGM similarly started the Dattak Vasti Yojana for slums in 2001 so that community based organisations are involved to ensure collection of waste from slum households to collection points. The scheme was changed to Swachh Mumbai Prabodhan Abhiyan (SMPA). Under the scheme, a unit is made of 150 families of 750 people. For implementation of this scheme, monthly allowance is provided on per unit basis. Accordingly, for one unit an allowance of Rs. 5400/- per month and for the organization an addition allowance of Rs. 600/- per unit has provided for carrying out activities like awareness, public participation and a conducive environment for the scheme. In this scheme, eligible organisation is awarded area of minimum 5 units and maximum 18 units. The contract for this work is awarded and renewed annually.[61] There is no data for the reports available on the MCGM website, although the circular of the scheme mandates this.

D. Recommendations

The process of centralised waste management currently followed, therefore needs to be altered to enable a decentralised management of waste to ensure maximum recovery and sustainable management.

- **Collection and Segregation:** MCGM needs to incentivise residents to participate in the waste management process to enable collective management of waste. The first step is ensuring door-to-door collection and 100% segregation of waste at source. Indore for example used a mix of awareness campaigns and fines to ensure segregation of waste- this was however possible due to household collection and household wise monitoring of whether waste was being properly segregated.

- **Composting:** While the MCGM has planned new initiatives for decentralisation of waste, biodegradable waste processing units should be developed in each constituency. 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 of biodegradable waste in every constituency. The model of ward in F/South Mumbai 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. The MCGM policy of bulk generators is a positive step in this regard, however, subsidies for compost units and developing a market network for sale of compost will be essential for its success.

- **Recycling:** As for non-biodegradable waste, a local government-managed network of buyers for such materials like paper, glass, plastic, etc needs to be developed. In Mangalore for instance dry waste collection centres have been set up where such waste is sold to manufacturers and recyclers. This provides incentive for people to segregate and sell such waste. Further, there is need for devising better recycling methods– Kochi for example widely uses plastic for road tarring.

[61] https://portal.mcgm.gov.in/irj/go/km/docs/documents/HomePage%20Data/Related%20Links/SwachaMumbaiPrabodhanAbhiyan/Scheme_Circular.pdf

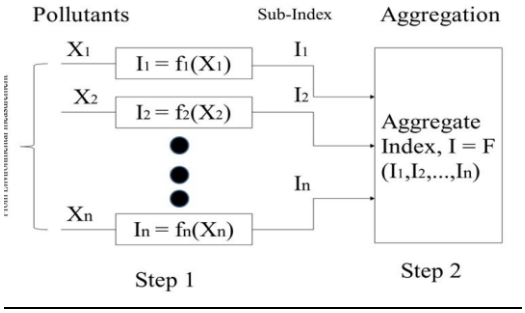
Section IV: Air Quality

A. Key Highlights

- On an average ***49% days in 2019 in Mumbai had satisfactory air quality (179 days)*** and 29% days had moderate air quality (106 days), while there were no days with severe air quality.
- The best average monthly AQI in Mumbai was 45 in September 2019 – the least AQI in 5 years.
- The highest ***average monthly AQI in 2019 was 179 in December***.
- Mumbai sees the ***best air quality in the months of June to September***, which can be explained by the presence of the monsoon season, which drastically helps abate poor air quality. Similarly, the worst AQI is in winter months of December and January.
- In 2019, ***8 new AQI monitoring stations*** were added (Borivali, Colaba, CST, Kurla, Powai, Sion, Vile Parle, Worli) apart from the existing one at Bandra- this was a much-needed move to calculate a more accurate AQI for the city.
- However, ***'air pollution' complaints increased by 13% from 2017 to 2019***, while the AQI has fallen, indicating that in specific areas air pollution might still be a problem, which average figures do not reveal.

B. Measuring AQI

An Air Quality Index (AQI) is defined as an overall scheme that transforms weighted values of individual air pollution related parameters (SO2, 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 by means of 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. Effect may be more pronounced in those with lung and heart diseases.
	Severe	>400	May cause respiratory problems even in healthy people, and seriously impact those with lung/heart diseases. Even increased breathing during light physical activity can impact health.

C. AQI Status in Mumbai

Table 18: Average Month-wise AQI from April 2015 to December 2019[62]

Month	Average AQI				
	2015	2016	2017	2018	2019
January	NA	170	186	176	171
February	NA	98	168	147	150
March	NA	103	126	127	119
April	101	74	97	88	90
May	89	70	66	80	85
June	86	59	55	72	68
July	68	68	78	65	53
August	63	56	51	69	56
September	73	55	71	81	45
October	139	91	107	115	85
November	114	113	136	137	132
December	134	164	152	151	179

NA – Data for 2015 was available from the month of April

Inference:

- The best Average Monthly AQI was 45 in September 2019 – the least monthly average AQI in 5 years. The highest Average Monthly AQI in 2019 was 179 in December.
- Mumbai sees the best air quality in the months of June to September, which can be explained by the presence of the monsoon season, which drastically helps abate poor air quality. Similarly, the worst AQI is in winter months of December and January.

Table 19: Station wise Number of days with Air Quality level for the year 2019[63]

Air Quality Level	Bandra	Borivali East	Colaba	CST	Kurla	Powai	Sion	Vile Parle West	Worli	Average
Good	0	118	89	49	33	104	68	77	67	53
Satisfactory	129	42	38	81	78	42	53	28	74	179
Moderate	184	31	29	37	67	55	30	34	35	106
Poor	12	2	21	26	22	2	22	17	19	24
Very Poor	0	0	2	2	2	0	2	1	1	0
Severe	0	0	0	0	0	0	0	0	0	0
NA	40	172	186	170	163	162	190	208	169	3
Total	**365**	**365**	**365**	**365**	**365**	**365**	**365**	**365**	**365**	**365**

NA – Data not Available

Inference:

- In 2019, 8 new stations were added apart from the existing one at Bandra- this was a much-needed move to calculate a more accurate AQI for the city. However since data of the new stations is available only from June, it is not possible to make an area wise comparison.
- On an average 49%, days in 2019 had satisfactory air quality (179 days) and 29% days had moderate air quality (106 days), while there were no days with severe air quality.

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

[63] 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 20: AQI of Year-wise Best and Worst Days from 2017 to 2019

Year	Best AQIs		Worst AQIs	
2017	12-05-17	39	01-01-17	241
	19-05-17	35	23-01-17	222
	20-05-17	40	24-01-17	500
	24-05-17	38	26-01-17	222
	08-06-17	41	02-02-17	225
	01-08-17	40	19-02-17	285
	03-08-17	39	28-02-17	264
	14-08-17	41	13-03-17	261
	25-08-17	41	20-10-17	249
	26-09-17	38	25-12-17	247
			29-12-17	233
2018	07-06-18	52	03-01-18	243
	12-06-18	51	04-01-18	245
	21-06-18	55	10-01-18	272
	05-07-18	55	08-02-18	232
	19-07-18	57	02-03-18	235
	03-08-18	57	03-03-18	223
	04-08-18	57	28-03-18	230
	05-08-18	56	08-11-18	233
	06-08-18	57	10-11-18	233
	07-08-18	57	24-12-18	221
	09-08-18	57		
	06-09-18	57		
2019	24-07-19	32	03-01-19	265
	25-07-19	34	04-01-19	225
	04-09-19	35	10-01-19	217
	05-09-19	36	20-01-19	250
	06-09-19	36	11-02-19	230
	27-09-19	34	17-02-19	237
	28-09-19	29	12-12-19	222
	29-09-19	36	24-12-19	219
	30-09-19	29	25-12-19	275
	01-10-19	37	26-12-19	282

Inference:

The lowest AQI (best air quality) was reported in September 2019 (7 out of 10 best days) and has improved compared to the lowest AQI of the previous two years. Worst AQI days were recorded in December and January 2019, highest being 282.

Table 21: Comparison of Pollution Complaints

Pollution Sub-Issues	2017	2018	2019	% Change from 2017 to 2019
Average Air Quality Index	107	113	92	-14%
Air Pollution	149	193	169	13%
Pollution due to Chemical Effluents	55	84	92	67%
Factory Noise Pollution	0	0	0	0%
Nuisance due to Masala Mills/ Flour Mills	11	9	7	-36%
Total complaints	**215**	**286**	**269**	**25%**

Inference:

- 'Air Pollution' complaints increased by 13% from 2017 to 2019, while the AQI has fallen, indicating that in specific areas air pollution might still be a problem, which average figures do not reveal.
- Complaints related to 'pollution due to chemical effluents' has increased by 67% from 2017 to 2019.

D. Recommendations

- **Uniform Monitoring:** For better AQI monitoring, the CPCB and System of Air Quality, Weather Forecasting and Research (SAFAR) both agencies that monitor air quality of cities separately should instead, co-ordinate and a single AQI with uniform stations, be calculated by measuring 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.

Section V: Centralised Complaint Registration System (CCRS)

A. Key Highlights

For 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 local body regarding civic issues in their locality and the local government is accountable to solve the same in a timely and structured manner.

Overall Complaints:

- Overall, MCGM's CCRS ***in 2019 received 1,28,145 complaints***- highest complaints were related to drainage (24,267), followed by buildings (20,317) and Solid Waste Management (17,116).
- Although the total number of complaints increased from 2018 to 2019 by 10%, **complaints closed also improved from 83% in 2018 to 96% in 2019** and the average days to resolve a complaint improved from 46 days in 2018 to 30 days in 2019, showing improved performance of the CCRS.
- ***4% of the complaints were not solved at Level 0 and were escalated***. L (19%) and T (17%) wards had the highest complaints that were not solved at Level 0 and escalated to higher levels.
- However, in 2019, unlike previous years, almost all the complaints that were not solved at the initial administrative level (Level 0) ***were escalated upto the level of the Municipal Commissioner*** (Level 4), which should have ideally been solved at lower levels of the escalation matrix. Of these 96% were pending at Level 4.
- In 2019, ***councillor code was filled in only 22% of the total complaints***, down from 24% in 2018.

Ward-wise Complaints:

- Highest numbers of complaints were in ***K/W (10,399), K/E (9,724) and P/N (8,019) wards*** in 2019.
- ***L (18%) and T (15%) ward had the highest percent of complaints*** unsolved/pending in 2019.
- G/N, L and R/C wards took the most time for solving complaints- 55, 46 and 44 days respectively while F/N (15), F/S (18), H/W (13), K/E (18) and N (17) took the least.

Issue-wise Complaints:

- The ***citizen's charter*** prescribes for almost all major complaints to be solved in ***one day.*** However, on an average, MCGM took ***22 days to solve complaints of drainage, water supply and solid waste management in 2019.***
- It took an ***average of 35 days to clean a septic tank in 2019,*** highest being in R/N, G/S and P/N wards which reflects the poor quality of service provided by MCGM in terms of sanitation.
- T ward took the maximum days to repair an overflowing drain (58 in 2019).
- ***R/C ward took 105 days to solve a water shortage complaint***. On an average, it took 24 days to solve a complaint of a burst water pipe as well as leakage in water lines reflecting a high amount of water wasted.
- It took ***17 days on an average to lift garbage***- reflecting a poor SWM in the city, L, G/N, and T wards being the worst with 44, 41, and 40 days taken to solve the complaint, respectively.
- S, R/C and G/S wards took ***69, 59 and 59 days*** respectively to solve ***a complaint of no attendee at public toilets.***

B. Issue Wise Details of Complaints Registered and Closed in the CCRS

The Complaint Management System of MCGM provides for a complaint number (1916), an online portal on the MCGM website, or 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 is escalated to the next level of administration. This is based on the 'escalation matrix' which has been adopted by the MCGM 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.

Table 22: Issue wise comparison of Total complaints and Complaints closed in 2018 and 2019

Complaint Type	Total complaints received		Closed Complaints				Average days to resolve a complaint	
	2018	2019	2018		2019		2018	2019
			In no.	In (%)	In no.	In (%)		
Roads	13,458	15,239	10,533	78%	14,433	95%	40	31
Buildings	21,014	20,317	13,468	64%	18,105	89%	77	55
Drainage	20,641	24,267	17,849	86%	23,818	98%	36	22
Water Supply	12,647	15,507	11,978	95%	15,277	99%	42	24
Solid Waste Management (SWM)	14,494	17,116	12,999	90%	16,876	99%	36	19
License	14,203	14,473	12,803	90%	13,961	96%	43	28
Pest control	6,703	7,501	6,560	98%	7,451	99%	36	17
Garden	2,936	3,367	2,393	82%	3,346	99%	66	23
Colony Officer	1,437	1,196	1,147	80%	1,072	90%	56	52
Storm Water Drainage	1,548	2,155	1,165	75%	2,091	97%	62	34
Shop and Establishment	878	778	825	94%	746	96%	29	26
Medical Officer Health (MOH)	1,743	1,472	1,530	88%	1,418	96%	49	39
MCGM Related	877	1103	597	68%	1,014	92%	56	45
Estate	588	623	317	54%	564	91%	86	57
Toilet	494	627	433	88%	612	98%	44	28
Pollution	286	269	162	57%	235	87%	76	54
School	58	78	29	50%	63	81%	108	68
Nuisance due to vagrants on municipal roads, footpaths, gardens	2,653	2,057	1,755	66%	1,843	90%	68	52
Grand Total	**1,16,658**	**1,28,145**	**96,543**	**83%**	**1,22,925**	**96%**	**46**	**30**

Inference:

- Highest complaints were related to drainage (24,267), followed by buildings (20,317) and Solid Waste Management (17,116) in 2019.
- Total number of complaints has increased by 10% from 2018 to 2019 and the number of complaints closed has improved from 83% in 2018 to 96% in 2019.
- The average days to resolve a complaint has also improved from 46 days in 2018 to 30 days in 2019, showing improved performance of the complaint management system.

Table 23: Issue wise Comparison of Total Complaints and Action taken on Complaints in 2018 and 2019

Complaint Type	Total complaints received		Action Taken Report*			
	2018	2019	2018		2019	
			In no.	In (%)	In no.	In (%)
Roads	13,458	15,239	10,586	78.66%	15,228	99.93%
Buildings	21,014	20,317	13,526	64.37%	20,260	99.72%
Drainage	20,641	24,267	17,869	86.57%	24,263	99.98%
Water Supply	12,647	15,507	12,006	94.93%	15,435	99.54%
Solid Waste Management (SWM)	14,494	17,116	13,010	89.76%	17,116	100%
License	14,203	14,473	12,826	90.30%	14,454	99.87%
Pest control	6,703	7,501	6,565	97.94%	7,500	99.99%
Garden	2,936	3,367	2,403	81.85%	3,367	100%
Colony Officer	1,437	1,196	1,165	81.07%	1,195	99.92%
Storm Water Drainage	1,548	2,155	1,166	75.32%	2,153	99.91%
Shops and Establishment	878	778	821	93.51%	778	100%
Medical Officer Health (MOH)	1,743	1,472	1,524	87.44%	1,472	100%
MCGM Related	877	1103	602	68.64%	1,103	100%
Estate	588	623	323	54.93%	616	98.88%
Toilet	494	627	433	87.65%	627	100%
Pollution	286	269	162	56.64%	269	100%
School	58	78	30	51.72%	78	100%
Nuisance due to vagrants on municipal roads, footpaths, gardens	2,653	2,057	1,759	66.30%	2,054	99.85%
Grand Total	**1,16,658**	**1,28,145**	**96,776**	**82.96%**	**1,27,968**	**99.86%**

**differs from 'Complaints Closed'*

Inference:

There is a significant improvement in Action Taken Report (ATR) generation in 2019, which was more than 99% for all types of complaints.

Table 24: Issue-wise Status of Action Taken Report Generated on Complaints in 2019

Complaint Type	Total complaints received	Action Taken	Forwarded to Department		False Complaint		Action Taken/ Service Provided		Action Not Initiated	
			In no.	In (%)	In no.	In (%)	In no.	In (%)	In no.	In (%)
Roads	15,239	15,228	665	4%	872	6%	13,112	86%	579	4%
Buildings	20,317	20,260	235	1%	3,074	15%	14,458	71%	2,493	12%
Drainage	24,267	24,263	231	1%	1,393	6%	21,687	89%	952	4%
Water Supply	15,507	15,435	3194	21%	1,005	7%	11,127	72%	109	1%
Solid Waste Management (SWM)	17,116	17,116	18	0%	867	5%	16,043	94%	188	1%
License	14,473	14,454	13	0%	1,391	10%	12,582	87%	468	3%
Pest control	7,501	7,500	1	0%	482	6%	6,977	93%	40	1%
Garden	3,367	3,367	76	2%	538	16%	2,735	81%	18	1%
Colony Officer	1,196	1,195	61	5%	378	32%	635	53%	121	10%
Storm Water Drainage	2,155	2,153	22	1%	94	4%	1,981	92%	56	3%
Shops and Establishment	778	778	0	0%	683	88%	61	8%	34	4%
Medical Officer Health (MOH)	1,472	1,472	51	3%	225	15%	1,133	77%	63	4%
MCGM Related	1,103	1,103	66	6%	32	3%	925	84%	80	7%
Estate	623	616	39	6%	248	40%	276	45%	53	9%
Toilet	627	627	0	0%	36	6%	577	92%	14	2%
Pollution	269	269	138	51%	63	23%	35	13%	33	12%
School	78	78	12	15%	19	24%	32	41%	15	19%
Nuisance due to vagrants on municipal roads, footpaths, gardens	2,057	2,054	4	0%	231	11%	1,613	79%	206	10%
Grand Total	**1,28,145**	**1,27,968**	**4,826**	**4%**	**11,631**	**9%**	**1,05,989**	**83%**	**5,522**	**4%**

Inference:

- Out of the total complaints on which action was taken, in 83% the service was provided, 9% were reported to be false complaints and on 4%, action was pending in 2019.
- Action taken through service provided was highest in solid waste management (94%) and pest control (93%) whereas the least was in shops and establishments (8%) and pollution (13%).
- In 72% complaints of water supply, service was provided.
- Highest complaints where no action was taken were related to education (schools), 19% in 2019.

Table 25: Issue-wise Status of Complaints Escalated in 2019

Complaint Type	Total Complaints Received	Escalated Complaints			
		Level I (AMC/Chief Engineer)	Level II (DMC)	Level III (Add. MC)	Level IV (MC)
Roads	15,239	644	644	644	644
Buildings	20,317	2,215	2,215	2,215	2,162
Drainage	24,267	453	453	453	422
Water Supply	15,507	1	1	1	1
Solid Waste Management (SWM)	17,116	208	208	208	208
License	14,473	496	496	496	496
Pest control	7,501	39	39	39	39
Garden	3,367	20	20	20	20
Colony Officer	1,196	132	132	132	132
Storm Water Drainage	2,155	48	48	48	48
Shop and Establishment	778	31	31	31	31
Medical Officer Health (MOH)	1,472	54	54	54	54
MCGM Related	1103	82	82	82	82
Estate	623	34	34	34	34
Toilet	627	15	15	15	15
Pollution	269	36	36	36	36
School	78	15	15	15	15
Nuisance due to vagrants on municipal roads, footpaths, gardens	2,057	215	215	215	215
Total	**1,28,145**	**4,738**	**4,738**	**4,738**	**4,654**
In (%)		**4%**	**4%**	**4%**	**4%**

The table above depicts the number of complaints escalated to different levels under the 'escalation matrix', which has been adopted by the MCGM. 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. Through this system, the higher administration is mandated to take note of and address complaints if they are not solved within a stipulated time.

Inference:

- If a complaint is solved at the level at which it is filed, it is treated as being solved at Level 0. As can be seen through the data, once complaints are escalated, they reach the highest level i.e. that of the Municipal Commissioner.
- In 2019, 96% complaints were solved at the Level 0. Whereas of the 4% complaints that were escalated all of them were escalated up to the level of Municipal Commissioner.
- 98% complaints were resolved at Level IV out of 4,738 complaints registered at Level I in 2019.

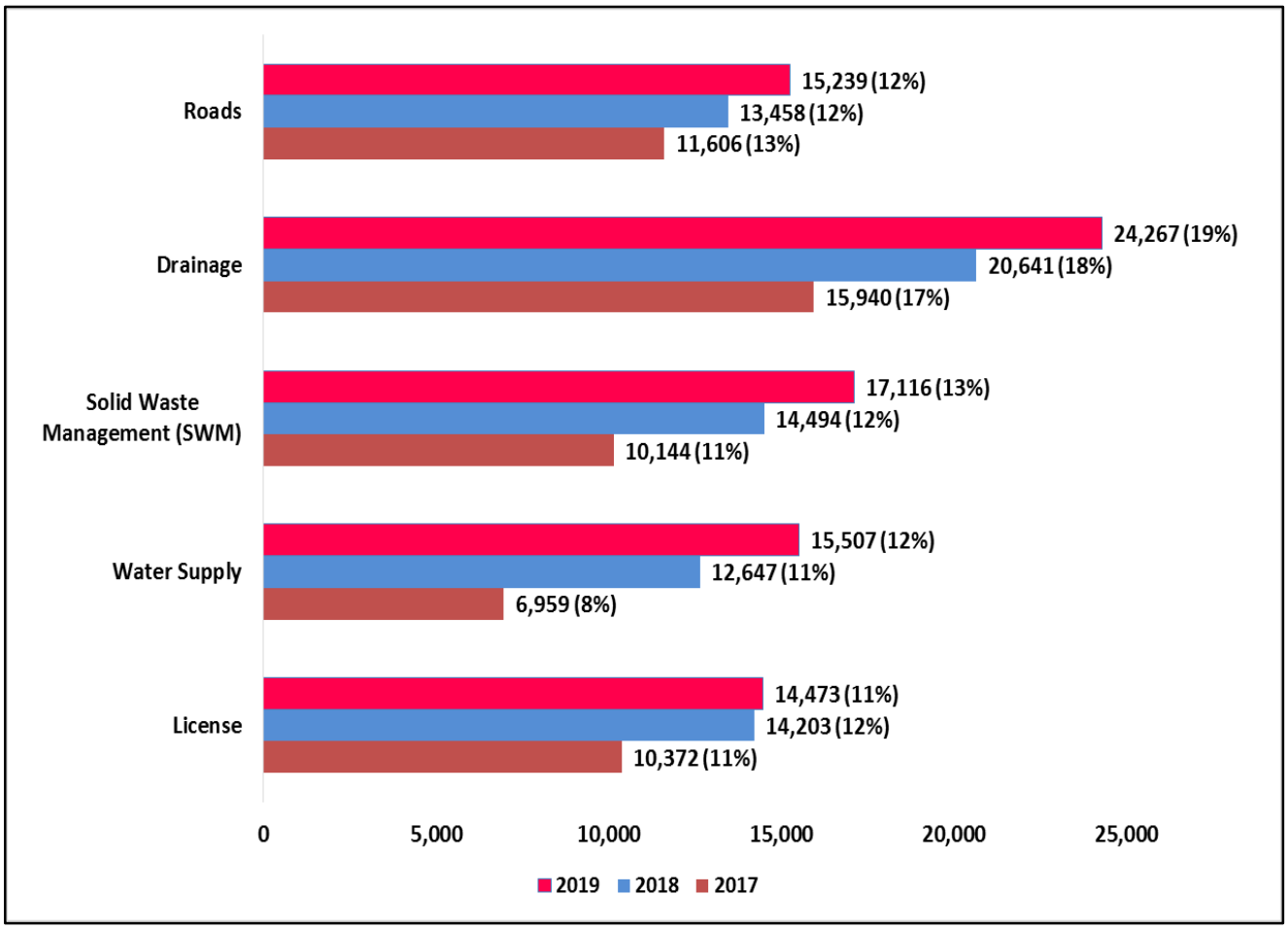
Table 26: Sub-issue Wise Top Four Civic Complaints by Citizens from 2017 to 2019

Issues/Sub-issues	2017	2018	2019	Increase from 2017 to 2018 (in %)	Increase from 2018 to 2019 (in %)
Roads					
Bad Patches / Potholes on the Roads	4,164	4,918	7,091	18%	44%
Municipal Land - Road/ Footpath/SWD	2,721	3,374	3,224	24%	-4%
Resurfacing of Road	1,239	1,281	1,332	3%	4%
Total complaints	**11,606**	**13,458**	**15,239**	**16%**	**13%**
Drainage					
Drainage Chokes and Blockages	9,256	12,403	14,077	34%	13%
Overflowing drains of manholes	4,346	4,290	5,645	-1%	32%
Replacement of Missing / Damaged Manhole	957	2,469	2,856	158%	16%
Total complaints	**15,940**	**20,641**	**24,267**	**29%**	**18%**
Solid Waste Management (SWM)					
Garbage not lifted from House/Gully/Municipal Market/Road/Authorised collection point	3,597	5,157	6,086	43%	18%
Removal of Debris	1,625	2,122	2,371	31%	12%
Lifting of Tree Cutting	794	1,241	1,753	56%	41%
Providing/removing/replacing dustbins	499	552	666	11%	21%
Collection point not attended properly	565	644	710	14%	10%
Total complaints	**10,144**	**14,494**	**17,116**	**43%**	**18%**
Water Supply					
Shortage of Water Supply	2,253	3,476	4,504	54%	30%
Leaks in Water Lines	1,333	4,491	5,294	237%	18%
Unauthorised Tapping of Water Connection	939	1,308	1,158	39%	-11%
Contaminated Water Supply	1,207	1,156	1,940	-4%	68%
Total complaints	**6,959**	**12,647**	**15,507**	**82%**	**23%**

Inference:

- Water supply related complaints increased by 23% from 2018 to 2019, of which the highest number of complaints were related to leaks in water lines (5,294 complaints in 2019). 1,940 complaints of contaminated water were received.
- Highest number of complaints among top 4 was regarding chokes and blockages (14,077) in the drainage, reflecting poor solid waste management. This resonates with the 17,116 complaints of solid waste management in 2019.

Graph 1: Comparison of Most Frequent Complaints[64] by Citizens from 2017 to 2019



Note: The percentages mentioned in brackets indicate the share of complaints related to that issue with respect to total number of complaints. For e.g. in 2018, 12% of total complaints were related to 'Roads'.

Inferences:

- Complaints related to 'Drainage issues' (15,940 in 2017 and 24,267 in 2019) is the most frequently complained about issue in both 2017 and 2019.
- Over the last three years, percentage share of complaints related to Drainage, Solid Waste Management, and Water Supply have increased.

[64] The complaints registered data is obtained through RTI from the Central Complaint Registration System (CCRS) of the MCGM

Table 27: Analysis of Complaints Attended (Closed) in Comparison with Days Mentioned in MCGM's Citizen Charter[65]

Issues/Sub-issues	To be resolved as per Citizens' Charter	Actual time taken to resolve			
		2017	2018	2019	Increase from 2018 to 2019 (in %)
Drainage					
Drainage Chokes and Blockages	1	32	14	17	20%
Overflowing drains or manholes	1	56	28	25	-11%
Odour (Foul Smell) from Drains	1	71	25	36	45%
Replacement of Missing / Damaged Manhole	1	66	32	34	9%
Raising of Manhole (except in Monsoon)	7	40	27	46	74%
Cleaning of septic tank	7	56	34	35	3%
Repairs to pipe sewers/main sewers	7	60	30	36	21%
Water Supply					
Contaminated Water Supply	1	37	25	23	-8%
Leaks in Water Lines	7	37	26	24	-9%
Shortage of Water Supply	2	38	25	24	-3%
Burst Water Main	1	37	26	24	-10%
Solid Waste Management (SWM)					
Garbage not lifted - Co-authorised Point	1	12	26	17	-32%
Collection point not attended properly	1	22	25	20	-20%
Garbage lorry not reported for service/ Lorry not covered	1	12	23	22	-7%
Providing/removing/replacing dustbins	8	24	27	19	-28%
Sweeping of road	1	16	24	19	-22%
Removal of Dead Animals	1	19	23	19	-19%
No attendance at public toilets	2	28	25	22	-11%
Average	**3**	**37**	**22**	**22**	**0%**

Inference:

- The citizen's charter prescribes for almost all major complaints to be solved in one day. However, on an average, MCGM took 22 days to solve complaints of drainage, water supply and solid waste management in 2019.
- It took 17 days on an average to solve complaints of garbage lifting, 20 days for collection point not attended and 22 days for garbage vehicle not arrived, which reflects the poor state of solid waste management service in the city.
- Similarly overflowing manholes complaint took 25 days to be solved and open manhole took 34 days, thus posing a major health and danger risk to people.

[65] *Citizen Charter http://goo.gl/M8EL9h*

C. Ward Wise Details of Complaints Registered and Closed in the CCRS

Table 28: Ward Wise Comparison of Total Complaints and Complaints Closed in 2018 and 2019

Ward	Total complaints received		Closed Complaints				Average days to resolve a complaint	
	2018	2019	2018		2019		2018	2019
			In no.	In (%)	In no.	In (%)		
A	2,474	2,896	2,468	100%	2,859	99%	59	19
B	3,972	3,959	2,750	69%	3,688	93%	64	31
C	3,696	3,596	2,627	71%	3,521	98%	37	36
D	4,815	5,159	4,731	98%	5,058	98%	20	25
E	4,337	4,642	4,138	95%	4,618	99%	21	23
F/N	4,425	5,304	4,329	98%	5,290	100%	18	15
F/S	2,369	2,857	2,316	98%	2,850	100%	36	18
G/N	6,241	5,954	2,825	45%	5,421	91%	33	55
G/S	3,160	4,192	2,545	81%	4,183	100%	34	33
H/E	3,518	4,397	3,091	88%	4,362	99%	24	24
H/W	4,763	4,774	4,721	99%	4,756	100%	23	13
K/E	8,146	9,724	8,017	98%	9,432	97%	50	18
K/W	9,465	10,399	9,071	96%	9,871	95%	52	28
L	7,242	7,560	5,286	73%	6,142	81%	141	46
M/E	4,232	4,334	3,926	93%	3,849	89%	55	28
M/W	4,331	4,387	3,996	92%	4,345	99%	35	37
N	6,570	6,843	6,422	98%	6,811	100%	17	17
P/N	6,586	8,019	4,406	67%	7,512	94%	85	41
P/S	4,855	5,133	3,700	76%	4,975	97%	41	36
R/C	5,315	6,398	3,247	61%	6,388	100%	59	44
R/N	2,171	2,729	1,087	50%	2,619	96%	67	39
R/S	6,249	6,008	6,206	99%	5,991	100%	50	21
S	5,115	6,144	3,443	67%	6,060	99%	41	35
T	2,611	2,737	1,195	46%	2,324	85%	21	38
Total	**1,16,658**	**1,28,145**	**96,543**	**83%**	**1,22,925**	**96%**	**46**	**30**

Inference:

- Highest numbers of complaints were in K/W (10,399), K/E (9,724) and P/N (8,019) wards in 2019.
- There has been an improvement in the percentage of complaints closed in 20 out of 24 wards, A, K/E, K/W and M/E being exceptions.
- G/N, L and R/C wards took the most time for solving complaints- 55, 46 and 44 days respectively. F/N (15), F/S (18), H/W (13), K/E (18) and N (17) took the least number of days in 2019.
- All wards except for D, E, G/N, M/W and T took lesser days in 2019 to resolve complaints as compared to 2018.

Table 29: Ward wise Status Report of Complaints in 2019

Ward	Total Complaints	Closed (Action taken)		Complaints Registered (Action Pending)		In Process (Not assigned/Re Assigned/Being Attended)	Not related to MCGM
		No.	In (%)	No.	In (%)		
A	2,896	2,859	99%	22	1%	0	15
B	3,959	3,688	93%	114	3%	149	8
C	3,596	3,521	98%	17	0%	52	6
D	5,159	5,058	98%	84	2%	11	6
E	4,642	4,618	99%	10	0%	2	12
F/N	5,304	5,290	100%	9	0%	0	5
F/S	2,857	2,850	100%	1	0%	0	6
G/N	5,954	5,421	91%	317	5%	213	3
G/S	4,192	4,183	100%	3	0%	2	4
H/E	4,397	4,362	99%	20	0%	10	5
H/W	4,774	4,756	100%	14	0%	3	1
K/E	9,724	9,432	97%	122	1%	22	148
K/W	10,399	9,871	95%	477	5%	41	10
L	7,560	6,142	81%	1,375	18%	35	8
M/E	4,334	3,849	89%	426	10%	52	7
M/W	4,387	4,345	99%	31	1%	3	8
N	6,843	6,811	100%	16	0%	7	9
P/N	8,019	7,512	94%	447	6%	35	25
P/S	5,133	4,975	97%	96	2%	57	5
R/C	6,398	6,388	100%	5	0%	1	4
R/N	2,729	2,619	96%	86	3%	17	7
R/S	6,008	5,991	100%	14	0%	1	2
S	6,144	6,060	99%	56	1%	17	11
T	2,737	2,324	85%	397	15%	0	16
Total	**1,28,145**	**1,22,925**		**4,159**		**730**	**331**
In (%)		**96%**		**3%**		**1%**	**0.26%**

Inference:

- L (18%) and T (15%) ward had the highest percent of complaints unsolved/pending in 2019.
- K/E and P/N wards had highest complaints that did not relate to MCGM, however in total only 0.26% complaints were those that did not relate to MCGM, which shows high awareness among citizens regarding the responsibilities of the MCGM.

Table 30: Ward Wise Number and Percentage of Complaints in which Councillor Code filled in 2018 and 2019.

Ward	2018			2019		
	Total Complaints	Complaints where councillor code was filled		Total Complaints	Complaints where councillor code was filled	
		Number	%		Number	%
A	2,474	467	19%	2,896	455	16%
B	3,972	1,585	40%	3,959	961	24%
C	3,696	919	25%	3,596	990	28%
D	4,815	933	19%	5,159	966	19%
E	4,337	1,111	26%	4,642	1,258	27%
F/N	4,425	1,097	25%	5,304	1,201	23%
F/S	2,369	530	22%	2,857	525	18%
G/N	6,241	2,160	35%	5,954	1,736	29%
G/S	3,160	771	24%	4,192	1,358	32%
H/E	3,518	664	19%	4,397	765	17%
H/W	4,763	863	18%	4,774	994	21%
K/E	8,146	1,818	22%	9,724	1,896	19%
K/W	9,465	2,015	21%	10,399	1,587	15%
L	7,242	1,842	25%	7,560	1,866	25%
M/E	4,232	1,021	24%	4,334	954	22%
M/W	4,331	1,080	25%	4,387	1,002	23%
N	6,570	1,592	24%	6,843	1,619	24%
P/N	6,586	1,583	24%	8,019	1,852	23%
P/S	4,855	1,077	22%	5,133	831	16%
R/C	5,315	1,638	31%	6,398	1,774	28%
R/N	2,171	577	27%	2,729	682	25%
R/S	6,249	1,122	18%	6,008	1,103	18%
S	5,115	1,182	23%	6,144	1,350	22%
T	2,611	657	25%	2,737	664	24%
Total	**1,16,658**	**28,304**	**24%**	**1,28,145**	**28,389**	**22%**

Inference:

- Overall, the % of complaints in which councillor code was filed reduced from 24% in 2018 to 22% in 2019. This is alarming since the councillor code is an essential requirement for proper functioning of the complaint management system since it enables the councillors to be aware of what complaints are filed in their ward and they can therefore hold the administration accountable to solve them at the earliest.
- In 4 wards, C, E, G/S and H/W the % of complaints in which councillor code was filed increased by 3%, 1%, 8%, 3% respectively, while B ward saw the most drastic fall (fall of 16%).

Table 31: Ward Wise Comparison of Total Complaints and Action Taken on the Complaints in 2018 and 2019

Complaint Type	Total complaints received		Action Taken Report			
	2018	2019	2018		2019	
			In no.	In (%)	In no.	In (%)
A	2,474	2,896	2,468	99.76%	2,896	100%
B	3,972	3,959	2,756	69.39%	3,945	99.65%
C	3,696	3,596	2,636	71.32%	3,589	99.81%
D	4,815	5,159	4,733	98.30%	5,158	99.98%
E	4,337	4,642	4,142	95.50%	4,636	99.87%
F/N	4,425	5,304	4,326	97.76%	5,299	99.91%
F/S	2,369	2,857	2,315	97.72%	2,856	99.96%
G/N	6,241	5,954	2,830	45.35%	5,946	99.87%
G/S	3,160	4,192	2,549	80.66%	4,189	99.93%
H/E	3,518	4,397	3,106	88.29%	4,394	99.93%
H/W	4,763	4,774	4,727	99.24%	4,770	99.92%
K/E	8,146	9,724	8,022	98.48%	9,702	99.77%
K/W	9,465	10,399	9,082	95.95%	10,382	99.84%
L	7,242	7,560	5,309	73.31%	7,549	99.85%
M/E	4,232	4,334	3,932	92.91%	4,320	99.68%
M/W	4,331	4,387	4,009	92.57%	4,384	99.93%
N	6,570	6,843	6,426	97.81%	6,838	99.93%
P/N	6,586	8,019	4,437	67.37%	7,998	99.74%
P/S	4,855	5,133	3,737	76.97%	5,133	100%
R/C	5,315	6,398	3,259	61.32%	6,394	99.94%
R/N	2,171	2,729	1,091	50.25%	2,725	99.85%
R/S	6,249	6,008	6,208	99.34%	6,001	99.88%
S	5,115	6,144	3,481	68.05%	6,127	99.72%
T	2,611	2,737	1,195	45.77%	2,737	100%
Total	**1,16,658**	**1,28,145**	**96,776**	**82.96%**	**1,27,968**	**99.86%**

Inference:

- In all the wards, action taken reports were made in more than 99% of complaints and in A, P/S and T wards it was 100% in 2019.
- Action Taken Reports of total complaints have increased from 82.96% in 2018 to 99.86% in 2019.

Table 32: Ward wise comparison of Total complaints and Complaints Escalated[66] in 2018 and 2019

Complaint Type	Total complaints received		Complaints Escalated			
	2018	2019	2018		2019	
			In no.	In (%)	In no.	In (%)
A	2,474	2,896	11	0%	16	1%
B	3,972	3,959	1,241	31%	242	6%
C	3,696	3,596	1,065	29%	72	2%
D	4,815	5,159	120	2%	94	2%
E	4,337	4,642	173	4%	0	0%
F/N	4,425	5,304	110	2%	0	0%
F/S	2,369	2,857	58	2%	2	0%
G/N	6,241	5,954	3,410	55%	560	9%
G/S	3,160	4,192	589	19%	0	0%
H/E	3,518	4,397	363	10%	30	1%
H/W	4,763	4,774	47	1%	9	0%
K/E	8,146	9,724	139	2%	110	1%
K/W	9,465	10,399	401	4%	495	5%
L	7,242	7,560	1,823	25%	1,401	19%
M/E	4,232	4,334	308	7%	374	9%
M/W	4,331	4,387	386	9%	25	1%
N	6,570	6,843	142	2%	11	0%
P/N	6,586	8,019	2,127	32%	481	6%
P/S	4,855	5,133	1,138	23%	147	3%
R/C	5,315	6,398	1,869	35%	1	0%
R/N	2,171	2,729	1,088	50%	105	4%
R/S	6,249	6,008	99	2%	12	0%
S	5,115	6,144	1,643	32%	95	2%
T	2,611	2,737	1,422	54%	456	17%
Total	**1,16,658**	**1,28,145**	**19,772**	**17%**	**4,738**	**4%**

Inference:
L (19%) and T (17%) wards had the highest complaints that were not solved at Level 0 and escalated to higher levels.

[66] Complaints are first escalated to Level 1 based upon the escalation matrix adopted by MCGM to *address the problem of complaints remaining stuck at the lower level of the civic administration, with no way to enforce accountability. Through this, the higher administration can take note of complaints not solved within the stipulated time*. For details of complaints escalated and solved from Level 1 to Level 4, refer Annexure 2.

Table 33: Ward-wise Top Civic Complaints from 2017 to 2019 (Roads and Drainage)

Ward	Population 2011	Road				Drainage			
		2017	2018	2019	Increase from 2018 to 2019 (In %)	2017	2018	2019	Increase from 2018 to 2019 (In %)
A	1,85,014	294	346	416	20%	373	469	622	33%
B	1,27,290	235	427	317	-26%	379	710	751	6%
C	1,66,161	298	293	316	8%	521	552	630	14%
D	3,46,866	512	536	552	3%	989	1,296	1,514	17%
E	3,93,286	265	291	312	7%	439	465	595	28%
F/N	5,29,034	544	623	524	-16%	278	530	674	27%
F/S	3,60,972	167	241	306	27%	235	360	645	79%
G/N	5,99,039	528	665	616	-7%	640	834	969	16%
G/S	3,77,749	266	321	362	13%	319	547	608	11%
H/E	5,57,239	401	471	612	30%	662	856	985	15%
H/W	3,07,581	404	577	515	-11%	736	1,027	1,102	7%
K/E	8,23,885	1,018	1,253	1,671	33%	1,057	1,353	1,730	28%
K/W	7,48,688	1,363	1,131	1,163	3%	1,732	2,072	2,357	14%
L	9,02,225	607	593	861	45%	1,457	1,620	1,649	2%
M/E	8,07,720	336	466	462	-1%	484	691	774	12%
M/W	4,11,893	396	442	576	30%	923	1,164	1,103	-5%
N	6,22,853	540	795	832	5%	999	1,161	1,314	13%
P/N	9,41,366	837	855	974	14%	683	871	1,230	41%
P/S	4,63,507	392	527	820	56%	440	792	910	15%
R/C	5,62,162	556	630	736	17%	742	983	1,309	33%
R/N	4,31,368	225	247	307	24%	242	330	453	37%
R/S	6,91,229	615	614	680	11%	547	627	927	48%
S	7,43,783	446	671	857	28%	631	820	934	14%
T	3,41,463	361	443	452	2%	432	511	482	-6%
Total	**1,24,42,373**	**11,606**	**13,458**	**15,239**	**13%**	**15,940**	**20,641**	**24,267**	**18%**

Inference:

- Highest number of road related complaints were in K/E (1,671) and K/W (1,163) wards in 2019 whereas P/S (56%) and L (45%) had the highest increase in road complaints from 2018 to 2019.
- Drainage complaints in 2019 were also highest K/W (2,357) and in K/E (1,730) wards whereas F/S (79%) and R/S (48%) had the highest increase in complaints from 2018 to 2019.

Table 34: Ward-wise Top Civic Complaints from 2017 to 2019 (SWM and Water supply)

Ward	Population 2011	SWM				Water Supply			
		2017	2018	2019	Increase from 2018 to 2019 (in %)	2017	2018	2019	Increase from 2018 to 2019 (in %)
A	1,85,014	228	265	361	36%	120	205	338	65%
B	1,27,290	205	312	391	25%	144	151	353	134%
C	1,66,161	498	730	687	-6%	254	342	445	30%
D	3,46,866	524	675	605	-10%	291	352	499	42%
E	3,93,286	474	830	840	1%	234	355	588	66%
F/N	5,29,034	397	531	871	64%	177	407	669	64%
F/S	3,60,972	213	268	409	53%	95	257	261	2%
G/N	5,99,039	506	542	661	22%	250	497	616	24%
G/S	3,77,749	320	399	401	1%	101	213	242	14%
H/E	5,57,239	307	429	540	26%	188	348	544	56%
H/W	3,07,581	501	661	659	0%	229	479	533	11%
K/E	8,23,885	588	934	1,019	9%	486	1,266	1,536	21%
K/W	7,48,688	691	960	1,680	75%	563	1,157	1,321	14%
L	9,02,225	513	596	827	39%	706	947	952	1%
M/E	8,07,720	332	463	597	29%	544	826	653	-21%
M/W	4,11,893	306	459	507	10%	291	482	489	1%
N	6,22,853	551	890	801	-10%	335	601	856	42%
P/N	9,41,366	557	880	1,106	26%	449	890	1,069	20%
P/S	4,63,507	439	845	842	0%	233	393	484	23%
R/C	5,62,162	672	788	997	27%	372	606	646	7%
R/N	4,31,368	142	247	345	40%	133	230	304	32%
R/S	6,91,229	478	721	922	28%	292	774	857	11%
S	7,43,783	482	762	737	-3%	342	590	988	67%
T	3,41,463	220	307	311	1%	130	279	264	-5%
Total	**1,24,42,373**	**10,144**	**14,494**	**17,116**	**18%**	**6,959**	**12,647**	**15,507**	**23%**

Inference:

- Highest number of SWM related complaints were in K/W (1,680) and P/N (1,106) wards in 2019 whereas K/W (75%) and F/N (64%) had the highest increase in SWM complaints from 2018 to 2019.
- Water supply complaints in 2019 were also highest in K/E (1,536) and K/W (1,321) wards whereas B (134%) and S (67%) had the highest increase in complaints from 2018 to 2019.
- K/E and K/W have the highest number of complaints in all four major areas of road, drainage, SWM and water; however, this probably points more to increased awareness and use of the complaint mechanism in these wards.

Table 35: Ward-wise Top Three Road Related Civic Complaints from 2017 to 2019

Roads										
Ward	Population 2011	Bad Patches / Potholes on the Roads			Municipal Land - Road/ Footpath/SWD			Resurfacing of Road		
		2017	2018	2019	2017	2018	2019	2017	2018	2019
A	1,85,014	100	125	223	90	67	68	39	59	40
B	1,27,290	50	101	87	124	208	138	22	59	36
C	1,66,161	70	73	136	117	118	101	69	35	28
D	3,46,866	172	168	178	132	135	159	76	128	121
E	3,93,286	68	93	146	73	63	53	41	48	39
F/N	5,29,034	139	270	265	58	137	91	56	46	62
F/S	3,60,972	49	85	153	45	58	63	19	16	30
G/N	5,99,039	102	141	256	173	252	205	69	63	39
G/S	3,77,749	66	94	143	98	85	93	27	30	37
H/E	5,57,239	153	216	349	92	131	127	45	37	31
H/W	3,07,581	127	235	213	100	138	152	55	48	26
K/E	8,23,885	424	641	916	265	218	262	91	78	173
K/W	7,48,688	718	470	461	262	270	319	108	97	85
L	9,02,225	175	181	404	161	157	102	51	45	76
M/E	8,07,720	115	182	188	64	97	110	32	29	31
M/W	4,11,893	183	190	257	53	84	143	27	33	36
N	6,22,853	151	256	323	168	215	159	40	75	89
P/N	9,41,366	388	345	509	143	186	173	70	75	78
P/S	4,63,507	154	188	505	47	133	109	58	52	84
R/C	5,62,162	169	205	255	110	144	173	56	45	42
R/N	4,31,368	81	77	111	48	65	87	29	26	23
R/S	6,91,229	264	191	259	107	171	155	71	50	39
S	7,43,783	150	254	529	108	144	98	36	69	64
T	3,41,463	96	137	225	83	98	84	52	38	23
Total	**1,24,42,373**	**4,164**	**4,918**	**7,091**	**2,721**	**3,374**	**3,224**	**1,239**	**1,281**	**1,332**

Inference:

- Of the total 15,239 road complaints in 2019, 47% were related to potholes while 21% were related to encroachment on road/footpath, while 9% were related to resurfacing of roads.
- Highest number of pothole complaints were from K/E (916) and S (529) wards.

Table 36: Ward-wise Top Three Drainage Related Civic Complaints from 2017 to 2019

Drainage										
Ward	Population 2011	Drainage Chokes and Blockages			Overflowing drains of manholes			Replacement of Missing / Damaged Manhole		
		2017	2018	2019	2017	2018	2019	2017	2018	2019
A	1,85,014	183	243	308	140	134	188	24	68	91
B	1,27,290	171	372	341	169	203	318	14	60	57
C	1,66,161	313	355	310	150	126	214	27	42	55
D	3,46,866	416	618	667	483	520	651	47	98	124
E	3,93,286	233	246	285	153	125	222	27	56	57
F/N	5,29,034	133	284	304	93	127	199	28	86	123
F/S	3,60,972	117	187	269	72	89	260	21	66	76
G/N	5,99,039	315	413	437	208	183	338	63	165	130
G/S	3,77,749	182	300	270	91	145	242	24	62	57
H/E	5,57,239	477	611	674	128	134	162	27	74	105
H/W	3,07,581	487	671	784	157	166	162	49	142	115
K/E	8,23,885	576	762	986	286	244	311	88	253	288
K/W	7,48,688	1,216	1,508	1,673	351	305	308	79	173	290
L	9,02,225	751	1,007	940	447	348	404	78	124	177
M/E	8,07,720	285	352	421	108	160	171	28	98	76
M/W	4,11,893	541	743	650	243	227	188	47	97	136
N	6,22,853	647	784	779	224	209	282	36	94	97
P/N	9,41,366	344	418	679	177	203	278	55	156	160
P/S	4,63,507	262	434	607	101	165	129	34	133	121
R/C	5,62,162	544	677	915	109	145	173	40	103	164
R/N	4,31,368	131	223	306	53	34	60	17	35	53
R/S	6,91,229	289	398	584	121	73	136	50	98	136
S	7,43,783	370	454	553	171	143	181	31	137	116
T	3,41,463	273	343	335	111	82	68	23	49	52
Total	**1,24,42,373**	**9,256**	**12,403**	**14,077**	**4,346**	**4,290**	**5,645**	**957**	**2,469**	**2,856**

Inference:

- 58% of total 24,267 drainage complaints were related to chokes and blockages while were 23% related to overflowing drains and 12% for replacing manhole of drains.
- In B, C, G/S, L, M/W, N and T wards, number of chokes and blockage complaints fell from 2018 to 2019 while they increased in all other wards.

Table 37: Ward-wise Top Three Solid Waste Management Related Civic Complaints from 2017 to 2019

Solid Waste Management (SWM)										
Ward	Population 2011	Garbage not lifted from House/Gully/ Municipal Market/Road/ Authorised collection point			Removal of Debris			Lifting of Tree Cutting		
		2017	2018	2019	2017	2018	2019	2017	2018	2019
A	1,85,014	84	101	151	28	42	51	9	28	34
B	1,27,290	110	129	164	30	38	39	4	37	11
C	1,66,161	299	463	440	72	101	72	6	11	4
D	3,46,866	231	277	252	84	138	99	56	48	46
E	3,93,286	155	274	391	101	112	129	13	47	53
F/N	5,29,034	140	193	381	78	94	106	15	44	71
F/S	3,60,972	71	83	84	42	50	75	13	35	50
G/N	5,99,039	141	155	181	105	105	137	39	51	68
G/S	3,77,749	118	85	114	67	101	61	35	35	53
H/E	5,57,239	83	150	152	51	75	88	28	27	55
H/W	3,07,581	180	222	206	98	131	107	68	95	134
K/E	8,23,885	184	252	332	90	165	139	33	95	119
K/W	7,48,688	189	295	685	130	172	209	75	78	157
L	9,02,225	214	237	262	68	92	132	19	44	63
M/E	8,07,720	100	152	208	48	48	99	35	33	47
M/W	4,11,893	94	135	130	47	55	67	41	64	78
N	6,22,853	182	331	250	82	135	132	33	58	109
P/N	9,41,366	222	332	362	88	95	133	35	57	102
P/S	4,63,507	134	339	315	57	71	88	42	98	82
R/C	5,62,162	225	271	290	62	65	123	74	80	138
R/N	4,31,368	43	66	65	24	20	38	17	30	69
R/S	6,91,229	170	240	320	54	72	115	32	40	70
S	7,43,783	157	279	262	96	117	105	32	43	93
T	3,41,463	71	96	89	23	28	27	40	63	47
Total	**1,24,42,373**	**3,597**	**5,157**	**6,086**	**1,625**	**2,122**	**2,371**	**794**	**1,241**	**1,753**

Inference:

- Of the total 17,116 SWM complaints, 36% were related to garbage not being lifted, highest being in K/W (685) and C (440) wards. However, the highest increase was in K/W where complaints related to garbage not being lifted increased by 132% from 2018 to 2019.
- 14% of total SWM complaints were related to lifting of debris and waste from construction activities, the highest increase from 2018 to 2019 was in M/E (106%).
- Total complaints of lifting of tree cutting increased by 121% in the last 3 years, although the MCGM engages in tree trimming activities especially before monsoon, the number of complaints point to the poor management of cut branches/trees, which are often left on roads and footpaths.

Table 38: Top Four Water Supply Related Ward-wise Civic Complaints from 2017 to 2019

Water Supply													
Ward	Population 2011	Shortage of Water Supply			Leaks in Water Lines			Unauthorised Tapping of Water Connection			Contaminated Water Supply		
		2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
A	1,85,014	45	99	113	7	38	89	14	14	8	33	21	78
B	1,27,290	73	77	147	3	15	36	14	20	14	45	25	119
C	1,66,161	111	138	145	23	40	28	6	25	32	90	82	205
D	3,46,866	123	120	176	59	102	114	11	21	10	55	43	124
E	3,93,286	68	117	222	31	97	140	40	33	47	68	69	97
F/N	5,29,034	65	93	176	30	121	201	27	64	98	16	38	50
F/S	3,60,972	18	115	71	24	57	95	22	19	25	14	24	20
G/N	5,99,039	42	75	92	33	152	193	82	145	163	46	50	52
G/S	3,77,749	29	32	53	18	84	83	24	39	18	17	11	28
H/E	5,57,239	38	89	177	34	123	182	35	27	32	59	41	54
H/W	3,07,581	84	147	206	42	180	104	20	24	31	57	42	126
K/E	8,23,885	204	362	493	99	535	655	56	78	73	46	64	44
K/W	7,48,688	193	333	444	64	322	380	94	224	101	121	136	217
L	9,02,225	175	150	224	135	447	418	187	130	88	73	47	64
M/E	8,07,720	217	271	218	85	281	261	55	71	42	68	68	32
M/W	4,11,893	79	130	96	65	177	219	32	67	48	63	29	34
N	6,22,853	59	86	165	158	309	397	27	58	59	18	43	47
P/N	9,41,366	153	243	271	58	293	335	60	81	104	94	113	215
P/S	4,63,507	83	114	153	41	140	164	30	25	37	34	36	51
R/C	5,62,162	146	163	197	52	236	236	15	11	10	100	68	74
R/N	4,31,368	42	66	95	17	73	100	11	18	18	25	28	40
R/S	6,91,229	131	347	282	59	223	285	25	55	50	32	51	107
S	7,43,783	53	75	252	139	301	431	46	49	40	27	19	49
T	3,41,463	22	34	36	57	145	148	6	10	10	6	8	13
Total	**1,24,42,373**	**2,253**	**3,476**	**4,504**	**1,333**	**4,491**	**5,294**	**939**	**1,308**	**1,158**	**1,207**	**1,156**	**1,940**

Inference:

- 29% of 15,507 water related complaints were of shortage of water, whereas 34% were of leakage in water pipelines, 13% were related to contaminated water and 7% were for unauthorised tapping.
- Top four wards in shortage of water supply complaints in 2019- K/E, K/W, P/N and R/S were also wards, which had average water timings of less than 5 hours per day. (Refer Table 5).
- It is surprising that the Top 4 wards with highest water contamination complaints (C, H/W, K/W, and P/N) had an average of 0.7% of unfit water samples (Refer Table 7) in 2019. Further, % of unfit samples tested by MCGM fell from a city average of 3% in 2016-17 to 1% in 2018-19, however the number of contamination complaints have simultaneously increased from 1,207 in 2017 to 1,940 in 2019. This indicates that the tests done by MCGM for drinking water quality check are not sufficient to trace contaminated water for all areas in the wards and/or the areas where unfit samples were found have not seen improvement in water quality.
- Increase in complaints of unauthorised tapping of water connection from 2017 to 2019 shows that although the MCGM is looking to have metered connections it needs to work on its implementation feasibility, especially in highly dense areas of the city. This also points to the fact that adequacy of water is a major problem in the city which the per capita supply does not reflect.

Table 39: Ward-wise Average Number of Days for Closing Complaints in 2019 (1/2)

Complaint to be attended as per Citizens' Charter	Drainage Chokes and Blockages	Overflowing drains or manholes	Odour (Foul Smell) from Drains	Replacement of Missing / Damaged Manhole	Raising of Manhole (except in Monsoon)	Cleaning of septic tank	Repairs to pipe sewers/ main sewers	Contaminated Water Supply	Leaks in Water Lines
To resolved as per Citizens' Charter	1	1	1	1	7	7	7	1	7
Actual time taken to resolve in 2019	17	25	36	34	46	35	36	23	24
A	18	15	15	22	19	12	13	25	14
B	13	13	9	30	119	41	22	5	4
C	20	16	25	19	30	35	19	6	6
D	20	21	25	37	92	18	41	9	11
E	12	10	12	15	0	19	20	29	31
F/N	10	6	16	20	13	11	10	11	10
F/S	9	8	24	15	6	10	24	11	11
G/N	47	40	74	69	207	65	79	11	8
G/S	27	19	40	37	0	81	64	51	44
H/E	11	19	31	29	5	53	22	17	20
H/W	5	16	11	14	7	12	13	7	8
K/E	12	21	22	22	21	19	23	17	13
K/W	12	36	54	38	54	53	33	21	31
L	23	45	58	37	76	43	57	40	34
M/E	14	16	31	14	19	19	34	33	46
M/W	19	40	43	47	0	38	39	22	23
N	11	18	30	19	25	18	18	18	11
P/N	38	50	56	65	75	73	67	33	31
P/S	16	35	29	39	94	47	32	50	35
R/C	12	31	64	43	17	19	55	91	82
R/N	13	49	35	70	13	91	66	16	8
R/S	13	23	21	20	0	19	22	33	31
S	23	34	39	46	0	41	38	20	14
T	20	58	83	51	10	5	65	9	8

Inference:

- It took an average of 35 days to clean a septic tank in 2019, highest being in R/N, G/S and P/N wards which reflects the poor quality of service provided by MCGM in terms of sanitation.
- T ward took the maximum days to repair an overflowing drain (58 in 2019).

Table 40: Ward-wise average number of days for closing complaints in 2019 (2/2)

Complaint to be attended as per Citizens' Charter	Shortage of Water Supply	Burst Water Main	Garbage not lifted - Co-authorised Point	Collection point not attended properly	Garbage lorry not reported for service/ Lorry not covered	Providing/removing/replacing dustbins	Sweeping of road	Removal of Dead Animals	Non-attendance at public toilets
To resolved as per Citizens' Charter	2	1	1	1	1	8	1	1	2
Actual time taken to resolve in 2019	24	24	17	20	22	19	19	19	22
A	17	16	18	10	30	10	35	21	11
B	5	7	8	10	8	6	9	7	15
C	6	7	14	9	8	7	9	11	2
D	12	14	31	37	33	96	17	30	29
E	26	35	15	19	19	27	18	9	6
F/N	7	8	15	10	8	10	10	8	11
F/S	13	11	12	19	9	12	11	13	0
G/N	9	10	41	39	51	68	35	59	21
G/S	58	67	23	36	22	33	26	31	59
H/E	19	21	13	9	17	12	12	14	11
H/W	8	6	5	6	5	6	6	6	5
K/E	14	14	7	6	6	6	7	4	5
K/W	23	28	11	14	10	13	14	10	8
L	37	34	44	36	85	17	37	42	28
M/E	43	54	12	15	8	19	16	11	17
M/W	26	21	21	20	43	20	22	24	15
N	14	9	8	9	9	9	9	8	15
P/N	31	34	23	24	21	22	18	18	32
P/S	34	32	23	23	25	24	28	36	54
R/C	105	67	28	53	38	50	30	29	59
R/N	9	7	21	24	18	27	32	27	42
R/S	26	32	5	7	5	3	4	4	7
S	15	15	21	21	19	16	29	18	69
T	6	5	40	16	20	30	26	41	22

Inference:

- R/C ward took 105 days to solve a water shortage complaint. On an average, it took 24 days to solve a complaint of a burst water pipe as well as leakage in water lines reflecting a high amount of water being wasted.
- It took 17 days on an average to lift garbage- reflecting a poor SWM in the city, L, G/N, and T wards being the worst with 44, 41, and 40 days taken to solve the complaint, respectively.
- S, R/C and G/S wards took 69, 59 and 59 days respectively to solve a complaint of no attendee at public toilets.

D. Recommendations

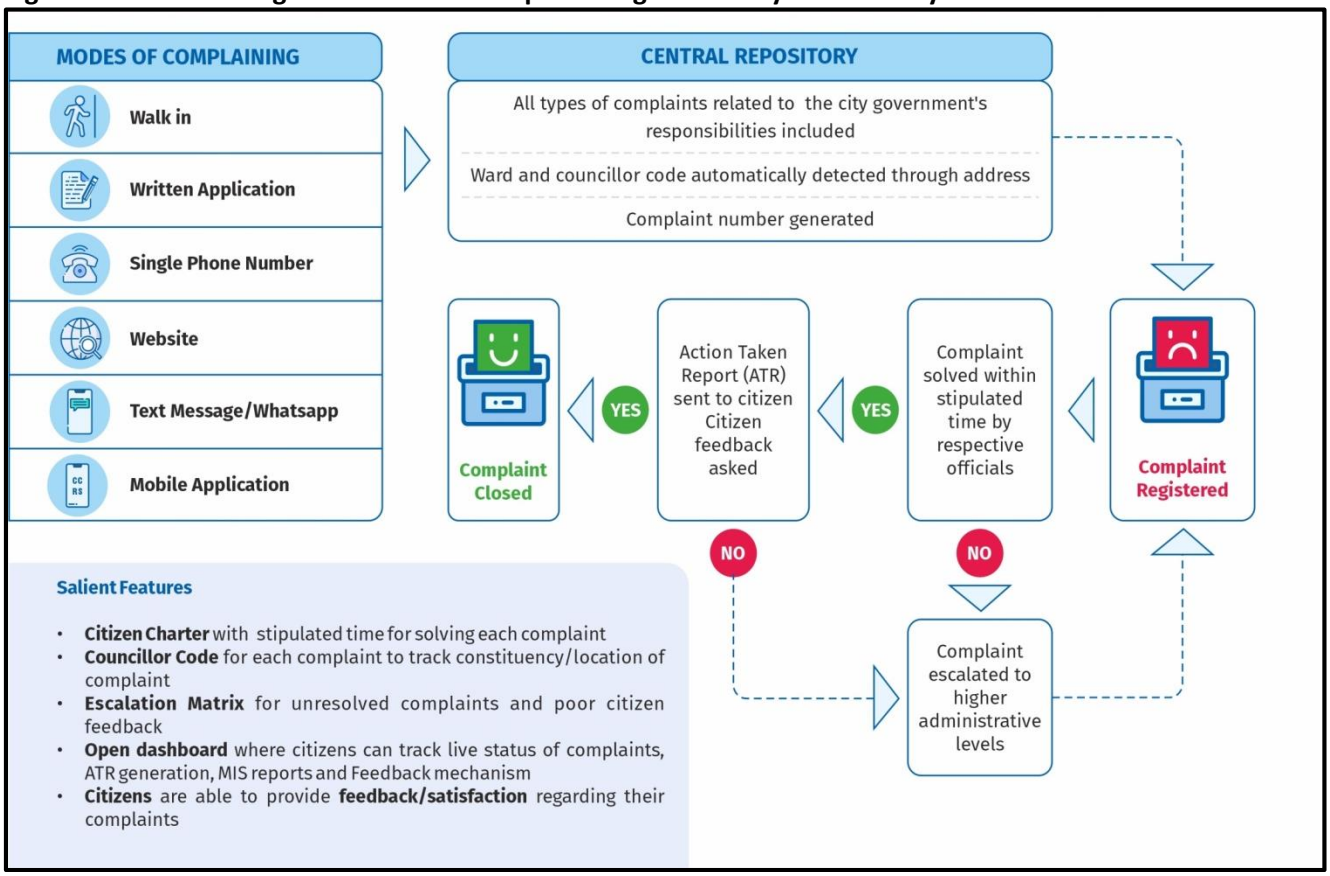
- **Councillor Code:** The councillor code is the constituency number of the councillor that is to be fed into the management system for locating the constituency of every complaint. This enables the councillor to be aware of complaints filed and to hold the administration accountable for timely solving of complaints. 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 using the address entered by the complainant the ward and councillor code should be automatically detected in the CCRS.

- **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.

- **Type of Complaints:** The complaint management system includes various types and sub-types of complaints under which a complaint can be filed. However, under medical officer of health (MOH) for health services only complaints such as to licence of food stalls, unauthorised food selling, births and deaths is included. The CCRS should therefore include the entire gamut of services that the MCGM undertakes, one example is including sub-heads for all kinds of complaints regarding health services such as dispensary timings, doctor's service, infrastructure of hospitals/dispensaries, etc.

- **Complaints Dashboard:** As a step towards Open Government Data, an openly available dashboard regarding complaints should be set up by the MCGM. 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.

Figure 1: Ideal Working of Centralised Complaint Registration System for City Governments



Section VI: Analysis of Municipal Budget Related to Civic Issues[67]

A. Key Highlights

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

Department-wise Budgetary Allocation:

- ***SWM budget was constant at an average of 9.6%*** of total budget from 2017-18 to 2020-21.
- Budget allocation for ***water supply*** reduced from 10.25% of the total budget in 2017-18 to 8.67% in 2020-21.
- Overall ***sewerage department*** saw a fall in allocation from 5.69% in 2017-18 to 4.13% in 2020-21.
- Of all the departments, water, sewerage and drainage, and solid waste management are the key civic issues faced by citizens and the primary duties of the local government. In the past 4 years, ***an average of 28% of the budget was spent*** on these.

Department-wise Actual Expenditures:

- In 2018-19, only ***58% of the capital budget of water and sewerage*** department was actually spent.
- The ***SWM department had the worst capital utilisation*** in 2018-19 among other civic departments with only 23% of the allocated capital budget spent.
- Revenue expenditures on the other hand were almost spent (92% for SWM department) or spent more than allocated (120% for water and sewerage).

Budgetary Process:

- Apart from specificities of the budget, it is also important to look at the budgetary process, which should be ***participatory and inclusive***.
- The national and state budgets are ***prepared and presented*** by their respective finance ministers, both of which fall in the deliberative (elected) wing of governments. At the city level in Mumbai however, the budget is prepared and presented by the Municipal Commissioner, a bureaucrat and an unelected executive appointed by the state government.
- The elected bodies, namely the standing committee and the Corporation then debate on it and make modifications, following which the budget goes into effect for the financial year. Although the ward committees have considerable powers for proposing budgetary requirements before the budget is prepared, it is at the discretion of the administration to accept them.
- Further, the ***chief auditor*** of MCGM is also an appointee of the state government and its report is not presented to the entire house but only the standing committee.

[67] All figures are in crores unless specified otherwise. All figures have been taken from the Municipal Commissioner's speeches from 2014-15 to 2019-20, available on MCGM website: www.mcgm.gov.in.
Note: 'RE' stands for Revenue Expenditure and 'CE' stands for Capital Expenditure

B. Overall Budget Analysis

Table 41: Budget Estimates in Revenue Expenditure (in crores)

Revenue Expenditure			
Financial Year	**Budget Estimates**	**Revised Estimates**	**Difference (in %)**
2014-15	20,120.73	18,966.61	-6%
2015-16	21,675.41	18,617.32	-14%
2016-17	24,172.71	18,573.69	-23%
2017-18	17,011.83	15,866.07	-7%
2018-19	17,723.25	15,717.83	-11%
2019-20	19,205.27	19,240.31	0%
2020-21	18,796.74	-	-

Note (-): Data not available in public domain

Inference:
The revised estimates from 2014-15 to 2018-19 were lesser than the budget estimates, however in 2019-20 revised revenue expenditure estimate was more than the budget estimates.

Table 42: Budget Estimates in Capital Expenditure (in crores)

Capital Expenditure			
Financial Year	**Budget Estimates**	**Revised Estimates**	**Difference (in %)**
2014-15	11,051.69	7,348.08	-34%
2015-16	11,836.00	7,630.60	-36%
2016-17	12,874.78	5399.67	-58%
2017-18	8,127.08	6,111.07	-25%
2018-19	9,527.80	7,797.56	-18%
2019-20	11,480.42	10,785.08	-6%
2020-21	14,637.76	-	-

Note (-): Data not available in public domain

Inference:
The revised estimates of capital expenditures from 2014-15 to 2019-20 are consistently lower than the budget estimates, however the gap has reduced over the years.

C. Budget Analysis of Key Civic Departments

Table 43: Budgetary Allocation of Departments Related to Civic Issues from 2017-18 to 2020-21

Department	Budget 17-18		Budget 18-19		Budget 19-20		Budget 20-21	
	BE	%	BE	%	BE	%	BE	%
Solid Waste Management Department	2,430	9.67%	2,606	9.56%	2,889	9.41%	3,291	9.84%
Storm Water Drains Department	844	3.36%	929	3.41%	1,303	4.25%	1,339	4.00%
Water Operation Department	2,250	8.95%	2,244	8.24%	1,875	6.11%	1,713	5.12%
Water Supply Project Department	328	1.30%	453	1.66%	620	2.02%	1,185	3.55%
Sewerage Operation Department	810	3.22%	798	2.93%	621	2.02%	611	1.83%
Sewerage Project Department	163	0.65%	147	0.54%	270	0.88%	347	1.04%
Mumbai Sewerage Disposal Project	456	1.82%	549	2.01%	489	1.59%	424	1.27%
Other departments	17,857	71.03%	19,526	71.65%	22,619	73.71%	24,525	73.35%
Total	**25,139**	**100%**	**27,251**	**100%**	**30,686**	**100%**	**33435**	**100%**

Inference:

- Budgetary allocation of solid waste management has increased from 2,430 crores in 2017-18 to 3,291 crores in 2020-21, however the percentage share to total budget has remained almost constant at an average of 9.6% in the last four years.
- Similarly, both the water supply departments put together have seen an in increase in allocation from 2,578 crores in 2017-18 to 2,898 crores in 2020-21. However, allocation to the operations department fell by 24% in the last 4 years.
- The percentage share of allocation to water supply projects has increased, but the overall expenditure on water supply of the city has fallen from 10.25% in 2017-18 to 8.67% in 2020-21.
- Overall sewerage department saw a fall in allocation from 5.69% in 2017-18 to 4.13% in 2020-21, and was the department with the least percentage share from total budget among the major civic departments.
- Storm Water Drains department saw an increase in allocation from 844 in 2017-18 to 1,339 in 2020-21 with a percentage share of 4% in 2020-21.
- Of all the departments, water, sewerage and drainage, and solid waste management are the key civic issues faced by citizens and the primary duties of the local government. In the past 4 years, an average of 28% of the budget was spent on these.

Table 44: Budget Estimates and Actual Expenditure of Roads, Traffic Operations & Bridges Depts. from 2014-15 to 2020-21

Financial Year	Budget Estimates			Actuals			Percentage Utilised		
	RE	CE	Total	RE	CE	Total	RE	CE	Total
2014-15	652	2,831	3,483	892	2,137	3,028	137%	75%	87%
2015-16	688	3,858	4,546	871	1,894	2,765	127%	49%	61%
2016-17	705	4,479	5,184	858	549	1,406	122%	12%	27%
2017-18*	806	2,480	3,286	813	1,350	2,163	101%	54%	66%
2018-19*	848	3,270	4,118	990	1,692	2,682	117%	52%	65%
2019-20*	881	3,821	4,702	-	-	-	-	-	-
2020-21*	699	4,700	5,399	-	-	-	-	-	-

Note (-): Data not available in public domain
* - includes Coastal Road Project

Inference:
Revenue expenditure actuals of the roads, bridges and traffic departments have been higher than the estimates in the past 5 years (2014-15 to 2018-19) whereas the capital expenditure, which is a major portion of the roads budget, is being utilised only half since the past two years.(54% in 2017-18 and 52% in 2018-19)

Table 45: Budget Estimates and Actual Expenditure of Storm Water Drains Department from 2014-15 to 2020-21

Financial Year	Budget Estimates			Actuals			Percentage Utilised		
	RE	CE	Total	RE	CE	Total	RE	CE	Total
2014-15	337	1,121	1,458	432	657	1,089	128%	59%	75%
2015-16	329	1,098	1,426	346	402	748	105%	37%	52%
2016-17	410	999	1,408	440	469	909	107%	47%	65%
2017-18	369	475	844	441	599	1,040	119%	126%	123%
2018-19	363	566	929	489	822	1,312	135%	145%	141%
2019-20	478	825	1,303	-	-	-	-	-	-
2020-21	427	912	1,339	-	-	-	-	-	-

Note (-): Data not available in public domain

Inference:
The utilisation of the SWD department has drastically improved from 2016-17 to 2018-19 and actual spend was more than the estimate, which is probably why the estimates for 2019-20 and 2020-21 have been accordingly raised.

Table 46: Budget Estimates and Actual Expenditure of 'G' Budget (Water & Sewerage Operations) from 2014-15 to 2020-21

Financial Year	Budget Estimates			Actuals			Percentage Utilised		
	RE	CE	Total	RE	CE	Total	RE	CE	Total
2014-15	3,245	2,881	6,127	2,059	1,136	3,195	63%	39%	52%
2015-16	3,247	2,543	5,790	2,615	1,239	3,854	81%	49%	67%
2016-17	3,328	2,559	5,887	4,038	942	4,980	121%	37%	85%
2017-18	3,215	1,611	4,826	4,559	974	5,533	142%	60%	115%
2018-19	3,513	1,787	5,300	4,212	1,040	5,251	120%	58%	99%
2019-20	3,532	2,150	5,682	-	-	-	-	-	-
2020-21	3,490	2,601	6,091	-	-	-	-	-	-

Note (-): Data not available in public domain

Inference:
While water and sewerage account for around 13% of the budget, actual expenditures portray a grim picture- in 2018-19 only 58% of the capital budget was spent. While, the revenue expenditure was more than the budgeted in 2018-19 (120%).

Table 47: Budget Estimates and Actual Expenditure of Solid Waste Management[68] from 2014-15 to 2020-21

Financial Year	Budget Estimates			Actuals			Percentage Utilised		
	RE	CE	Total	RE	CE	Total	RE	CE	Total
2014-15	2,144	486	2,630	1,686	76	1,762	79%	16%	67%
2015-16	2,227	418	2,645	1,806	66	1,872	81%	16%	71%
2016-17	2,458	394	2,852	1,944	124	2,069	79%	32%	73%
2017-18	2,247	359	2,606	2,110	142	2,253	94%	40%	86%
2018-19*	2,456	510	2,966	2,265	117	2,382	92%	23%	80%
2019-20*	2,709	562	3,270	-	-	-	-	-	-
2020-21*	2,746	925	3,671	-	-	-	-	-	-

Note (-): Data not available in public domain
* - Includes Slum Sanitation Programme (SSP)

Inference:
The SWM department had the worst capital utilisation in 2018-19 among other civic departments with only 23% of the allocated capital budget spent. Overall budget for SWM is however consistently increasing from 2017-18 to 2020-21.

[68] Includes transport and Slum Sanitation Programme

D. Recommendations

- **Focus on Civic Departments:** There is a need for greater focus on key civic departments to ensure that amounts allocated are effectively spent in development works, especially the capital budget, since in these departments capital budget allocations account for new establishment, replacement, repair and maintenance of basic civic infrastructure.

- **Budget Making Process:** Just like the 'power of the purse' at the national level is with the Lok Sabha, the elected House, the responsibility to demand accountability of budgetary spending should rest with the elected (deliberative) body of the MCGM. The audit report of the government should also be presented and deliberated by the elected wing of the MCGM.

- **Outcome Based Budgeting:** The Budget also needs to set some basic service-level benchmarks in terms of outcomes of the budget. A budget's core purpose is rendered moot if there is no outcome-based approach, which encourages monitoring and tracking of the result of spending.

Section VII: Human Resources in MCGM

A. Vacancies in MCGM Human Resources

Table 48: Department-Wise MCGM Human Resources in 2018 and 2019

Department	2018			2019		
	Posts			Posts		
	Sanctioned	Available	Vacant (%)	Sanctioned	Available	Vacant (%)
Municipal Secretary Department	457	304	33%	447	293	34%
Municipal Auditor's Department	979	564	42%	989	524	47%
Municipal Commissioner office	1,049	659	37%	1,028	651	37%
Auditor's Department	1,800	1,453	19%	1,800	1,472	18%
Security Department	4,242	2,843	33%	4,257	2,659	38%
Water Supply and Sewerage Department	467	396	15%	464	383	17%
Central Procurement Dept.	99	70	29%	96	64	33%
Labour Department	374	196	48%	218	39	82%
Public Relations Department	52	40	23%	44	37	16%
Mumbai Fire Brigade	4,175	3,191	24%	4,185	3,006	28%
Enquiry Department	118	106	10%	118	103	13%
Assessor and Collector Department	3,649	1,854	49%	3,308	1,656	50%
Legal Department	355	263	26%	354	256	28%
Solid Waste Management Department	35,181	28,664	19%	35,223	28,952	18%
Storm Water Drains Department	3,377	2,025	40%	3,377	1,969	42%
Mechanical & Electrical Department	1,024	572	44%	1,005	534	47%
Development and Planning Department	495	342	31%	480	353	26%
City Engineer's Department	4,218	2,592	39%	4,234	2,586	39%
Water Engineer's Department	10,834	6,604	39%	10,851	6,803	37%
Water Supply project Department	554	243	56%	554	245	56%
Sewerage Propulsion Department	7,815	4,324	45%	7,816	4,423	43%
Sewerage Project	454	178	61%	454	191	58%
Civic Training Institute and Research Centre	72	56	22%	72	55	24%
Roads & Traffic Department	6,350	3,792	40%	6,350	3,740	41%
Mumbai Sewerage Disposal Project	86	50	42%	89	54	39%
License Department	899	757	16%	971	826	15%
Education Department	22,081	12,240	45%	21,995	11,762	47%

Department	2018			2019		
	Posts			Posts		
	Sanctioned	Available	Vacant (%)	Sanctioned	Available	Vacant (%)
Garden & Recreation Department	1,639	794	52%	1,626	787	52%
Shops & Establishment Department	259	206	20%	259	202	22%
Municipal Printing Press	516	270	48%	478	227	53%
Health Department	12,533	8,530	32%	12,276	8,250	33%
KEM and Medical college	6,152	3,985	35%	5,820	3,552	39%
LT Marg and Medical college	4,830	3,214	33%	4,493	2,859	36%
BYL Nair and Tora Medical College	4,414	2,680	39%	4,109	2,356	43%
Nair Hospital Dental College	351	255	27%	319	216	32%
Deonar Abattoir	820	319	61%	821	318	61%
Planning Department	53	26	51%	71	31	56%
Estate Department	1,542	1,148	26%	1,541	1,177	24%
Markets Department	1,111	642	42%	1,109	627	43%
Encroachment and Elimination Department	91	81	11%	91	83	9%
Information and Technology Department	47	41	13%	43	39	9%
Suburban Hospitals	10,202	6,648	35%	9,579	5,412	44%
Disaster Management Cell	281	94	67%	281	71	75%
Bridges Department	141	85	40%	180	94	48%
Dr. Rustam N Kapoor Medical College	512	247	52%	664	250	62%
Zoo	213	97	54%	216	94	56%
Coastal Road Project	42	19	55%	64	29	55%
Building shielding	264	182	31%	264	193	27%
Total	**1,57,269**	**1,03,941**	**34%**	**1,55,083**	**1,00,503**	**35%**

Inference:

- For effective functioning of the government, it is essential to have adequate human resources. Overall 35% of the posts in MCGM were vacant in 2019.
- In 2019, labour department had the highest vacancy (82%) whereas Encroachment and Elimination Department as well as Information and Technology Department had the lowest vacancy (9%) each.
- In key departments of civic services, 18% posts were vacant in SWM department, 17% in water supply and sewerage department, 42% in storm water department, 47% in education, 41% in roads and 33% in health department.
- The Disaster Management Cell, which manages the complaints of citizens, had a vacancy of 75%.

B. Recommendations

The MCGM should ensure that key departments related to delivery of basic services do not have high vacancies. Further, sanctioned posts should be revised based on the annual requirements for each department and should be accordingly filled.

Section VIII: Performance of Ward Committees

A. Key Highlights

Overall Performance:

- In 2019, ward committee ***attendance of councillors was 73%, fallen from 79% in 2018***.
- In 2019, ***952 questions*** were raised as compared to 1,046 in 2018, a 9% fall.
- 32 councillors did not a single question in the ward committees while 19 councillors asked more than 10 questions in 2019.

Issue-wise Questions:

- ***285 questions were raised on issues other than key civic responsibilities*** (such as on environment, crime, corporation management related, building, estate etc). These were more than the questions on SWM (101), water (62) and drainage (46) put together.
- The second most asked questions were related ***to roads (203).***
- ***105 questions were asked on naming and renaming*** of roads/monuments/etc, reflecting misplaced priorities of the councillors in deliberation.

Type of Questions and Administrative Response:

- Most of the questions raised ***(70%) were 'point of orders'.*** This shows that councillors prefer using those devices that also entail discussion rather than just written answers from the administration.
- However, administrative response to questions has been lackadaisical with total number of ***pending replies increasing from 261 questions in 2015 to 913 questions in 2019.***

B. Performance of Ward Committees

The 74th Constitutional Amendment Act (CAA) provides for the formation of ward committees in municipalities with a population of more than three lakhs, with the aim to decentralise governance and strengthen grassroots democracy.

Praja's pan-India study of 21 cities[69] shows that ward committees in furtherance of the 74th CAA are provided for in the local government legislation for all 21 cities but are constituted only in 8 of 21 cities namely Dharamshala, Delhi, Udaipur, Ahmedabad, Mangaluru, Mumbai, Kochi and Bhubaneswar. Of these, ward committees are active only in 6 cities, namely Dharamshala, Delhi, Ahmedabad, Mumbai, Kochi and Bhubaneswar. In cities like Delhi, Mumbai, Panaji, Coimbatore, Vijayawada and Raipur, committees are mandated to be formed at the zonal level while in the rest ward committees are mandated to be formed at ward constituency level.

There are 17 Ward Committees in Mumbai at the administrative ward level, consisting of all the councillors within the administrative jurisdiction of the respective wards. Ward Committees are one of the most crucial mechanisms available to Municipal Councillors for conducting deliberations for delivering effective governance. Issues of prime significance to citizens' daily lives related to civic amenities such as road, water supply, drainage, etc. including budgetary suggestions can be taken up and redressed effectively in this forum.

Questions and issues raised and debated in the ward committee are indicative of how the councillors have performed in bringing up and solving civic issues. There are various devices used in the ward committee including short-notice questions, notice of motion, adjournment motion, amendments, agenda and point of order. (Refer Annexure 6)

[69] https://www.praja.org/praja_docs/praja_downloads/National%20Consultation%20On%20Urban%20Governance-%20Key%20Finding%20From%2021%20States.pdf

Table 49: Total number of Meetings, Attendance and Questions Asked in Ward Committees

Ward Committee			
Year	**Total Meeting**	**Attendance in (%)**	**Total Questions**
Mar'17 to Dec'17	240	82%	856
Jan'18 to Dec'18	279	79%	1,046
Jan'19 to Dec'19	280	73%	952

Inference:
While the number of ward committee meetings in 2019 is almost same as 2018, the total number of questions asked has fallen by 9% and attendance has fallen by 6%. The fall can be mainly attributed to 2019 being an election year, both at the centre and state level, which points to the fact that deliberation of local representatives often, suffers due to it.

Table 50: Number of Questions Asked by Councillors in Ward Committees

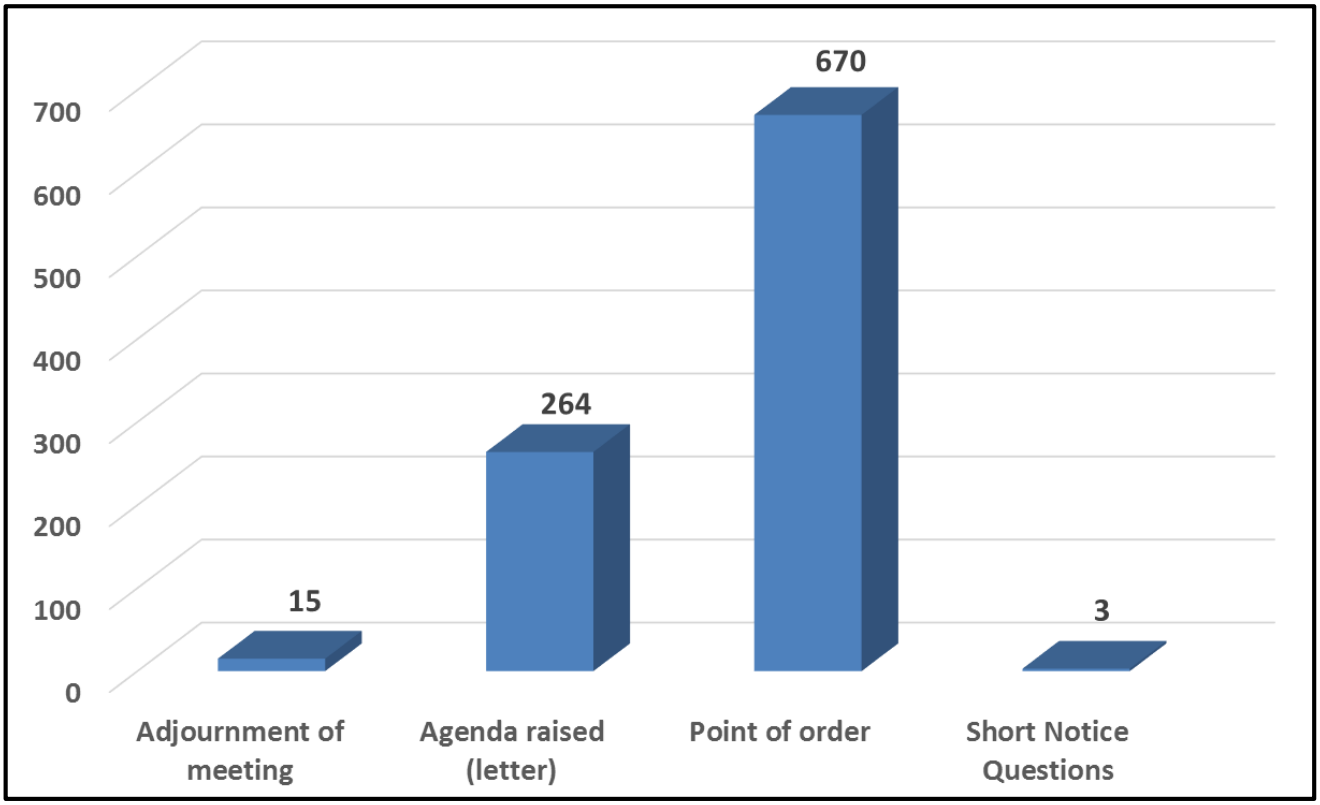
Category	**No. of Members**		
	Mar'17 to Dec'17	**Jan'18 to Dec'18**	**Jan'19 to Dec'19**
Zero Question	38	31	32
1 to 5 Question asked	134	122	137
6 to 10 Question asked	46	53	39
Above 10 Question asked	10	21	19
Total Members	**228***	**227**	**227**

Note (*): - Shailaja Girkar was elected in March 2017 but passed away in September 2017, and Pratibha Girkar was elected in her place. Shailaja Girkar's questions till August 2017 have been considered. Hence, the number of councillors has been shown as 228 and not 227.

Inference:

- Maximum number of councillors asked between 1 to 5 questions in 2019 (137 Councillors).
- 32 councillors have not asked a single question in 2019. This is lower than the 2017 figure of 38.
- 19 councillors asked more than 10 questions in 2019 as compared to 10 councillors in 2017.

Graph 2: Types of Devices Used by Councillors in 2019



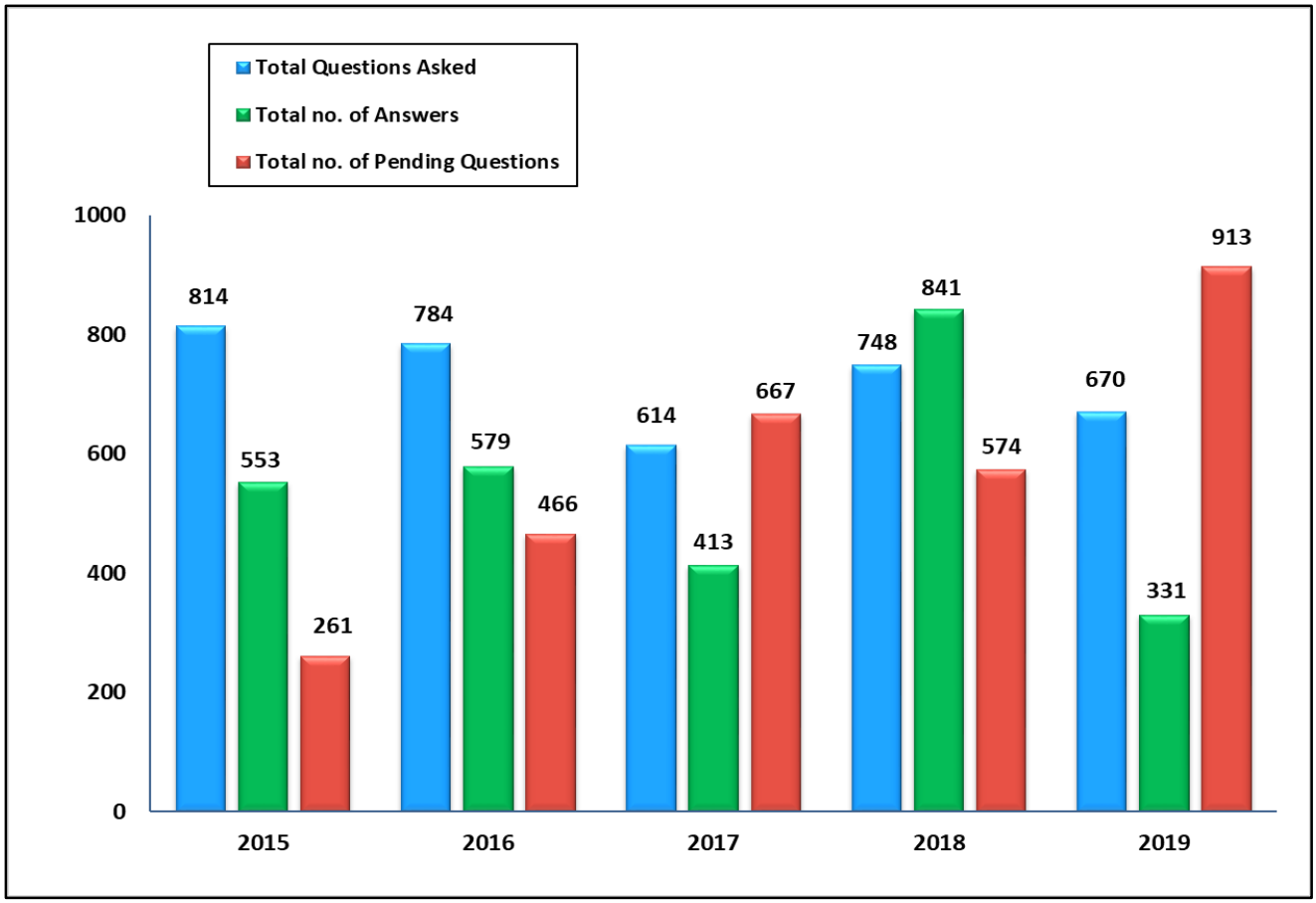
Inference:

Point of Order has been, by far the most frequently used device by Councillors in 2019 (670 times) which shows that it takes a more serious level device to bring attention of the administration to issues. This is also reflected in the fact that 'short notice questions' was used as a device only 3 times. This points to the fact that councillors prefer using those devices that entail discussion rather than written answers from the administration.

Table 51: Types of Devices Used by Councillors from March 2017 to December 2019

Types of devices	Mar '17 to Dec '17	Jan '18 to Dec '18	Jan '19 to Dec '19
Adjournment of meeting	8	20	15
Agenda raised (letter)	257	275	264
Amendment Proposed	0	0	0
Point of order	588	748	670
Short Notice Questions	0	3	3
Notice of Motion	3	0	0
Total	**856**	**1,046**	**952**

Graph 3: Answers Given by Administration to Point of Order Questions Raised in Ward committee Meetings from 2015 to 2019

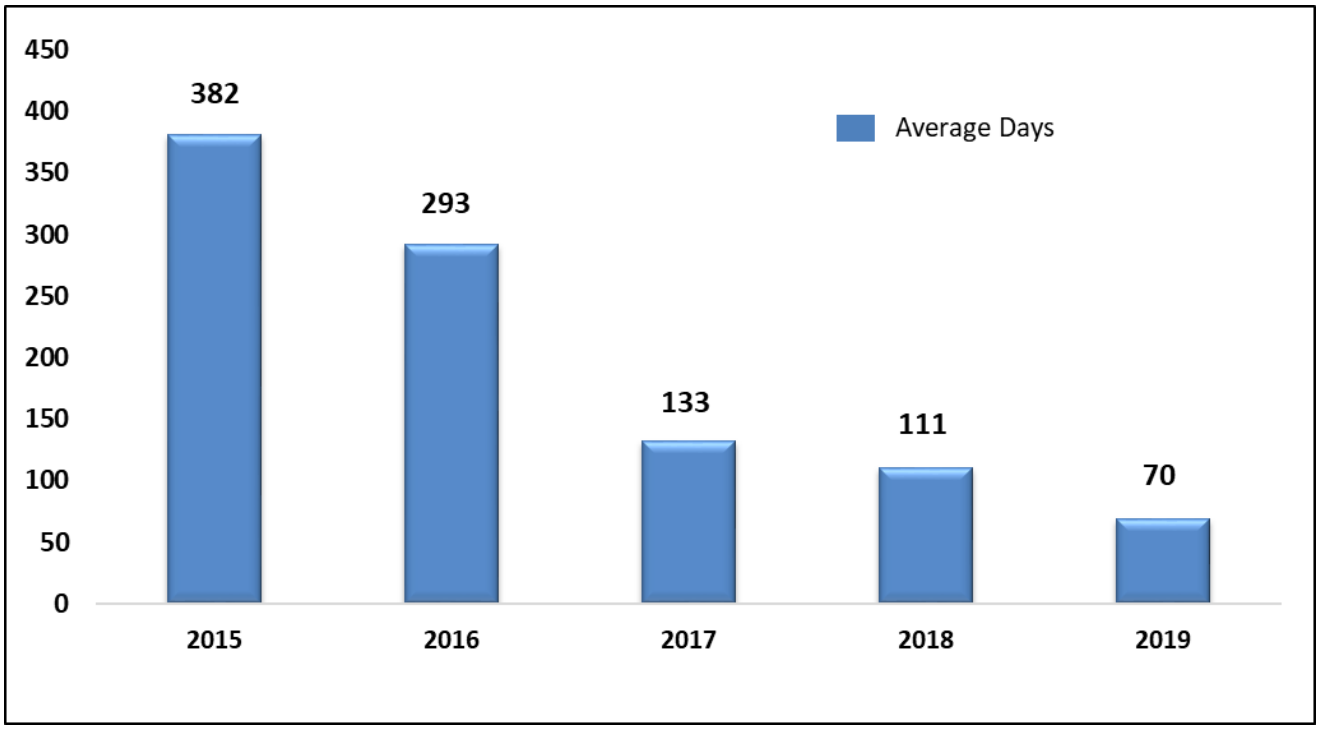


Note: Pending questions from previous years have been added to the current years, since those questions are still pending. Hence, the 'Pending Questions' figures are progressive in nature.

Inference:

- Total Number of pending questions has escalated every year, from 261 questions in 2015 to 913 questions in 2019, showing that the response of the administration to the questions has been lackadaisical.
- It is important to understand that Point of Order is questions that relate to serious issues. The Ward Committee needs to take a serious stand in ensuring that these questions are answered in a timely manner, which in turn will result in better functioning of the government.

Graph 4: Comparison of the Average Days Taken to Answer Point of Order Questions in the Ward Committees from 2015 to 2019



Inference:
Although the amount of pending point of order replies is high, the average number of days taken to answer them has improved drastically in the last 5 years, from in 382 in 2015 to 70 in 2019.

Table 52: Top Three Wards in Complaints and Questions in Proportion to the Ward Population in 2019

Top three Ward in complaints proportion to population		H/E	M/E	R/N
Population 2011		5,57,239	8,07,720	4,31,368
No. of Councillors		10	15	8
Total Complaints		4,397	4,334	2,729
Road	**Complaints**	612	462	307
	Question asked	7	10	12
Drainage	**Complaints**	985	774	453
	Question asked	0	4	1
SWM	**Complaints**	540	597	345
	Question asked	3	8	3
Total Questions		36	53	44
Naming/Renaming of Roads		5	2	3

Inference:

- H/E (4,397), M/E (4,334) and R/N (2,729) are the top three wards with the highest number of complaints in proportion to their population.
- However, the total questions asked in major issues does not resonate with the complaints, the former being very low compared to the latter. For example, 985 drainage complaints in H/E ward and 453 in R/N had 0 and 1 questions raised by councillors in ward committees, respectively.

Table 53: Top Three Wards in Complaints and Its Number of Questions in 2019

Top three wards in complaints		K/E	K/W	P/N
No. of Councillors		15	13	18
Total Complaints		9,724	10,399	8,019
Road	Complaints	1,671	1,163	974
	Questions asked	19	15	23
Drainage	Complaints	1,730	2,357	1,230
	Questions asked	1	4	2
SWM	Complaints	1,019	1,680	1,106
	Questions asked	3	10	9
Total Questions		77	69	101
Naming/Renaming of Roads		3	5	7

Inference:

- K/E (9,724), K/W (10,399) and P/N (8,019) were the top three wards in terms of number of complaints in 2019.
- However, the numbers of questions were meagre in comparison to complaints- only 3 questions were raised on SWM in K/E, and only 1 on drainage.

Table 54: Top Three Wards in Questions Asked in Proportion to the Number of Councillors Elected from the Ward in 2019

Top three ward in total questions	G/S	M/W	P/N
No. of councillors	7	7	18
Total Questions	74	61	101
Roads	26	12	23
Drainage	3	2	2
SWM	11	6	9
Naming/Renaming of Roads	7	7	7
Total Complaints	4,192	4,387	8,019

Inference:

- G/S (74), M/W (61), and P/N (101) are the top three wards for questions asked in proportion to the number of Councillors.
- Among the top three wards, Councillors of G/S have asked more questions related to Roads, Drainage and Solid Waste Management**.**

Table 55: Issue-wise Questions Asked by Councillors in 2019

Sr. No.	Ward	Drainage	SWM	Water Supply	License	Roads	Garden	Community Development	Health	Education	Naming/ Renaming of Road	Other issues related	Total
1	**Ward Committee A, B and E**												
	A	2	1	0	0	1	0	0	0	0	3	3	**10**
	B	0	1	1	1	0	0	0	0	0	2	0	**5**
	E	0	2	1	1	2	0	0	0	0	7	5	**18**
2	**Ward Committee C and D**												
	C	0	2	0	0	1	0	0	1	0	4	0	**8**
	D	1	1	1	0	5	0	0	0	1	3	7	**19**
3	**Ward Committee F/South and F/North**												
	F/N	1	2	4	5	3	0	0	1	0	3	10	**29**
	F/S	3	2	2	1	4	0	0	0	0	1	9	**22**
4	**Ward Committee G/North**	5	3	0	2	4	0	1	0	0	2	11	**28**
5	**Ward Committee G/South**	3	11	2	0	26	6	4	0	1	7	14	**74**
6	**Ward Committee H/East and H/West**												
	H/E	0	3	3	0	7	0	0	1	0	5	17	**36**
	H/W	1	3	3	5	2	0	0	0	0	10	5	**29**
7	**Ward Committee K/East**	1	3	5	9	19	2	3	0	5	3	27	**77**
8	**Ward Committee K/West**	4	10	9	3	15	1	2	1	2	5	17	**69**
9	**Ward Committee L**	5	5	12	5	15	2	0	1	0	9	11	**65**
10	**Ward Committee M/E**	4	8	2	2	10	0	5	2	1	2	17	**53**
11	**Ward Committee M/W**	2	6	4	7	12	3	1	0	0	7	19	**61**
12	**Ward Committee N**	0	6	3	4	15	1	1	0	0	5	4	**39**
13	**Ward Committee P/North**	2	9	3	10	23	5	3	1	3	7	35	**101**
14	**Ward Committee P/South**	1	5	3	2	8	0	0	0	0	2	13	**34**

Sr. No.	Ward	Drainage	SWM	Water Supply	License	Roads	Garden	Community Development	Health	Education	Naming/ Renaming of Road	Other issues related	Total
15	**Ward Committee R/Central and R/North**												
	R/C	2	11	1	3	8	1	0	0	2	4	13	**45**
	R/N	1	3	1	3	12	2	0	4	1	3	14	**44**
16	**Ward Committee R/South**	4	2	1	5	7	3	0	0	2	5	23	**52**
17	**Ward Committee S and T**												
	S	3	1	1	1	3	1	1	1	0	5	9	**26**
	T	1	1	0	0	1	0	0	2	0	1	2	**8**
	Total	**46**	**101**	**62**	**69**	**203**	**27**	**21**	**15**	**18**	**105**	**285**	**952**

Inference:

- Highest number of questions were raised by P/N ward committee (101) in 2019.
- Most number of questions raised were related to roads (203), followed by naming and renaming (105) and SWM (101).

C. Analysis of Political Party Manifestos

When political parties make certain promises in election manifestos, it is expected that they would have put some thought into those issues in the years leading up to the election. If parties made an effort to raise these issues in the period before the elections, then it indicates sincerity towards the causes they espouse. It also indicates a coherent thinking process of the parties.

The most objective way of analysing this is by comparing the promises in the manifestos with the questions asked by the councillors in the corporation and its various committees. For this, we collated all the promises made by major political parties in their manifestos and divided them into several broad categories. Not all parties have necessarily asked questions related to all of these categories. Within these categories, we have compared specific issues raised by the parties in their manifestos with questions raised by them in the preceding years. Thus, we have restricted our analysis to these sub-issues rather than focusing on broader issues.

In our analysis, we have compared Issues in Political Party Manifestos for 2017 MCGM elections and Questions asked by respective Party Councillors during March 2017 to December 2017. We have given the benefit of doubt to political parties while comparing issues mentioned in the manifestos with questions rose earlier. For example, if completion of the Gargai project was listed as an issue in the manifesto, questions related to increased water supply were taken as being related to this issue, even if the questions were not specifically about the project. This is because although the completion of the project is a specific issue, it is linked to the broader question of adequate water supply.
We are going to track this section every year in our civic issues report henceforth to see whether the newly elected councillors are raising any of the issues that their respective political parties have mentioned in their manifestos.

Note: The party-wise points and sub-points are given in Annexure 5 of this report.

Table 56: Party Wise Summary of Manifesto Points and Questions Raised in 2019

Manifesto Points	Bharatiya Janata Party (83 Councillors)		Shiv Sena (93 Councillors)		Indian National Congress (31 Councillors)		National Congress Party (9 Councillors)	
	Points*	Questions	Points*	Questions	Points*	Questions	Points*	Questions
Affordable houses	8	35	1	70	0	21	0	9
BEST Transport	8	10	3	32	0	9	4	1
Development Plan	24	5	2	11	0	3	4	0
Disaster Management	4	0	0	1	0	0	0	0
Fire Brigade	6	3	0	10	0	1	3	3
Floods	3	0	1	0	0	1	0	0
Holistic Development	10	5	0	10	0	1	0	0
Municipal Hospital	10	19	4	26	2	24	6	20
Municipal School Education	16	34	6	69	6	16	6	13
New Road Projects	7	16	3	26	3	10	3	5
Open Spaces	19	49	2	45	6	9	5	0
Planning for Hawkers	8	16	0	10	4	3	4	2
Potholes	1	9	0	8	1	3	2	0
Property Tax	4	8	2	3	4	2	1	0
Public Health	12	19	4	42	7	10	5	13
Road/ Road Tendering	1	39	0	53	1	24	1	4
Sanitation	1	20	1	18	0	9	0	2
Sewerage	7	25	0	26	0	6	3	2
Culture and Tourism#	26	17	4	27	0	1	2	1
Solid Waste Management	10	51	1	49	5	16	5	2
Subsidised Meals	0	0	0	0	2	0	0	0
Traffic Management	6	22	0	23	1	6	1	1
Transparent administration /Citizen Participation	21	1	0	3	0	0	0	1
Water Supply	13	43	2	42	6	16	6	1
Women/ children/ youth / senior citizens	15	21	3	28	14	5	10	4
Total	**240**	**467**	**39**	**632**	**62**	**196**	**71**	**84**

Note (*): Points refers to number of points in the manifesto raised by that party under each issue.
(#): Culture and Tourism includes social culture, tourism, encouragement to Mumbai tourism, monuments of personalities, Marathi Pride.

Inference:

- Of the four major parties, key civic issues of water, sewerage, sanitation and SWM did not have high priority in the manifesto points. BJP and Shiv Sena had only one issue each on sanitation while INC and NCP had zero, in their manifestos.
- For Shiv Sena and BJP, more manifesto points were regarding culture and tourism than the key civic issues of water, sewerage, sanitation and SWM.
- The data shows that even where certain issues were not manifesto points, councillors have raised related questions and vice versa, showing a disconnect between manifesto promises and councillor deliberation.

D. Recommendations

- **Raising Civic Issues:** The ward committee data shows that the councillors need to lay more focus on key civic issues rather than naming/renaming.

- **Timely Administrative Response:** For the ward committee to be an effective forum, timely response of the administration to issues raised is necessary and the councillors need to proactively pursue their issues.

- **Citizen involvement**: For the forum to be truly participatory, citizen involvement is important. The ward committees have a provision for including 3 members from the civic society; however, this has not been implemented. Mumbai also has a provision for area sabhas, which enable participation of people in the planning and budget making process; however, this has not been implemented in practice.

- **Manifesto:** Manifestoes of parties should be based on the key priorities and issues faced in the city, and on issues that are the primary duties of the corporation such as basic civic services.

Annexure 1: Number of Days for Resolving Complaint According to Citizen's Charter

Sr. No.	Complaint	To be resolved (in days)
1	Drainage Chokes and Blockages	1
2	Overflowing drains or manholes	1
3	Odour (Foul Smell) from Drains	1
4	Replacement of Missing / Damaged Manhole	1
5	Raising of Manhole (except in Monsoon)	7
6	Cleaning of septic tank	7
7	Repairs to pipe sewers/main sewers	7
8	Contaminated Water Supply	1
9	Leaks in Water Lines	7
10	Shortage of Water Supply	2
11	Burst Water Main	1
12	Garbage not lifted - Co-authorised Point	1
13	Collection point not attended properly	1
14	Garbage lorry not reported for service/ Lorry not covered	1
15	Providing/removing/replacing dustbins	8
16	Sweeping of road	1
17	Removal of Dead Animals	1
18	No attendance at public toilets	2

Annexure 2: Details of Complaints Escalated in 2019

Table 57: Issue-wise Details of Complaints on Level 0 in 2019

Issues		Level 0		
	Total Complaints	No. of Complaints on which action was taken	Closed Complaints	Average Days
Roads	15,239	15,228	14,433	31
Buildings	20,317	20,260	18,105	55
Drainage	24,267	24,263	23,818	22
Water Supply	15,507	15,435	15,277	24
Solid Waste Management (SWM)	17,116	17,116	16,876	19
License	14,473	14,454	13,961	28
Pest control	7,501	7,500	7,451	17
Garden	3,367	3,367	3,346	23
Colony Officer	1,196	1,195	1,072	52
Storm Water Drainage	2,155	2,153	2,091	34
Shop and Establishment (S & E)	778	778	746	26
Medical Officer Health (MOH)	1,472	1,472	1,418	39
MCGM Related	1,103	1,103	1,014	45
Estate	623	616	564	57
Toilet	627	627	612	28
Pollution	269	269	235	54
School	78	78	63	68
Nuisance due to vagrants on municipal roads, footpaths, gardens	2,057	2,054	1,843	52
Total	**1,28,145**	**1,27,968**	**1,22,925**	**30**

Table 58: Issue-wise Details of Complaints on Level I in 2019

Issues		Level I		
	Total Complaints Escalated	No. of Complaints on which action was taken	Closed Complaints	Average Days
Roads	644	0	0	0
Buildings	2,215	0	0	0
Drainage	453	0	0	0
Water Supply	1	0	0	0
Solid Waste Management (SWM)	208	0	0	0
License	496	0	0	0
Pest control	39	0	0	0
Garden	20	0	0	0
Colony Officer	132	0	0	0
Storm Water Drainage	48	0	0	0
Shop and Establishment (S & E)	31	0	0	0
Medical Officer Health (MOH)	54	0	0	0
MCGM Related	82	0	0	0
Estate	34	0	0	0
Toilet	15	0	0	0
Pollution	36	0	0	0
School	15	0	0	0
Nuisance due to vagrants on municipal roads, footpaths, gardens	215	0	0	0
Total	**4,738**	**0**	**0**	**0**

Table 59: Issue-wise Details of Complaints on Level II in 2019

Issues		Level II		
	Total Complaints Escalated	No. of Complaints on which action was taken	Closed Complaints	Average Days
Roads	644	0	0	0
Buildings	2,215	0	0	0
Drainage	453	0	0	0
Water Supply	1	0	0	0
Solid Waste Management (SWM)	208	0	0	0
License	496	0	0	0
Pest control	39	0	0	0
Garden	20	0	0	0
Colony Officer	132	0	0	0
Storm Water Drainage	48	0	0	0
Shop and Establishment (S & E)	31	0	0	0
Medical Officer Health (MOH)	54	0	0	0
MCGM Related	82	0	0	0
Estate	34	0	0	0
Toilet	15	0	0	0
Pollution	36	0	0	0
School	15	0	0	0
Nuisance due to vagrants on municipal roads, footpaths, gardens	215	0	0	0
Total	**4,738**	**0**	**0**	**0**

Table 60: Issue-wise Details of Complaints on Level III in 2019

Issues		Level III		
	Total Complaints Escalated	No. of Complaints on which action was taken	Closed Complaints	Average Days
Roads	644	0	0	0
Buildings	2,215	53	3	35
Drainage	453	31	3	13
Water Supply	1	0	0	0
Solid Waste Management (SWM)	208	0	0	0
License	496	0	0	0
Pest control	39	0	0	0
Garden	20	0	0	0
Colony Officer	132	0	0	0
Storm Water Drainage	48	0	0	0
Shop and Establishment (S & E)	31	0	0	0
Medical Officer Health (MOH)	54	0	0	0
MCGM Related	82	0	0	0
Estate	34	0	0	0
Toilet	15	0	0	0
Pollution	36	0	0	0
School	15	0	0	0
Nuisance due to vagrants on municipal roads, footpaths, gardens	215	0	0	0
Total	**4,738**	**84**	**6**	**24**

Table 61: Issue-wise Details of Complaints on Level IV in 2019

Issues		Level IV			Total Unresolved Escalated Complaints
	Total Complaints Escalated	No. of Complaints on which action was taken	Closed Complaints	Average Days	
Roads	644	644	50	36	594
Buildings	2,162	2,162	83	62	2,129
Drainage	422	422	37	41	413
Water Supply	1	1	0	0	1
Solid Waste Management (SWM)	208	208	14	40	194
License	496	496	21	38	475
Pest control	39	39	1	36	38
Garden	20	20	8	23	12
Colony Officer	132	132	9	49	123
Storm Water Drainage	48	48	4	56	44
Shop and Establishment (S & E)	31	31	1	99	30
Medical Officer Health (MOH)	54	54	6	46	48
MCGM Related	82	82	2	146	80
Estate	34	34	2	40	32
Toilet	15	15	1	94	14
Pollution	36	36	2	124	34
School	15	15	0	0	15
Nuisance due to vagrants on municipal roads, footpaths, gardens	215	215	4	115	211
Total	**4,654**	**4,654**	**245**	**50**	**4,487**

Table 62: Ward-wise Details of Complaints on Level 0 in 2019

Ward		Level 0		
	Total Complaints	Complaints with action taken report	Closed Complaints	Average Days
A	2,896	2,896	2,859	19
B	3,959	3,945	3,688	31
C	3,596	3,589	3,521	36
D	5,159	5,158	5,058	25
E	4,642	4,636	4,618	23
F/N	5,304	5,299	5,290	15
F/S	2,857	2,856	2,850	18
G/N	5,954	5,946	5,421	55
G/S	4,192	4,189	4,183	33
H/E	4,397	4,394	4,362	24
H/W	4,774	4,770	4,756	13
K/E	9,724	9,702	9,432	18
K/W	10,399	10,382	9,871	28
L	7,560	7,549	6,142	46
M/E	4,334	4,320	3,849	28
M/W	4,387	4,384	4,345	37
N	6,843	6,838	6,811	17
P/N	8,019	7,998	7,512	41
P/S	5,133	5,133	4,975	36
R/C	6,398	6,394	6,388	44
R/N	2,729	2,725	2,619	39
R/S	6,008	6,001	5,991	21
S	6,144	6,127	6,060	35
T	2,737	2,737	2,324	38
Total	**1,28,145**	**1,27,968**	**1,22,925**	**30**

Table 63: Ward-wise Details of Complaints on Level I in 2019

Ward		Level I		
	Total Complaints Escalated	Complaints with Action Taken Report	Closed Complaints	Average Days
A	16	0	0	0
B	242	0	0	0
C	72	0	0	0
D	94	0	0	0
E	0	0	0	0
F/N	0	0	0	0
F/S	2	0	0	0
G/N	560	0	0	0
G/S	0	0	0	0
H/E	30	0	0	0
H/W	9	0	0	0
K/E	110	0	0	0
K/W	495	0	0	0
L	1401	0	0	0
M/E	374	0	0	0
M/W	25	0	0	0
N	11	0	0	0
P/N	481	0	0	0
P/S	147	0	0	0
R/C	1	0	0	0
R/N	105	0	0	0
R/S	12	0	0	0
S	95	0	0	0
T	456	0	0	0
Total	**4,738**	**0**	**0**	**0**

Table 64: Ward-wise Details of Complaints on Level II in 2019

Ward		Level II		
	Total Complaints Escalated	Complaints with Action Taken Report	Closed Complaints	Average Days
A	16	0	0	0
B	242	0	0	0
C	72	0	0	0
D	94	0	0	0
E	0	0	0	0
F/N	0	0	0	0
F/S	2	0	0	0
G/N	560	0	0	0
G/S	0	0	0	0
H/E	30	0	0	0
H/W	9	0	0	0
K/E	110	0	0	0
K/W	495	0	0	0
L	1401	0	0	0
M/E	374	0	0	0
M/W	25	0	0	0
N	11	0	0	0
P/N	481	0	0	0
P/S	147	0	0	0
R/C	1	0	0	0
R/N	105	0	0	0
R/S	12	0	0	0
S	95	0	0	0
T	456	0	0	0
Total	**4,738**	**0**	**0**	**0**

Table 65: Ward-wise Details of Complaints on Level III in 2019

Ward		Level III		
	Total Complaints Escalated	Complaints with Action Taken Report	Closed Complaints	Average Days
A	16	0	0	0
B	242	11	0	0
C	72	0	0	0
D	94	0	0	0
E	0	0	0	0
F/N	0	0	0	0
F/S	2	0	0	0
G/N	560	13	2	16
G/S	0	0	0	0
H/E	30	0	0	0
H/W	9	2	0	0
K/E	110	3	1	1
K/W	495	9	0	0
L	1401	24	0	0
M/E	374	7	0	0
M/W	25	0	0	0
N	11	0	0	0
P/N	481	9	0	0
P/S	147	2	2	50
R/C	1	0	0	0
R/N	105	1	0	0
R/S	12	0	0	0
S	95	3	1	10
T	456	0	0	0
Total	**4,738**	**84**	**6**	**24**

Table 66: Ward-wise Details of Complaints on Level IV in 2019

Ward		Level IV			Total Unresolved Escalated Complaints
	Total Complaints Escalated	No. of Complaints on which action was taken	Closed Complaints	Average Days	
A	16	16	0	0	16
B	231	231	2	19	240
C	72	72	11	48	61
D	94	94	2	51	92
E	0	0	0	0	0
F/N	0	0	0	0	0
F/S	2	2	2	56	0
G/N	547	547	39	84	519
G/S	0	0	0	0	0
H/E	30	30	6	38	24
H/W	7	7	2	21	7
K/E	107	107	6	20	103
K/W	486	486	9	77	486
L	1377	1,377	17	32	1,384
M/E	367	367	2	27	372
M/W	25	25	4	45	21
N	11	11	1	4	10
P/N	472	472	23	57	458
P/S	145	145	9	36	136
R/C	1	1	0	0	1
R/N	104	104	6	65	99
R/S	12	12	5	110	7
S	92	92	39	29	55
T	456	456	60	43	396
Total	**4,654**	**4,654**	**245**	**50**	**4,487**

Annexure 3: Ward Committee and Ward-wise Number of Meetings, Attendance (%) and No. of Questions Asked from January 2019 to December 2019

Sr. No.	Ward	No. of Councillors	No. of Meetings	Attendance (in %)	Total Question asked	No. of questions asked by councillors			
						Zero Que.	1 to 5 Que.	6 to 10 Que.	Above 10 Que.
1	**Ward Committee A, B and E**								
	A	3	18	65%	10	0	2	1	0
	B	2		64%	5	1	1	0	0
	E	7		60%	18	1	5	1	0
2	**Ward Committee C and D**								
	C	3	14	88%	8	0	3	0	0
	D	6		80%	19	2	3	1	0
3	**Ward Committee F/South and F/North**								
	F/N	10	18	70%	29	3	5	2	0
	F/S	7		82%	22	2	4	0	1
4	**Ward Committee G/North**	11	16	71%	28	3	7	1	0
5	**Ward Committee G/South**	7	17	76%	74	1	4	0	2
6	**Ward Committee H/East and H/West**								
	H/E	10	16	62%	36	1	7	2	0
	H/W	6		65%	29	0	3	3	0
7	**Ward Committee K/East**	15	17	79%	77	4	5	3	3
8	**Ward Committee K/West**	13	15	59%	69	1	6	4	2
9	**Ward Committee L**	16	17	73%	65	3	10	1	2
10	**Ward Committee M/East**	15	15	62%	53	0	10	5	0
11	**Ward Committee M/West**	7	16	84%	61	0	2	3	2
12	**Ward Committee N**	11	14	79%	39	1	9	1	0
13	**Ward Committee P/North**	18	16	81%	101	2	10	2	4
14	**Ward Committee P/South**	9	15	76%	34	0	7	1	1
15	**Ward Committee R/Central and R/North**								
	R/C	10	24	82%	45	0	7	2	1
	R/N	8		74%	44	0	5	2	1
16	**Ward Committee R/South**	13	18	71%	52	1	8	4	0
17	**Ward Committee S and T**								
	S	14	14	74%	26	3	11	0	0
	T	6		69%	8	3	3	0	0
	Total	**227**	**280**	**73%**	**952**	**32**	**137**	**39**	**19**

Annexure 4: Party Wise Questions Raised by Councillors in Ward Committees

Table 67: Party-wise Number of Questions Asked by Councillors in 2018 and 2019

Political Party Name	Total Members		Zero Question		1 to 5 Question asked		6 to 10 Question asked		Above 10 Question asked	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Akhil Bharatiya Sena	1	1	0	0	1	1	0	0	0	0
All India Majlis-e-Ittehad-ul Muslimeen	2	2	1	1	1	0	0	1	0	0
Bharatiya Janata Party	83	83	7	8	51	52	17	15	8	8
Bhartiya Republican Party Bahujan Mahasangha	-	-	-	-	-	-	-	-	-	-
Independent	2	1	1	0	1	1	0	0	0	0
Indian National Congress	30	31	3	6	11	15	12	7	4	3
Maharashtra Navnirman Sena	1	1	1	1	0	0	0	0	0	0
Nationalist Congress Party	9	9	2	3	6	6	1	0	0	0
Republican Party Of India (RPI)(A)	-	-	-	-	-	-	-	-	-	-
Samajwadi Party	6	6	2	0	3	4	1	2	0	0
Shiv Sena	93	93	14	13	48	58	22	14	9	8
Total Members	**227**	**227**	**31**	**32**	**122**	**137**	**53**	**39**	**21**	**19**

Table 68: Party-wise Number of Questions Asked on Civic Issues in 2018 and 2019 (1/2)

Political Party Name	No. of Members		Road		Drainage		SWM	
	2018	2019	2018	2019	2018	2019	2018	2019
Akhil Bharatiya Sena	1	1	0	0	0	0	0	1
All India Majlis-e-Ittehad-ul Muslimeen	2	2	0	3	0	0	0	1
Bharatiya Janata Party	83	83	75	78	13	20	28	42
Bhartiya Republican Party Bahujan Mahasangha	-	-	-	-	-	-	-	-
Independent	2	1	0	0	0	0	3	0
Indian National Congress	30	31	34	26	10	5	14	11
Maharashtra Navnirman Sena	1	1	0	0	0	0	0	0
Nationalist Congress Party	9	9	6	3	0	0	2	2
Republican Party Of India (RPI)(A)	-	-	-	-	-	-	-	-
Samajwadi Party	6	6	3	9	1	2	1	3
Shiv Sena	93	93	90	84	23	19	38	41
Total	**227**	**227**	**208**	**203**	**47**	**46**	**86**	**101**

Table 69: Party-wise Number of Questions Asked on Civic Issues in 2018 and 2019 (2/2)

Political Party Name	Water Supply		Naming/ Renaming of Roads / Chowk		Other related issues		Total	
	2018	2019	2018	2019	2018	2019	2018	2019
Akhil Bharatiya Sena	0	0	1	0	0	0	1	1
All India Majlis-e-Ittehad-ul Muslimeen	0	0	0	0	2	2	2	6
Bharatiya Janata Party	20	24	73	49	157	157	366	370
Bhartiya Republican Party Bahujan Mahasangha	-	-	-	-	-	-	-	-
Independent	0	0	0	1	2	1	5	2
Indian National Congress	12	13	16	13	97	65	183	133
Maharashtra Navnirman Sena	0	0	0	0	0	0	0	0
Nationalist Congress Party	3	1	3	3	12	11	26	20
Republican Party Of India (RPI)(A)	-	-	-	-	-	-	-	-
Samajwadi Party	4	0	1	0	4	10	14	24
Shiv Sena	28	24	64	39	206	189	449	396
Total	**67**	**62**	**158**	**105**	**480**	**435**	**1,046**	**952**

Table 70: List of Councillors Who Asked Zero Questions in Ward Committees from Mar 2017 to Dec 2019

Name	Ward	Constituency No.	Political Party
Gulnaz Salim Qureshi	H/E	92	All India Majlis-e-Ittehad-ul Muslimeen
Jagdish Makkunny Thaivalapill	G/N	185	Shiv Sena
Manisha Harishchandra Rahate	S	119	Nationalist Congress Party
Sanjay Ramchandra Turde	L	166	Maharashtra Navnirman Sena
Vishakha Sharad Raut	G/N	191	Shiv Sena
Yashwant Kamlakar Jadhav	E	209	Shiv Sena

Annexure 5: Party Manifestos, 2017

Table 71: Bhartiya Janta Party (BJP) Manifesto

Manifesto Points
1. Affordable houses (8)
Completed by 2022 under Pantpradhan Awas Scheme and house for everybody asking for; Construction of 11 lakh affordable houses to provide house to everybody in Mumbai; Slum Redevelopment Scheme, MHADA redevelopment scheme will be speeded up; Ownership house will be provided to Corporation's cleaning staff within five years; Redevelopment of B.D.D./B.I.T. Chawls and Dharavi; Section 33(7) will be made applicable to residents in dilapidated buildings in suburbs; Rehabilitation of slums near airport and slums of hill slopes; Shifting and rehabilitation of slums in C.R.Z. area.
2. BEST Transport (8)
To manage budgeted deficit in Best budget cross subsidy will be granted by Municipal corporation; Wi-Fi system will be installed in all bus depot and buildings of Best; Pollution free Best buses running on battery will be purchased; Five big Best terminals will be constructed in Mumbai; Multi-storied parking areas will be constructed on premises of Best depots to enhance income of Best undertaking; Considering new network of Metro bus routes will be replanned and changed; Mobile app PIS – Passenger lnformation System - will be developed so that passengers will know definite timing of bus service; Scheme will be prepared for Best employees preferably for best bus drivers and conductors.
3. Development Plan (24)
Inclusion of development plan mandatory of the Municipality under section 61 of Municipality Act, 1888; New independent department for the strict implementation of Development Plan 2034 and erection of independent ward in every departmental office; lmplementation of special campaign/ security policy to allow access of Occupation Certificate to buildings older than 15 years; Cancellation of increased property tax and increased water bill in case of buildings older than 15 years; Policy decision for the use of Fungible FSI of discounted rates to regulate additional carpet area covered by flowerbed, balcony; Immediate possession of reserved and facility land plots developed under Reservation to make them available for public use; Logging redevelopment of 103 Municipal markets in Mumbai will be completed in 5 years; Additional galas available in market redevelopment will be used for rehabilitation of project affected and hawkers and footpaths will be cleared; "Mumbai Bajarhot" will be started of free facility plots in Mumbai; Reserved galas will be made available on rent in municipal markets for products from konkan; Mumbai Nagpur Samruddhi Corridor; Mumbai Delhi Corridor; Mumbai-Pune-Nashik_Ahmedabad Bullet Train; Sewri-Nhava Shev Trans Harbour Link way connecting Mumbai and Navi Mumbai within 30 minutes will be completed; Metro Projects- 2,3, 4, 5, 6.7 will be completed before year 2022 and passenger capacity will be increased by additional 90 lakh Passenger; Passenger carrying capacity will be doubled from present with construction of High, Railway on present railway route (Rail-over-rail); Row-row water transport will be started. Borivali- Nariman point, Belapur - Gate way, Bandra, Juhu, Charkop, Versova, Tender process initiated Rope-way transport will be started between Mumbai and Navi Mumbai and Uttan-Gorai-Borivali; 500 Wi-Fi spots started in Mumbai; 4717 CCTV cameras - 24 hours electronic surveillance system active; irregular traffic in Mumbai will regularised with use of state-of-the art technology by Digital Policing using CCTV in Wi-Fi Mumbai; BJP',s central government scheme- Now three independent residents by Mumbai port Trust available for cancer patients undergoing treatment in Mumbai; Free Wi-Fi will be made available for citizens of all main roads, public markets, gardens, Crowded areas; Large CCTV Network will be built up of public places. schools, bus stands, hospitals, gardens and crowded areas by following up with State Government.; Wi-Fi system and CCTV system will be co-ordinated with Municipal Corporation- Mumbai Police-Mumbai Fire Brigade-Disaster Management System and in turn third eye will keep watch on of crimes-criminals and Disaster Management will be strengthened and mode effective; Power generated from non-conventional sources like solar energy- wind energy will be used in various Municipal buildings and complexes.

4. Disaster Management (4)
Additional Disaster Management Center will be established in the east and west suburbs; Fire Department and hospitals, State of art systems will be created for management; Non-government organisations helping in the disaster management will be connected with the Disaster Management Center; Disaster Management Training Center will be established. Through this center, a Disaster Management Volunteer force will be created.
5. Fire Brigade (6)
Number of Fire Brigade Stations will be increased. Number of Fire Brigade stations will be decided considering geographical area based on population; Mini fire tenders will be made available for gaothans, koliwadas, hilly areas, etc.; State-of-the art and scientific firefighting equipment will be purchased to make it reachable in high-rise buildings.; Special training centres will be started for Fire Brigade; Considering this proper fire resistance uniform and equipment/material will be provided to every fire officer and fireman; Wireless fire panic button will be installed in each building using Wi-Fi system and through it each building may be connected to control room of Fire Brigade by pressing just one button
6. Flood (3)
Additional FSl will be given to the residents residing in the low level areas which suffer from floods.; Additional Water Expressing Centres will be established to drain the rain water speedily.; A network of small rain water lines will be created on the roads in Mumbai and the missing links will be found out to make the water flow network complete.
7. Holistic Development (10)
Theatres will be developed oi facility plots in Mumbai city; Development and beautification of Hoi Ali in Mumbai will be undertaken; Cemetery for siya muslims will be developed; Recreation center for senior citizens will be started in each zone; Special school center will be started in each zone for mentally handicapped. Free bus service will be made available to such students; Mumbai will be made banner-free by removing all unauthorised banners, hoardings; To enhance participation of citizens in administration, a meeting will be called under chairmanship of Ward committee in each zone once o month to communicate with non-government and social organizations; To implement 'Hoppy Street' concept for citizens in each zone necessary arrangement will be mode by corporation; Premises will be made available for construction of fuel canters, CNG gas/Petrol=diesel station for vehicles on East-West High Ways and important roads; Special policy will be framed to encourage registered 30,152 business and professions in Mumbai for generation of employment and self-employment
8. Municipal Hospital (10)
Make use of Health lnformation Management System to entirely computerize the health service provided in all the major and minor hospitals of the Municipality; lnstall RISPACK (Radiology lnformation System Picture Archival Communication System) in every major hospital; build individual hospitals in east and west suburban for the treatment of infectious diseases; make additional 500 ventilators available in the hospitals in Mumbai; redevelop TB Hospital; Build special hospitals for AIDS control; Girl child is born in the Municipal Corporation Hospital, on amount of Rs. 5000/- will be kept as fixed deposit in the name of that girl child for 18 years; build trauma centre and dialysis centre in each hospitals; Build a special hospital for treatment of cancer in the jurisdiction of Municipality; Improve ICU capacity and ventilators in hospitals.

9. Municipal School Education (16)
Build new schools for physically challenged students in every administrative ward and to take them to and fro these schools a free special bus service will be made available; Strict implementation of Right to Education Act; Special campaign to improve the number of Marathi schools and Marathi Medium Students; Increase in the number of semi-English mediums along with other mediums; Commission of Kindergarten (KG) classes in all Municipality schools; Maintenance of digital catalogue to reduce & control the student dropout rate; Erection of updated computer labs in all Municipality schools; Improvement in capacity to gain knowledge through digital classrooms along with updated educational material, equipment's and audio visual technology; Special focus on cleanliness in Municipality schools; independent website of education department and availability of educational material; Erection of Dr. Abdul Kalam Educational Science Centre to improve students interest in Science; Organisation of various study tours for Municipality students; Study rooms and libraries in Municipality schools; Strict quality control of the nutritional value of Mid-day Meal food and achievement of quality improvement; implementation of Central Government's Skill Development Programme for Seventh and Eighth Standard students; Complete the process of appointing sufficient number of teachers
10. New Road Project (7)
No street tax till new roads are not made; a network-of elevated roads near the rail roads will be created by the Municipal Corporation; As per Municipal Corporation Act, clause 61(N), it is mandatary to wash the roads and clean the roads; Clause of utility duct will be included in the roads contracts; More bright with use of L.E.D. bulbs at all street lamps and electricity will be saved on a big scale; High mast L.E.D. lights will be installed of major junctions of main roads; Streetlights will be provided in slum areas.
11. Open Spaces (19)
Protection of all open spaces; Development and beautification of open spaces will be done as well as suggestions will be entertained by the local people before the implementation; Open spaces will be kept open for public; Erection of mobile tower in a garden will be prohibited; Beautification of Powai Lake and of all other lakes; Cleaning and beautification of coastline and beaches; Erection of CCTV system on sea beaches for security, also life guard will be stationed; Stationing of cleanliness volunteer unit for 24 hour maintaining of cleanliness of sea beaches; Establishment of independent authority for the purpose of cleaning, purification and beautification rivers; Commencement of water sports on water fronts; Appointment of committee of environmental experts to study the hazardous as well as environmental friendly elements for Mumbai; Protection and conservation of 12859 hectares of Natural area that constitutes 29.59% of total area of Mumbai; Strict penal action against things that are harmful to the environment; Use of satellite images and camera drone for protection of mangrove forests and lands; Construction of Mangrove park on a forty acre plot in Mulund as well as in Kandivali Chorkop; Large scale plantation of trees in Mumbai city. Felicitation by the Mayor of the participants and NGO's that plant and adopt more than 3000 trees; Making of 1503 silent zone areas in Mumbai free from noise pollution by sound absorbing/cutting technology like MMRDA of the state government; Erection of smoke towers to measure and control the pollution level; Completion of Noise Level Mapping in Mumbai. Along with air pollution, to control noise pollution, measurement with decibel metres of levels of noise by vehicles and other sources and proper action against them
12. Planning for Hawkers (8)
Planning and regulation of the street hawkers; Provision of all facilities to hawkers and peddlers to do their businesses in a respectful manner.; planning and regulation of hawker and peddler business via guidance system; Surveys of hawkers and peddlers to determine and give a fixed timing of business and areas of operation; Mobile hawkers and peddlers permit for those who operate on two-wheelers, three-wheelers and four-wheelers; Issuance of permit for former weekly market in big housing societies as per no objection certificate and recommendation of the said society; Official spaces and licences to miscellaneous professionals such as leather workers, flower-garland sellers and newspaper sellers; Reservation for physically challenged in hawkers and peddlers area
13. Potholes (1)
Policy of making roods in Mumbai free of potholes in five years

14. Property Tax (4)
Property tax rates will be stabilised for 5 years; Each property holder will receive individual property bill; Abhay scheme will be implemented for recovery of arrears of property tax; Special discount will be given to green and environment supporting buildings using unconventional energy, classifying wet and dry waste, and reusing-drainage water
15. Public Health (12)
Introduce o Citizen Smart Health Card for the citizen and these cardholders will be provided a free body check-up once every year; Conduct o health survey of Mumbaikars; Implement Mumbai Mahanagarpalika Jeevandayi Aarogya Yojana; Make available a Rs.5 lakhs per family/per year Health lnsurance Cover; Available the essential medicines for free. For that purpose, will update the list of medicines. Focus will be on more utilisation of generic medicines; Introduce a telemedicine consultancy; Expand blood component lab; Introduce skin bank in Mumbai; Introduce a special outpatient ward for poor patients operational from 7.OO PM to IO.OO PM; Make available independent patient word (paid ward) for patients or reasonable rates; Introduce a Yog Training Centre and Yogic Healing Treatment Centre at every ward and will make integrated medicines and treatments available; Improve the current undergraduate and postgraduate student admission capacity of the Municipal Medical College
16. Road/ Road Tendering (1)
People will be given double financial compensation to the people affected by road widening
17. Sanitation (1)
Free water and electricity will be provided to the public toilets in the slums
18. Sewerage (7)
lmmediate attention will be paid to the 50% un-sewerage areas and a time bound program will be established to create a network of sewerage systems.; the sewerage connection will be made available to anybody who applies for the same.; Municipal Corporation will establish eight S.T.P. (Sewerage Treatment Plant).; ln the remote areas - hilly areas the modern technologies such as micro-tunnelling will be used; S.T.Ps will be made compulsory for re-use of waste water in industrial areas, commercial complexes, non-residential offices and big residential complexes; Avoid thefts of the lids of chambers of the sewerage lines, new lids made with fibre will be used to avoid potholes created by its weight; Scheme of toilet for every home will be implemented in all the slums and for the same the work of sewerage systems
19. Social culture/ Tourism / Encouragement to Mumbai Tourism / Monuments Of The Great Personalities/Marathi Pride (26)
"Redevelopment policy" will be framed for giving justice to sons of soil of gaothon, Koliwadas; Special efforts will be made to provide basic amenities to residents in C.R.Z. area; Upgradation of walkaways, lighting, lavatories, sanitation, etc. for sons of soil Koli, Agari, ST's of Gaothan, Koliwada, etc.; Permission to be granted for repairing homes in Gaothon, Koliwada by relaxing stringent conditions; Health centres/mobile dispensary will be made available in Gaothon - Koliwada area; independent closets/ shades will be constructed of various places for sell of fish for koli women; Agari - Koli Bhavan to be built; Work lagging behind in Zoo will be completed in one year; Clean state-of-the art and strong cages and other facilities will be made available on priority basis to give justice to Indian animals.; 23 Theme gardens/gardens will be developed; New Indian animals and birds will be brought; Interpretation Zoo, Aquarium, cafeteria and administrative office will be started newly immediately in constructed building; Work of Entrance plaza will be completed; A lesson on Samyukta Maharashtra Movement will be included in the curriculum of each student learning; A special scheme for preservation of Marathi language will be implemented by Municipal corporation. Efforts will be made by this deportment to use Marathi on computers and websites to maximum extent; Mumbai Marathi Sahitya Sammelan' will be organised; Mumbai Museum Gallery will be constructed exhibiting History of Mumbai and Pride and Culture of Maharashtra; Mumbai's local deity "Shri Mumbadevi Mandir Area" will be developed; Marathi Granthsangrahalaya will be upgraded; Corporation's theatres will be made available to Marathi drama of discounted rates on priority basis; independent Tourism Development Department will be started in corporation for encouraging Mumbai Tourism; Eastern sea coast will be opened for tourism. Attractive

water fronts. cruise terminal, row-row transport, marine plaza, water sports and theme garden will be developed in thot area.; Services like Nilmbari, Vibhavari best buses and amphibian duck buses will be provided and upgraded to encourage Mumbai Darshan tourism; ln the Indian Ocean, the tallest monument of international quality of Chatrapati Shivaji Maharaj will be created; A gigantic monument of Dr. Babasaheb Ambedkar of lndu Mill; A giant monument of Hindu Hriday Samrat Balasaheb Thakare

20. Solid Waste Management (SWM) (10)

Free dust bins will be provided for the classification of wet waste and dry waste; Call 24x7 waste collection will be done to implement the Zero Waste campaign; Number of small waste carrying carts (ghanta gadi) will be increased and the waste in the slum areas and remote areas will be collected.; Housing societies which will carry out classification of waste into dry waste and wet waste will be given financial incentives in the tax system; Vehicle Tracking System under GPS system will be used on approx. 1500 waste carrying vehicles making 3746 trips daily; Clean area voluntary group will be created under the Special Cleanliness Campaign in the slum areas and in chawls. ; Slum Adoption scheme (Dattak Vasti Yojana) will be implemented effectively; For the solid waste management, considering that the capacity of waste process land in Mumbai is finished, alternate arrangements will be established in Mumbai Mahanagar boundaries.; Project for generating electricity from waste will be implemented; Systems will be established to lift the debris and process ii to create sand for the construction material and re-use the some

21. Traffic Management (6)

Traffic Comprehensive Mobility Plan prepared by the state government will be implemented by the year 2020 and the Western Free Way; State of art signalling systems will be established; Traffic guidance will be made available using the state of art G.P.S. systems; Follow up with the state government will be done and expansion of Eastern Express Freeway will be carried out from Govandi to Ghatkopar-Thane and will be connected to the Metro-4 route; Providing of parking palace at railway stations, bus stands, rickshaw stands and crowded places; SATIS(Station area traffic improvement scheme) will be implemented.

22. Transparent administration/ Citizen Participation (21)

Some contractors in Mumbai municipal corporation have provided low quality work for which their cartel will be put to an end so big contractors can work; Municipal corporation will enter into joint ventures for contract work; Changes in law will make it compulsory for the officers of municipal corporation to show their balance sheet; The persons who are helping cartels in tenders and opposing the E-tender will be booked under organized crime.; The information about proposed and sanctioned proposals of the Mumbai Municipal corporation will be published in a transparent manner for the citizens of Mumbai; In every six months funds allotted to the corporators and their details will be provided in a booklet form and electronic form for all citizens free of cost.; Citizens who inform about thefts or persons involved in theft or help in increasing municipal corporation's income will be given 10% without disclosing their names; A ,Up-Lokayukta, designation will be created as per the present laws in the Mumbai Municipal Corporation jurisdiction , for the citizens of Mumbai.; Whenever the citizens of Mumbai lodge complaints, these complaints are finally entangled in the maze of the legal department procedures of the Municipal Corporation.; Every year, one audit of the balance sheet of Mumbai Municipal Corporation will be carried out and its report will be published in a simple language for the common public.; lf there are variations In the given contracts then a Third Party Audit will be carried out for the same.; In one year suggestions and proposals will be invites from the citizens; The complaints submitted by citizens and action taken for the same will be informed to citizens by a SMS.; The force of inviting consultation from consultants, opinions from experts, scheduled rate, earnest money etc. will be carried out by expert committee and their suggestions will be implemented within six months.; As per the Right to Service Act, a Right to Municipal Service Act will be proposed and Citizen Charter will be established.; It will be made compulsory for the elected corporators to conduct Area Meetings under the 'Nagarraj Bill'.; The entire administration of Municipal Corporation Head Office and Divisional Office will be connected through video conferencing; Financial incentive will be given to those citizens in Mumbai who will carry out all services, facilities, transactions hundred percent cashless; A separate mobile app for municipal corporation to submit

complaints and suggestions for citizens; A Special Force will be established to implement the suggestions given in the internal and external audit report of the Municipal Corporation.; An inquiry of the Educational, Health and other projects, initiated during the lost twenty years in the Municipal Corporation under P.P.P. contracts and their current status will be carried out by a retired judge.
23. Water Supply (13)
Water for any one, For the next 5 years; 24 hours water supply will be provided; Right to water- who ever applies for water will be supplied water; Where no taps are there water will be provided through tankers; 750 litres per day per family; The Water Projects of Gargoi. Pinjal, Damanganga will be completed and 3200 MLD additional water will be made available; Water Purification systems will be improved; Protection of bigger main water lines, along with the security guards, E-security guards, i.e. C.C.T.V. cameras will be fitted; Modernization of Water Hydrant will be carried out for prompt emergency management and removal of complaints about contaminated water. The Water Hydrant will be cleaned with a time bound program.; Stop the monopoly of the licensed plumbers, on area-wise panel of the licensed plumbers will be prepared and fixed rates will be decided for the services offered; Processing plant will be established to convert the saline water of the ocean into potable water; Wherever there is no tap connection, Municipal Corporation will supply water through tankers; Time bound program will be designed to fight this dreadful problem and will be implemented immediately
24. Women, children, youth, senior citizens (15)
lncreased Special Financial Provision for women in gender budget; Commission of women employment, training centres for self-employment, Sakhi-Kendras, Women Support Centres and Skill Development Centres; Consultation Centre for technical guidance and financial help in self-employment; Fully-equipped maternity homes; NICU & lnfant Specialty Ward in Mumbai City and Suburbs; Right To Pee - E-Toilets will be created for women in the vicinity of one kilometre and the information about these will be made available on mobile apps; Availability of sanitary napkin handing machine and sanitary napkin disposable machine in ladies' toilets.; Sports grounds with modern facilities will be created for youth; Premises with more than 10000 sq. ft. space available there football court, basketball court, etc. and gymnasium to be erected; Swimming pool will be constructed in each administrative zone; lndoor stadium will be constructed in each zone; Study room and digital library will be constructed for students; Skill development center will be constructed for youth; Self-employment counselling center will be constructed for youth; Mayor Trophy Competition will be organised for country sports of Mumbai level

Table 72: Shiv Sena (SS) Manifesto

Manifesto Points
1. Affordable houses (1)
Gharkul' scheme for sanitation workers and other municipal employees
2. BEST Transport (3)
Unified budget for BMC and BEST; To start small buses for people living in suburbs; Integrated bus, metro and local pass
3. Development Plan (2)
To classify koliwadas as 'gaothans' to allow their development; To retain Aarey colony as a green zone under the new Development Plan.
4. Disaster Management
5. Fire Brigade
6. Flood (1)
New pumping stations at Mogra and Mahul
7. Municipal Hospital (4)
To set up a medical college in Shatabdi hospital; To set up a Cath lab at Cooper Hospital; To set up special hospitals for management of diabetes; Stores selling generic medicines in civic hospitals

8. Municipal School Education (6)
Encouragement to skill development and vocational training; To set up e-libraries in island city as well as suburbs; Starting self-defence training for girls ; Priority in BMC jobs to be given to students from BMC schools; To set up a 'sangeet' academy in every ward; Better and more nutritious mid-day meals
9. New Road Project (3)
Completion of the Goregaon-Mulund Link Road project; Two-wheeler stands for citizens and dabbawalas near stations; Completion of the Coastal Road project
10. Open Spaces (2)
To construct new gardens, and also undertake beautification of traffic islands; More spaces to be created for sports to be played on open grounds
11. Planning for Hawkers
12. Potholes
13. Property Tax (2)
Property tax waived off for houses less than 500 sq. feet; Concession in property tax to be given to houses larger than 700 sq. feet if they segregate waste, conduct rain water harvesting, etc.
14. Public Health (4)
Balasaheb Thackeray Aarogya Kawach Yojana; To set up modern facilities for healthcare of sanitation workers; To introduce ambulances which can serve multiple patients at a time for use in disaster or emergency situations; To introduce 'OPD on wheels' project to ensure health at citizens' doorsteps
15. Road/ Road Tendering
16. Sanitation (1)
To increase the number of public toilets
17. Sewerage
18. Social culture/ Tourism / Encouragement to Mumbai Tourism / Monuments Of The Great Personalities/Marathi Pride (4)
A memorial will be constructed as a tribute to Marathi theatre; To set up a memorial for freedom fighters; To create a tourist attraction on the eastern shoreline; To construct a 'Dabbawala bhawan'
19. Solid Waste Management (SWM) (1)
Garbage processing centre to be set up at Deonar dumping ground
20. Traffic Management
21. Water Supply (2)
To set up treatment plants for reusing sewage water; To complete Gargai, Pinjal projects at the earliest
22. Women, children, youth, senior citizens (3)
Sanitary napkin vending machines in toilets for women; To set up recreation centres for senior citizens; To construct a football ground as well as an international level training centre for shooting.

Table 73: Indian National Congress (INC) Manifesto

Manifesto Points
1. Affordable houses
2. BEST Transport
3. Development Plan
4. Disaster Management
5. Fire Brigade

6. Flood
7. Municipal Hospital (2)
Free medicines will be distributed in all Municipal hospitals; After co-ordinating with the private hospital doctors, special panel will be established for providing free service at Municipal Corporation hospitals
8. Municipal School Education (6)
To make sure that every BMC school is made as the same level as Right to Education (RTE); Many schools which have been closed will now be made open; Structure of all the schools will be upgraded; The shortage in the number of teachers will be removed; International School Plan- In the start we will develop one BMC school and make it of an international level and with that experience will make all the schools in the city of that level; Each ward will have an advanced digital and traditional library; Students of Municipal School will get free bus pass for travelling upto 5 kms.
9. New Road Project (3)
In the coming 7 years, all roads will be built of concrete; It would be ensured that with new roads, useful ducts would be made; Each ward will have an engineer team appointed to look after the roads
10. Open Spaces (6)
All the open spaces like RG, PG, garden will come under the possession of Municipal Corporation; Maintenance of all the open spaces will be done by Municipal Corporation; Mumbai people will now get free entry at all open spaces; An independent department will be appointed by Municipal Corporation to look after the open spaces; Political leaders who have taken the possession of the open spaces and encroached on these spaces, action will be taken against them and the lands will be taken and their shops will be shut; Identification of the poor slums near the open spaces so that we can improve the living conditions of the poor people
11. Planning for Hawkers (4)
Hawker Protection Act passed in the parliament will be followed in accordance; All the hawkers working in Mumbai will be given a legal licence so as to stop the bribe that they pay, which will also help in giving justice to the traders and residents; Arrangements to make available nice, clean and free sidewalk on all paths in Mumbai; Proper legal system to be implemented so that the hawkers carry on with their work on their demarcated places
12. Potholes (1)
Complaints on potholes to be addressed within 24 hours
13. Property Tax (4)
Property tax waived off for houses less than 500 sq. feet; To make the Clearance Department more skilled and to incorporate transparency and will reduce the price of houses; Organising of Citizen Meetings in every 3 months with BMC officers and steering committee heads; Organising of people gatherings in every 3 months with ward level officers and municipal servants for discussion of grievances
14. Public Health (7)
In Municipal Corporation's budget, funds for the health service will be raised by 15%; Under the policy, 'Doctor Aapke Dwaar Par', ambulatory clinics will be opened up in each constituency. Will have one doctor, one nurse and medicines free of cost for the patients; Free transport facility for the pregnant women during their puerperium for their visits to the hospital ; Free blood will be made available at blood banks at all health departments of BMC ; Free yearly health check-ups for the women of the age group 20-40 years; Two to three times increase in the number of doctors and health staff at municipal corporation
15. Road/ Road Tendering (1)
Appointment of an independent audit team for the inspection of the condition of all roads- grouping and classification of all roads will be done
16. Sanitation
17. Sewerage

18. Social culture/ Tourism / Encouragement to Mumbai Tourism / Monuments Of The Great Personalities/Marathi Pride
19. Solid Waste Management (SWM) (5)
The first motive is to make Mumbai clean and trash free; Arrangement to shift all the three dumping grounds out of Mumbai; International methods for the disposal of wastes will be brought to Mumbai; Alike international cities, process for the production of electricity, gas, compost by wastes will be started; To treat every drop of dirty water in Mumbai, Dirty Water Process Plant will be made ready at many places
20. Subsidised Meals (2)
Municipal Corporation Canteen- Municipal Corporation canteens will be opened up in many places, which will provide full meal at low prices. In the start, this policy will start at all major centres. Afterwards, this facility will be opened for all the citizens in many parts of the city; 'Manpa Thali' will be given at the least rate of Rs. 20 for the general public at Municipal canteens, full meal at Rs. 20 will be provided.
21. Traffic Management (1)
Study of the intelligent traffic distribution and management will be done, so that, in times of heavy traffic the reason for the traffic jam and distribution is ascertained
22. Transparent administration/ Citizen Participation
23. Water Supply (6)
Free drinking water for each family as per their necessity; Every household will get water connection for Rs. 1500; Will work on reducing water leakage, aim is to reduce the leakage by 10-15%; Establishment of fully advanced digital system to measure the water flow in the city and to prevent any water theft and water leakage; 100% water meter policy to be implemented without any pendency; Aim to make Mumbai tanker-free
24. Women, children, youth, Senior citizens (14)
Availability of advanced digital and traditional library (for various competitive exams) with newspapers, computers and Wi-Fi; Free bus travelling pass for the graduate students; One Sports School for every five ward to promote youth for a healthy lifestyle and to pursue a career in sports. International level center for Olympics and other games. ; Training center for the development of the reading-speaking skills of English and Marathi language for better job opportunities; Mumbai Students Self Career- Youth of the age group 15-25 years helping in the cleanliness programme of BMC for 5 days in a year will be given smartphone and free Wi-Fi for a year. ; Under the Municipal Corporation Canteen Policy, prominence will be given to the Women Self Help Group by creating jobs for them; High standard toilets will be built across Mumbai only for women with the availability of free sanitary napkin vending machines; Skill Development Centre will be opened to promote women's talents; Women and Children homes for poor women; Availability of open spaces near poor slums so that the mothers can spend time with their kids; Easy accessibility towards health wellness of women and their children; Joint venture of Municipal Corporation with Mumbai Police for women safety; Reserved tables for women at Municipal Corporation canteens; All the Municipal Corporation canteens will be run by Women's Self Help Group.

Table 74: National Congress Party (NCP) Manifesto

Manifesto Points
1. Affordable houses
2. BEST Transport (4)
Mini bus services for localities far from railway stations; Connecting buses to trains, metro and monorails; For electricity users, waiving of all charges except electricity tax; Land allotted for BEST bus stands, electricity sub-stations, etc. will not be sold and will be used for their designated purposes.

3. Development Plan (4)
Mobile markets at ward levels; To set up a fish market to be run by women in every ward; To construct toilets for women in fish markets; Concession on property and water tax
4. Disaster Management
5. Fire Brigade (3)
To acquire land marked under DCR to construct fire station; To set up two separate fire stations in the suburbs; Rules will be modified to introduce new methods of fire-fighting for high-rises
6. Flood
7. Municipal Hospital (6)
To ensure that civic hospitals have adequate facilities such as trauma centres, CT scans, etc.; To make the Sewri TB hospital a world-class and modern hospital; To set up two municipal hospitals of the standard of KEM hospital in the western and eastern suburbs; To improve security and install CCTVs in municipal hospitals; Stores selling generic medicines in civic hospitals; Laboratory testing facilities to be available in civic hospitals
8. Municipal School Education (6)
To improve condition of municipal school buildings which are in a dilapidated condition in accordance with the report of the Justice Dhanuka committee; To provide life insurance scheme for all civic school students; Plots reserved for schools will be used only for that purpose; To give encouragement to students who excel in sports and arts.; Priority in BMC jobs to be given to students from BMC schools; Municipal corporation will bear the cost of further education of students who score more than 75% marks
9. New Road Project (3)
Streetlights running on solar energy to be constructed; Blacklisting of contractors who do substandard work; Widening of narrow roads
10. Open Spaces (5)
Beautification of all chowpaties; Installation of CCTV cameras on open grounds for safety; To ensure drinking water facility on existing municipal grounds; Jogging track and open gym in municipal gardens; To make 'Ranicha baug' a site of international standards
11. Planning for Hawkers (4)
To conduct discussions with citizens on doubling number of hawker zones; Modernization of Deonar abattoir; To implement hawkers policy; To construct pavements which are free from hawkers
12. Potholes (2)
To pay special attention to potholes; To fix a pothole within a day and to take action against contractor within one week
13. Property Tax (1)
To reduce the difference between the property tax of old buildings and new buildings
14. Public Health (5)
Implementation of Mumbaikar health insurance scheme; To employ medicinal sprays at night to prevent contagious diseases; To increase the municipal budget for health and to implement it; On swamps and salt pans, insecticides will be sprayed; To start online OPD/counselling centre 'Hello doctor'; Special schemes for TB-free Mumbai
15. Road/ Road Tendering (1)
Tenders at an international level will be sought for widening/renovation of roads

16. Sanitation
17. Sewerage (3)
To complete the BRIMSTOWAD project at the earliest; To cover open drains; To construct closed drainage system for entire suburban area
18. Social culture/ Tourism / Encouragement to Mumbai Tourism / Monuments Of The Great Personalities/Marathi Pride (2)
Setting up of new auditoriums and an art gallery; Creating new tourist spot such as snow park, marine aquarium
19. SWM (5)
To create a 'Clean Up' App to receive complaints about dumping of solid waste; To generate electricity from solid waste, and use it for BMC; To create a waste disposal centre in every division; To give concession on property tax for societies which segregate dry and wet waste; Large canals to be covered
20. Subsidised Meals
21. Traffic Management (1)
To set up multiple-storeyed parking lots and also set up underground parking lots
22. Water Supply (6)
To create and implement a plan to create new projects on Kalu, Shahi, Gargai and Pinjar rivers; To increase the capacity of water tanks in water treatment plants at Panjrapol and Bhandup; Constructing new water tanks and increasing capacity of old ones; To roll back the 8% increase in water tax; To stop collection of various sewage taxes from slum-dwellers; To levy equal tax on people who live in buildings without completion certificate, rather than double tax
23. Women, children, youth, senior citizens (10)
Women's SHGs to be given priority in providing mid-day meals in schools; Creches to be started in every ward; Corporation to provide space for women's SHGs to sell their products; Women's SHGs to be given priority in managing parking lots and public toilets; To implement schemes giving 50% concession to women in healthcare services; Corporation to run courses in running beauty parlours, mehndi, stitching, typing, etc.; Setting up of day care centres in addition to old age homes; 75% concession in BEST buses for senior citizens; Appointing an officer in every ward for welfare of senior citizens; Free health check-up every three months in PHC centres

Annexure 6: Details of Devices used in Ward Committees

Functioning of the Ward Committees:

'Ward Committees' are one of the most crucial mechanisms available to Municipal Councillors for conducting deliberations for delivering effective governance. Issues of prime significance to citizens' daily lives related to civic amenities such as road, water supply, drainage, etc. could be taken up and redressed effectively in this forum. Almost all civic issues are to be resolved through this mechanism. This was precisely the aim of the 74th Constitutional Amendment, which mandated the creation of the Ward Committees, to bring in grassroots democracy and strengthen it.

Devices for raising questions/grievances in ward committee meetings:

Councillors use various devices to enable them to know about the functioning of various committees, monitor performance of Administration and resolve citizen's problems.

1. **Short Notice Questions**: Councillors can raise civic issues and follow up on them with the Administration through Short Notice Questions. These questions should be of urgent civic importance, for instance, those causing harm to lives of citizens, such as building collapse or fire etc. Such urgent matters are admitted and the Commissioner is accountable to answer them. In cases of not to so urgent matters, the written questions are sent by the Councillors to the Assistant Commissioner, who sends answers to respective Councillors. The Short Notice Question should be specific and related to only one matter at a time and should be framed in not more than 2-3 sentences. For example, 1) is it true that Mumbai city is severely caught up with Swine Flu? 2) How many patients are being treated in Mumbai in Kasturba and other hospitals? 3) Why has the indigenous vaccine for Swine Flu not yet been procured in Mumbai? Please give detailed information. The Short Notice Questions are not discussed in the House.
2. **Notice of Motions**: Councillors may ask for a statement to be made by the Commissioner on an urgent matter relating to the Administration by giving at least one hour notice before the meeting. The Commissioner answers the notice in writing and no discussion can be done on the answers. The Councillors may present a Notice of Motion on matters of importance and in the interest of Mumbai city. The Motion should be presented in a general form and should be in the interest of the public at large.
3. **Adjournment Motion**: The Councillors may bring to the notice of the House any incidences where citizens are facing severe problems due to specific reasons, and the concerned officers and ward in-charge have not taken due action despite bringing the matter to their attention. In such cases, Councillors can propose an Adjournment Motion, as a protest against the inaction of the Administration. The notice for the Adjournment Motion should be given at least half an hour before the meeting of the House. The proposal is accepted by majority vote. In case the Councillors directly present an Adjournment Motion in the House without prior notice, then it is treated as a Simplicitor, which is not discussed in the House and passed only with unanimous voting.
4. **Amendments proposed**: When a Councillor has any objection about a topic on the meeting agenda, if s/he thinks it is inadequate, s/he can present a notice to the Administrative office for Amendment in order to reconsider the topic. If a Councillor wants to present an Amendment, it is customary that s/he is allowed to speak first.
5. **Proposal raised/agenda raised/ letter to raise issues**: When a Councillor wants to raise any agenda or question, s/he writes a letter for the same, following which it appears in the agenda for discussion in the meeting.
6. **Point of Orders**: The Councillor, in order to bring any serious incident in his/her constituency to the notice of the House, can raise a Point of Order. There are specific rules on when and how the Point of Order can be raised apart from precedents. The Point of Order can be raised while a subject is being discussed in the

house, provided it is related to that subject. The Committee Chairperson has a right to decide whether or not to allow a discussion on the Point of Order and announces the decision on the Point of Order. In case the information provided is inadequate to reach a decision, it is presented in the subsequent meeting. The decision by the Ward Committee Chairperson is deemed final and in cases of disagreements, it can only be challenged in the Court.

Source: Corporation Procedure Rules and Regulation Mumbai: Municipal Printing Press, 2001.