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Report on
The Status of Civic Issues in Delhi

With a Focus on

- Solid Waste Management
- Air Quality
- Sewerage
- Public Grievances Redressal Management

Representational Images: Hindustan Times

June 2023

Contents

Abbreviations

MCD : Municipal Corporation of Delhi	AMRUT : Atal Mission for Rejuvenation and Urban Transformation
DJB : Delhi Jal Board	FC : Faecal Coliform
RTI : Right to Information Act, 2005	DPCC : Delhi Pollution Control Committee
SWM: Solid Waste Management	TSS : Total Suspended Solids
NDMC : North Delhi Municipal Corporation	AQI : Air Quality Index
SDMC : South Delhi Municipal Corporation	SO2 : Sulfur Dioxide
EDMC : East Delhi Municipal Corporation	CO: Carbon Mono-oxide
CPCB : Central Pollution Control Board	PM : Particulate Matter
BOD : Biochemical Oxygen Demand	NO2 : Nitrogen Dioxide
MPN : Most Probable Number	NH3: Ammonia
SBM : Swachh Bharat Mission	MLA : Member of the Legislative Assembly
MRF : Material Recovery Facility	MIS : Management Information Systems
MSW : Municipal Solid Waste	BWG : Bulk Waste Generators
STP : Sewerage Treatment Plant	MLD : Minimal Liquid Discharge

Metric Conversion Table

TPD	Tonnes per day	1 Ton = 1,000 kg
Mg	Milligram	
Lt	Litre	
MGD	Metric Gallon Per Day	1 MG = 4.54609 liters
ml	Millilitre	
kg	Kilogram	1 kg = 1,000 g

I. Foreword

Every year, Delhi faces significant challenges due to air pollution, heat waves, and contaminated rivers. These problems arise from various factors, including ineffective waste management processes and sewerage treatment processes. Citizen concerns about such issues have increased over time, and thus this report aims to understand how these growing problems, such as solid waste management (SWM), sewerage treatment, air and water quality, impact Delhi's climate change.

These rising concerns have seen a 36% increase in number of overall citizen complaints[1] from 3,30,099 in 2019 to 4,47,468 in 2022. Notably, *sewerage-related complaints experienced a significant rise of 75%, escalating from 78,997 in 2019 to 1,38,545 in 2022.* Additionally, complaints regarding 'water contamination' rose by 39% from 35,679 in 2019 to 49,492 in 2022.

Inefficient SWM and sewerage treatment have significant impacts on citizens' health and the environment. Rising temperatures contribute to methane gas emissions and landfill fires. For e.g., Ghazipur landfill experienced 6 fires in 2019-2020, and Bhalswa landfill had 12 fires in 2022. *These fires lead to respiratory diseases, with 2,07,752 cases reported in Municipal Corporation of Delhi (MCD) and State hospitals in 2021.* Inadequate sewerage treatment and landfill leachate contaminate surface and groundwater, *causing illnesses such as Diarrhoea (1,26,649 cases in 2021), Typhoid (9,335 cases), and Cholera (819 cases).*

To ensure effective SWM, the SWM Rules 2016 by the Union Government mandates effective collection and segregation of waste at source. However, there is a need for MCD to improve – for instance, although MCD claims 100% door to door collection, complaints related to 'garbage not collected' increased from 285% from 1,068 in 2016 to 4,117 in 2022. *Moreover, there is a lack in source segregation as the Delhi Pollution Control Committee (DPCC) SWM Action plan states, as of February 2023, out of the 250 wards, only 12 (5%) wards are carrying out 100% segregation at source.*

Along with the SWM Rules 2016, the National Institute of Urban Affairs (NIUA) recommends the Integrated Solid Waste Management (ISWM) system to reduce waste generation, process waste at source and reduce waste sent to landfills. However, in 2021-22, *only 46% of the total waste generated was processed in MCD facilities, while 54% was sent to MCD landfills.* Moreover, the waste sent to *MCD landfills increased from 51% in 2019-20 to 54% in 2021-22.* Hence, to achieve the target of clearing all landfill sites by December 2024, MCD should focus on reducing amount of fresh waste sent to landfill and explore decentralised methods of waste management.

Furthermore, Yamuna River is highly polluted due to the large amounts of untreated waste released through municipal sewage and various other industrial wastes let out. For instance, in 2021, Yamuna River showed high contamination due to faecal coliform at station outlets; Nizamuddin (49 lakh MPN/100ml), Okhla Bridge (110 lakh MPN/100ml) and Okhla Shahdara drain (220 lakh/100ml), while the prescribed limit is less than 2,500 MPN/100ml, highlighting that highly untreated sewage is being let into the river.

In addition, in 2022, 6 out of 20 STPs (Sewerage Treatment Plants) failed to meet the DPCC criteria for BOD[2] (30mg/lt.), while a total of 10 out of 20 STPs failed to meet the Central Pollution Control Board (CPCB) criteria for BOD (20mg/lt.). This reflects that even after treatment, waste water was highly polluted. If water is to be reused in the long run for sustainability of the water-sewerage system, it will be important to ensure that the STPs meet the treatment norms.
Delhi also faces a major challenges of air pollution - The *average yearly Air Quality Index (AQI) levels in Delhi have been 'Poor' in the past seven years except for 2020.* Moreover, in 2022, 55% (201) of 365 days had

[1] Overall complaints include complaints registered in MCD and Delhi Jal Board (DJB)
[2] BOD: Biochemical Oxygen Demand

'Poor' or 'Very Poor' (Poor AQI range 201-300 and Very Poor AQI range 301-400). Worst AQI days were recorded in November 2022, highest being an AQI of 446.

An answer to these problems can be addressed through regular deliberations between the Elected Representatives (ERs) and administration. ERs are mandated to raise citizens' issues and ensure effective and inclusive decision making. However, in 2022, for almost a year (from April to December) there was no elected council in MCD which has led to a lack of addressing the rising citizen issues in a democratic manner. *Moreover, in 2022, highest number of complaints was regarding water supply (1,99,205) and sewerage (1,38,545), while only 55 and 9 issues were raised respectively by Delhi MLAs (Member of Legislative Assembly). Moreover, from 2016 to 2022, issues raised on pollution and sewerage decreased by 13% and 36% respectively.*

Addressing the challenges of waste management and reducing landfill dependency requires the implementation of an efficient decentralised waste management system. This approach aims to achieve the goal of Zero Waste by emphasising waste segregation, recycling, and composting at the source. Additionally, establishing an open data dashboard and a robust monitoring system aligned with the Action Plan and National guidelines is crucial. Efficiency in sewerage treatment and the restoration of Delhi's water bodies are vital to address issues related to contaminated water sources and in turn safeguard the health and well-being of citizens.

Moreover, improving the complaints management system with a citizen-centric approach is essential. It involves establishing a single touchpoint for complaints and implementing a unified system for efficient and prompt resolution. Additionally, empowering the new elected representatives of the MCD through regular capacity building is crucial. By enhancing their understanding of the corporation's functioning, rules and regulations, and national guidelines, they can actively contribute to policy implementation and participate effectively in decision-making processes. This collaborative approach strengthens governance and can ensure a better and safe environment for the citizens of Delhi.

Milind Mhaske
CEO, Praja Foundation

II. Acknowledgement

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

We would like to appreciate our stakeholders; particularly, our Elected Representatives & government officials, the Civil Society Organisations (CSOs) and the journalists who utilise and publicise our data and, by doing so, ensure that awareness regarding various issues that we discuss and 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, Rohini Nilekani Philanthropies, Tree for Life Foundation, Lal Family Foundation, A.T.E. Chandra Foundation, Madhu Mehta Foundation and numerous other individual supporters. Their support has made it possible for us to conduct our study & publish this white paper.

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

FRIEDRICH NAUMANN FOUNDATION For Freedom. South Asia

Madhu Mehta Foundation

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

III. Sources of Data

The information[3] for this study has been collected by filing Right to Information (RTI) to the relevant departments:

1. **Civic Complaints data[4]:**
   a. **Municipal Corporation of Delhi (MCD)**: The data was collected by filing RTIs to all 12 zones of the MCD. We have taken data from the MCD (January 2016 to December 2022) for complaints and deliberations. The reply to our RTIs to the 12 zones was given in the form of a photocopy of the complaint register. This data helps us understand the trends that are prevalent regarding the registration of civic complaints.
   b. **State:** From January 2016 to December 2022, complaint data is collected from Delhi Jal Board (DJB). The data we received from the Delhi Jal Board Online Complaint System was in the form of a printout of the summary data. Delhi Jal board Complaints data help us to understand the trends in the complaints of citizens and compare it with the issues raised by our elected representatives.

Note:

- **2017 DJB Complaints:** DJB complaints for 2017 were only available from Jan 2017 - Sept 2017. In an RTI response to Praja Foundation, an Executive Engineer of the Delhi Jal Board (DJB), also the Public Information officer (PIO), responded, "Due to technical problem in CRM of call centre application, no information is available from 1.10.2017 to 31.12.2017." Hence, 2017 complaints data does not include the DJB complaints data from Oct 2017 – Dec 2017.

2. **Deliberations:**
   a. **Councillors:** The data on deliberations i.e., attendance, numbers of issues raised and the categories of issues raised pertain only to the Ward Committee for the period April 2017 to March 2022. Rest of the forums such as General Body Meetings, Standing Committee, Education Committee, and records of other such committees are not taken into account for this study.
   b. **Member of Legislative Assembly (MLA):** The data on MLA deliberations i.e., attendance, numbers of issues raised and the categories of issues raised pertain only to the Assembly Session from January 2020 to December 2022.

   Note for councillors: Data for 2017 is taken from April 2017 to December 2017, since Corporation elections were held in April 2017 and new councillors were elected.

3. **Air Quality Index (AQI):** Daily AQI data of 37 stations is downloaded from the National Air Quality Index Report of the Central Pollution Control Board (CPCB), after confirmation through an RTI application. (Details of 37 stations in Annexure 5.)

4. **Sewerage:** Data related to amount of water quality and sewage treatment is taken from DJB website.

5. **Solid Waste Management:** The data was taken from 'Delhi Pollution Control Committee' website.

Note: The three civic bodies, East Delhi Municipal Corporation, North Delhi Municipal Corporation and South Delhi Municipal Corporation were re-unified into a single local government on the 22nd day of May, 2022 as the Municipal Corporation of Delhi[5].

[3]Please refer Annexure 2 for functioning of Civic services and agencies operational in Delhi.
[4]Please refer Annexure 3 for an explanation of the working of the complaint mechanism in Delhi.
[5] 235183.pdf (egazette.nic.in)

Section I: Status of Key Service Delivery: SWM, Sewerage Treatment and Air Quality Index

Part I. Solid Waste Management (SWM)

Municipal waste management in Delhi is a critical issue. One of the many issues is the city's growing urban population generating large amounts of waste. The Municipal Corporation of Delhi (MCD)[6] is responsible for ensuring efficient collection, storage, segregation, transportation, and disposal/treatment of Municipal Solid Waste (MSW), construction and demolition (C&D) waste, etc. within the city. The overall generation of waste is increasing rapidly and by 2030, the total generation of MSW is expected to increase to 17,000 MT (metric tonnes) per day[7].

To overcome the challenges and for effective management of waste, a State Policy and Solid Waste Management Strategy was prepared for Delhi in 2017 and the Solid Waste Management Bye-laws for MCD were published in 2018 in accordance to the Solid Waste Management Rules 2016 (SWM Rules 2016) by the union government.

A. SWM Policy and Bye-laws in MCD

1. State Policy and Solid Waste Management Strategy

The State Policy and Solid Waste Management Strategy for Delhi have been framed in accordance with Section 11 of the SWM Rules 2016. The vision of this policy is "*to equip Delhi with an efficient, environment-friendly and sustainable waste management system with complete segregation, safe collection, transportation, treatment and disposal facilities and to achieve improved environmental outcomes by adopting appropriate measures."* This document envisions a framework to direct Solid Waste Management's growth and activities in Delhi. It is intended to help all Urban Local Bodies (ULBs) to introduce the necessary changes and set benchmarks in accordance with Municipal laws and even further. It aims to enhance public health, decrease the use of landfills, conserve energy and natural resources, and lessen pollution and the emission of greenhouse gases.

2. Delhi Pollution Control Committee (DPCC) Annual Reports and Action Plan[8]

The DPCC is an autonomous regulatory body in Delhi responsible for monitoring and mitigating pollution. The Action Plan and Timelines report for 2023 focuses on solid waste management, with the formation of the SWMC under the DPCC. The SWMC aims to establish new waste processing facilities, enhance existing ones, and remediate legacy waste sites. The report emphasises timelines, measurable targets, and monitoring outcomes to improve waste management and create a cleaner environment for Delhi residents. In addition, section 24 of the SWM Rule 2016 states State Pollution Control Committees must submit a consolidated annual report to the Central Pollution Control Board and Ministry of Urban Development by July 31st each year, outlining implementation and actions against non-compliant local bodies using Form-V.

[6] The three civic bodies, East Delhi Municipal Corporation (EDMC), North Delhi Municipal Corporation (NDMC) and South Delhi Municipal Corporation (SDMC) were re-unified into a single local government on the 22nd day of May, 2022 as the Municipal Corporation of Delhi.
7 The State Policy and Solid Waste Management Strategy
[8] Delhi Pollution Control Committee (delhigovt.nic.in)

3. Solid Waste Management Bye-laws 2018 for MCD[9]

The Delhi Pollution Control Committee (DPCC) website shows the SWM Bye-laws 2018 for North, South and East Municipal Corporations individually. The three municipal corporations were reunified into one corporation in 2022[10], hence the SWM Bye-laws 2018 has been considered as one for the overall MCD. The SWM Bye-laws 2018 for MCD emphasised the importance of operationalising segregation at the source, door-to-door collection and transportation of segregated solid waste, decentralised or semi-decentralised waste processing systems, and levying fees/penalties from waste generators for services such as garbage collection, transportation, and disposal. The below table highlights the status of key indicators as mentioned in the State Policy and Solid Waste Management Strategy 2017, DPCC Annual Reports and Delhi's SWM Action Plan 2023[11].

- **Table 1: Key Indicators and its Status as of 2021-22**

Indicators	Status
Waste segregation at source and adoption of three bin system.	As per the SWM Action Plan 2023, out of 250 wards, **only 12 wards are carrying out 100 % segregation at source**.
Door to door collection of waste and efficient collection and safe handling of all waste produced.	**100% door-to-door waste collection** is being practiced by MCD.
Waste Processing units including the establishment of composting units, biogas plants, and waste-to-energy plants.	MCD operates **156 MRFs with a capacity of 253 TPD**. MCD has identified **184 BWGs**. There are **3 waste-to-energy plants processing 4,550 TPD** of MSW.
Remediation of Landfills and 100% scientific disposal and treatment of waste.	MCD has three landfills: **Ghazipur, Bhalaswa, and Okhla and contain a total of 218.24 MT of legacy waste till Feb'23**. **Bio-mining of legacy waste began in October 2019 in all landfill**, following a mandate from the National Green Tribunal.
Better awareness among the urban population through community mobilization and participation	MCD, NDMC, DCB, and GNCTD's Environment Department will launch an IEC campaign for solid waste management as per the Action Plan 2023. Special Task Forces (STFs) for each district, headed by concerned ADMs, will create awareness and engage the community through educational, religious, and social organisations. The Divisional Commissioner will compile and submit monthly reports to the SWMC Convener for Solid Waste Monitoring.

[9] Delhi Pollution Control Committee (delhigovt.nic.in)
[10] 235183.pdf (egazette.nic.in)
[11] Delhi Pollution Control Committee (delhigovt.nic.in)

B. Status of Solid Waste Management in MCD as per DPCC Annual Reports 2019-20 to 2021-22[12]

- **Table 2: Amount of Waste Generated and Collection in MCD from 2019-20 to 2021-22**

MCD	Year	Solid Waste Generation (in TPD)	% Change Year on Year	Collection of MSW (in TPD)	Door to door collection % (in TPD)
NDMC	2019-20	4,013	-	4,013	100%
	2020-21	4,400	10%	4,400	100%
	2021-22	4,500	2%	4,500	100%
SDMC	2019-20	3,500	-	3,500	100%
	2020-21	3,600	3%	3,600	100%
	2021-22	3,600	0%	3,600	100%
EDMC	2019-20	2,700	-	2,700	100%
	2020-21	2,700	0%	2,700	100%
	2021-22	2,700	0%	2,700	100%
Total MCD	**2019-20**	**10,213**	**-**	**10,213**	**100%**
	2020-21	**10,700**	**5%**	**10,700**	**100%**
	2021-22	**10,800**	**1%**	**10,800**	**100%**

TPD - Tonnes per day

Inference:

- The total solid waste generation in MCD increased by 6% from 10,213 TPD in 2019-20 to 10,800 TPD in 2021-22. This shows steady growth in waste generation, highlighting the need for effective waste management strategies.
- From 2019-20 to 2021-22, 100% door to door collection of waste was carried out in MCD.

- **Table 3: Status of waste segregation in MCD from 2019-20 to 2021-22**

MCD	Year	No. of Ward	Solid Waste Generation (in TPD)	Waste Segregation at Source (in %)*
NDMC	2019-20	104	4,013	80% (in 3 Model Wards)
	2020-21		4,400	80% (in 3 Model Wards)
	2021-22		4,500	80% (in 3 Model Wards & Started in 32 Model wards)
SDMC	2019-20	104	3,500	10%
	2020-21		3,600	80-100% (in 15 Model Wards), 50-80% (in 13 Wards) 10-50% (in 30 Wards)
	2021-22		3,600	50%
EDMC	2019-20	64	2,700	10%
	2020-21		2,700	30%
	2021-22		2,700	30%

* Information given as per DPCC Annual Reports and only NDMC and SDMC had waste segregation in particular wards or model wards

Inference:

- In 2021-22, 35 Model Wards in NDMC segregated 80-100% of waste collected. Whereas, the SWM Rules 2016 states 100% segregation at source.
- In 2021-22, out of 64 wards within SDMC achieved 50% segregation of waste at source, while EDMC achieved 30% segregation.

[12] DPCC Annual Report

- **Table 4: Waste processing/treatment and disposal at landfill/dumpsite for disposal in MCD from 2019-20 to 2021-22[13]**

MCD	Year	Solid Waste Generation (in TPD)	Processing / Treatment of Solid Waste (in TPD)	% Waste sent to Processing/ Treatment	Disposal of Solid Waste in Landfill/ Dumpsite Sites	% Waste sent to Landfill/ Dumpsite
NDMC	2019-20	4,013	2,013	50%	2,000	50%
	2020-21	4,400	2,078	47%	2,322	53%
	2021-22	4,500	2,078	46%	2,422	54%
SDMC	2019-20	3,500	1,700	49%	1,800	51%
	2020-21	3,600	1,800	50%	1,800	50%
	2021-22	3,600	2,102	58%	1,498	42%
EDMC	2019-20	2,700	1,250	46%	1,450	54%
	2020-21	2,700	1,320	49%	1,380	51%
	2021-22	2,700	810	30%	1,890	70%
Total MCD	**2019-20**	**10,213**	**4,963**	**49%**	**5,250**	**51%**
	2020-21	**10,700**	**5,198**	**49%**	**5,502**	**51%**
	2021-22	**10,800**	**4,990**	**46%**	**5,810**	**54%**

TPD - Tonnes per day;

Inference:

- In 2021-22, approximately 46% of 4,990 the total waste generated in MCD is being processed, while 54% is sent to landfills.
- The percentage of waste sent to landfill has increased from 51% (5,250 TPD) in 2019-20 to 54% (5,810 TPD) in 2021-22.

[13] DPCC Website : Annual Report Solid Waste Management

C. Status of Solid Waste Management as per SWM Action Plan 2023[14]

- **Table 5: Zone wise waste generation as of February 2023**

Zone Name	No. of wards[15]	No. of Households	Population	MSW Generation (in TPD)	Per Capita (Population) In Kg[16]	Per Capita (Household) In Kg
Central	25	3,96,120	15,84,479	1,000	0.63	2.52
City SP	12	1,51,233	6,04,933	950	1.57	6.28
Civil Line	15	3,34,485	13,37,940	800	0.60	2.39
Karol Bagh	13	2,26,120	9,04,480	850	0.94	3.76
Keshavpuram	15	2,75,904	11,03,615	800	0.72	2.90
Najafgarh	22	3,66,556	14,66,223	900	0.61	2.46
Narela	16	7,61,763	30,47,052	500	0.16	0.66
Rohini	23	5,04,253	20,17,010	950	0.47	1.88
Shahdara North	35	5,08,937	20,35,747	1,250	0.61	2.46
Shahdara South	26	5,01,622	20,06,488	1,200	0.60	2.39
South	23	3,64,906	14,59,624	900	0.62	2.47
West	25	4,25,934	17,03,735	900	0.53	2.11
TOTAL	**250**	**48,17,832**	**1,92,71,326**	**11,000**	**0.57**	**2.28**

TPD - Tonnes per day

Inference:

- As of February 2023, the highest waste generation was in Shahdara North (1,250 TPD), followed by Shahdara South (1,200 TPD) and Central zone (1,000 TPD).
- The zones Keshavpuram, Karol Bagh, and City SP have a higher per capita waste generation of 0.72 Kg, 0.94 Kg, and 1.57 Kg respectively.
- Zones Narela (7,61,763), Rohini (5,04,253) and Shahdara North (5,08,937) are the top three wards with the highest households and population and have per capita waste generation rates of 0.16 Kg, 0.47 Kg and 0.61 Kg respectively.

[14] DPCC Website : Action Plan and Timeline

[15] The delimitation of wards of the Municipal Corporation of Delhi was done in May 2022, as mentioned in an official gazette.

[16] Per capita refers to the average amount of waste generate per person in a population.

- **Table 6: Zone wise wet waste and dry waste generation as of February 2023**

Zone Name	Population	MSW Generation (TPD)	Wet Waste Generation (TPD)	Dry Waste Generation		Wet Waste Per Capita (In Kg)	Dry Waste Per Capita (In Kg)
				Non-Recyclable (TPD)	Recyclable (TPD)		
Central	15,84,479	1,000	400	480	120	0.25	0.38
City SP	6,04,933	950	380	456	114	0.63	0.94
Civil Line	13,37,940	800	320	384	96	0.24	0.36
Karol Bagh	9,04,480	850	340	408	102	0.38	0.56
Keshavpuram	11,03,615	800	320	384	96	0.29	0.43
Najafgarh	14,66,223	900	360	432	108	0.25	0.37
Narela	30,47,052	500	200	240	60	0.07	0.10
Rohini	20,17,010	950	380	456	114	0.19	0.28
Shahdara North	20,35,747	1,250	500	600	150	0.25	0.37
Shahdara South	20,06,488	1,200	480	576	144	0.24	0.36
South	14,59,624	900	360	432	108	0.25	0.37
West	17,03,735	900	360	432	108	0.21	0.32
TOTAL	**1,92,71,326**	**11,000**	**4,400**	**5,280**	**1,320**	**0.23**	**0.34**

Inference:

- As of February 2023, out of the 11,000 TPD waste generated, the percentage of wet waste generation is 40% (4,400 TPD) while dry waste constitutes of 60% (5,280 TPD of non-recyclable waste and 1,320 TPD of recyclable waste).
- Out of the dry waste generated in MCD, only 20% is recyclable, while the remaining 80% is non-recyclable.
- The highest wet and dry waste generation is seen in the zones Shahdara North (500 and 750 TPD), followed by Shahdara South (480 and 720 TPD) and Central zone (400 and 600 TPD).

Bulk Waste Generators (BWG) produce a large amount of waste, which can have a significant impact on the environment if not managed properly. By identifying and regulating these generators, cities can ensure that the waste is disposed of in an environmentally responsible manner. Realising the importance of BWGs in management of solid waste, Government of India revamped the Municipal Solid Waste (Management and Handling) Rules 2000 and notified the Solid Waste Management Rules, 2016 on April 8, 2016[17]. The Rules mandate for effective waste management by bulk waste generators at source. Further, they lay emphasis on the duties and responsibilities of waste generators including bulk waste generators with timeframe for implementation and monitoring by the Government/ ULB.

[17] https://smartnet.niua.org/sites/default/files/resources/bulk_waste_generator_book.pdf

- **Table 7: Zone wise Bulk Waste Generators (BWG) as of February 2023**

Zone Name	No. of Wards	No. of Bulk Waste Generator	Quantum of MSW Generation (in TPD)
Central	25	8	1.72
City SP	12	15	1.65
Civil Line	15	21	2.12
Karol Bagh	13	17	1.70
Keshavpuram	15	45	4.50
Najafgarh	22	17	3.07
Narela	16	15	1.50
Rohini	23	16	2.49
Shahdara North	35	0	0.00
Shahdara South	26	11	1.10
South	23	11	4.43
West	25	8	0.90
Total	**250**	**184**	**25.18**

Inference:

- Among the MCD zones, Keshavpuram Zone has the highest number of bulk waste generators with 45 BWGs, followed by Civil Line Zone with 21 and Najafgarh and Karol bagh Zone with 17.
- The highest quantum of MSW (Municipal Solid Waste) generation is observed in Keshavpuram Zone with 4.50 TPD, followed by South Zone with 4.43 TPD and Najafgarh Zone with 3.07 TPD.

- **Table 8: Existing MSW processing facilities and capacity in MCD as of February 2023**

Type of Facility	Nos.	Location	Capacity (in TPD)	Present Utilisation Capacity (%)
Waste to Energy Plant	1	Okhla	1,950	100%
Waste to Energy Plant	1	Bawana	2,500	100%
Waste to Energy Plant	1	Tehkhand[18]	2,000	100%
Waste to Energy Plant	1	Ghazipur	1,300	95%
Composter	20	Various locations in MCD	20	100%
Local Composting Units	211	Various locations in MCD	543	100%
MRF	156	Various locations in MCD	253	100 %
Total	**391**		**8,566**	

*MRF: Material Recovery Facility

Inference:

- As of 2023, MCD operates four waste-to-energy plants with a capacity of 7,750 TPD (90% of total capacity of 8,566) for waste processing, 231 composter units and 156 MRFs, capable of processing 816 TPD (10% of total capacity of 8,566) of the waste.
- This shows that a large proportion of waste is processed at expensive waste-to-energy plants, while only a small amount is promoted and processed through cost-effective decentralised waste management at household level, community level, composter units, etc.

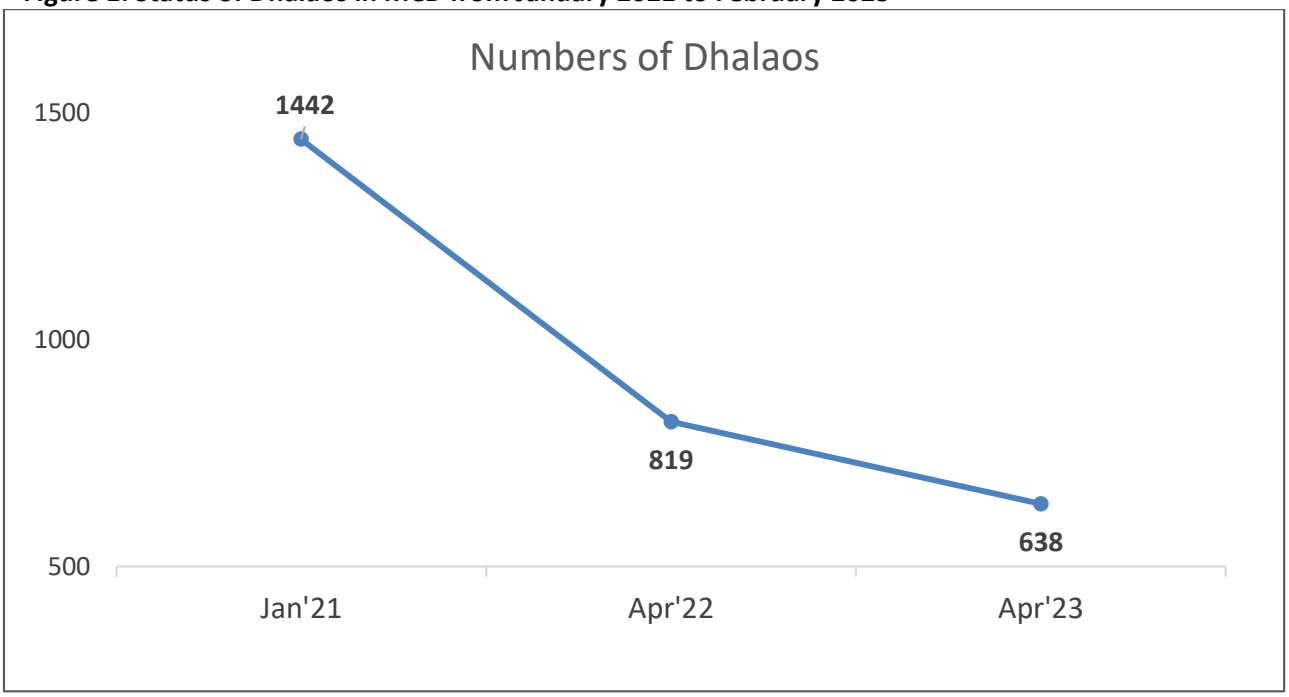
[18] Waste to energy plant started in October 2022.

Dhalaos[19]

Dhalao or Community Waste Storage Bin is any storage facility set up and maintained by MCD or collectively by owners and/or occupiers of one or more premises for storage of solid waste in a segregated manner on the roadside/in premises of any one of such owners/occupiers or in their common premises as authorised by the competent authority. In order to maintain a garbage-free city, dhalaos are discouraged for both practical and aesthetic reasons.

Dhalaos are still in use in MCD areas as secondary storage points, and the MCD has proposed closing 638 of them by the end of 2024 while keeping some of them open for the disposal of silt and street-sweeping waste. By April 15th, 2023, MCD must provide specific timelines, accountable officers, and the number of dhalaos intended to be retained to the SWMC Convenor for Solid Waste Monitoring Committee (SWMC).

- **Figure 1: Status of Dhalaos in MCD from January 2021 to February 2023**



Inference:

- As per SWM Rules 2016 door to door collection of waste is to be done and therefore dhalaos should be discouraged.
- From January 2021 to April 2022, a total of 623 dhalaos were closed in the Municipal Corporation of Delhi (MCD). Subsequently, from April 2022 to April 2023, an additional 181 dhalaos were closed.

[19] State Level Committee Meeting headed by CS, GNCTD (delhigovt.nic.in)

D. Delhi's Swachh Survekshan Ranking 2022

- **Table 9: Status of Swachh Survekshan in MCD for the year 2022**[20]

Type of Services	NDMC	SDMC	EDMC
Segregated door to door Waste Collection	75% to 90%	90% or above	75% to 90%
Cleanness of Road	50% to 75%	90% or above	90% or above
Cleanness of Public Toilet	25% to 50%	75% to 90%	less than 25%
Cleanness of Market areas	90% or above	90% or above	90% or above
Cleanness of residential area	90% or above	90% or above	90% or above
Cleanness of Drains	75% to 90%	75% to 90%	50% to 75%
Cleanness of Water bodies	90% or above	90% or above	90% or above
City Beautification	75% to 90%	75% to 90%	75% to 90%
Daily Sweeping in residential areas	75% to 90%	90% or above	75% to 90%
Not availability of open garbage dumps	75% to 90%	90% or above	90% or above
Citizen grievance redressed	50% to 75%	75% to 90%	50% to 75%

Inference:

- Despite all three Municipal Corporations of Delhi (MCDs) claiming to have achieved 100% door-to-door waste collection, the Swachh Survekshan survey reveals that the NDMC received ratings ranging from 75% to 90%, while the EDMC obtained similar ratings of 75% to 90%.
- NDMC, SDMC, and EDMC received ratings of 75%-90%, 75%-90%, and 50%-75% respectively for "Cleanness of drains" despite 12,094 drainage complaints in 2022.
- Although all three Municipal Corporations of Delhi (MCDs) received ratings of 90% or above in the category of "Cleanness of water bodies," the Central Pollution Control Board (CPCB) report reveals alarming levels of contamination in the Yamuna River. The presence of faecal coliform was particularly high at Nizamuddin (49 lakh MPN/100ml), Okhla Bridge (110 lakh MPN/100ml), and Okhla Shahdara drain (220 lakh MPN/100ml).
- NDMC and EDMC received ratings of 75%-90% in "Daily Sweeping of residential areas," while SDMC achieved a rating of 90% or above. It is worth noting that citizens registered 865 complaints regarding road sweeping in 2022.

[20] Swachh Survekshan Ranking: SBM Urban Website

E. Other Best Practices of Solid Waste Management by other Indian Cities

1. Source Segregation[21]

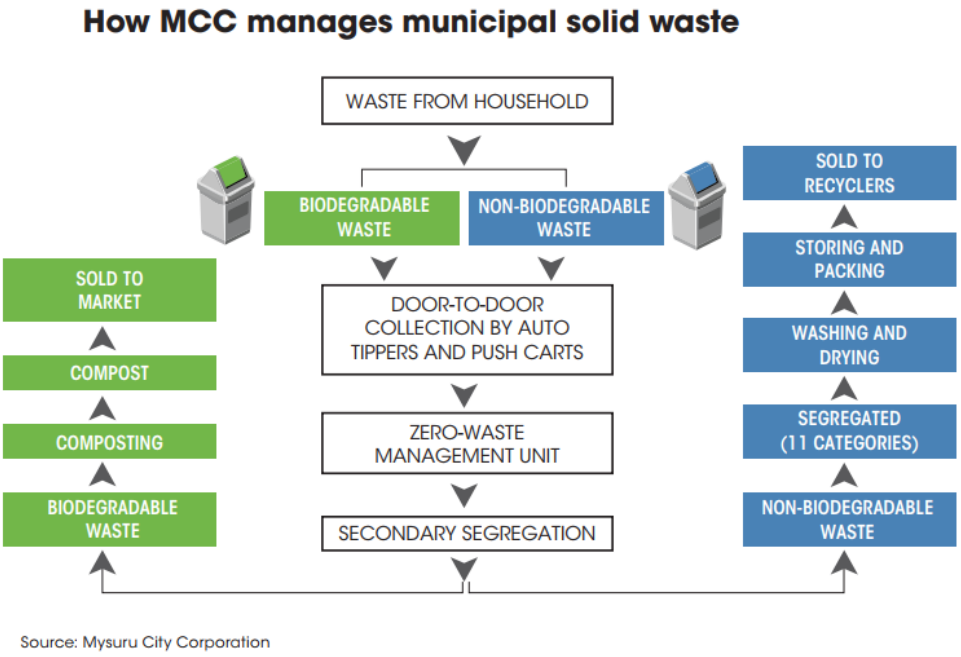
a. **Indore Municipal Corporation (IMC):** The city achieved 100% door-to-door waste collection and segregation by conducting an identification study, preparing a route plan, and deploying staff and vehicles accordingly. It took nearly a year to accomplish this. Partitioned vehicles are used for collection, and a GPS-enabled tracking system is used to monitor the vehicles. Any deviations from the established routes are penalised, with multiple violations resulting in dismissal. IMC adopted various Information, Education and Communication (IEC) activities to make Swachh Bharat Mission successful. Municipal officials, public representatives, religious and community leaders participated in the campaign to convince citizens to segregate waste. IMC engaged more than 800 self-help groups (SHGs), comprising over 8,000 women, to spread awareness about source segregation and to provide workers for material recovery facilities.

b. **Vijayawada Municipal Corporation (VMC):** The city implemented technological measures such as QR code-enabled Radio Frequency Identification (RFID) tags for waste collection, resulting in 52 bin-free wards. Smart bins send alerts when full. VMC also enforced source segregation, door-to-door collection, home composting, vermicomposting, public and community toilets, and plastic vending machines. Rag pickers are employed to segregate and collect plastic waste.

c. **Corporation of the City of Panaji (CCP):** Panaji in India implemented an innovative waste segregation system, as part of the HDFC-United Nations Development Programme Dry Waste Management project. Panaji's 16-way segregation model allows for more efficient recycling and resource recovery, while eliminating the need for landfills. This system is not only cheaper, but also reduces the health risks for waste pickers who sort the waste at material recovery facilities. The model requires minimal manual or mechanical sorting and is environmentally friendly.[22]

[21] CSE and NITI Aayog release 'Waste-wise cities' – compendium of best practices in municipal solid waste management (cseindia.org)
[22] 16-ways of segregating waste: Panaji's innovative model of solid waste management | United Nations Development Programme (undp.org)

d. **Mysuru City Corporation (MCC)**: The city implemented nine decentralised zero-waste management units for pit and vermicomposting. Each plant handles biodegradable waste from five wards, ensuring minimal load on the centralised compost unit. Compost is sold to farmers at Rs. 1,200/tonne, with 5% retained for horticultural purposes.



Source: Mysuru City Corporation

F. Status of Landfills under Municipal Corporation of Delhi[23]

- **Dumping Ground/Landfill**

▪ **Table 10: Status of Bio-Mining process at Dumping/Landfill Ground as of February 2023 (in Lakh Tonnes)**

Name of Dumpsite	Ghazipur	Okhla	Bhalaswa	Total
Legacy Waste including fresh MSW dumped (Drone Survey June, 2022)	85	45	73	203
Fresh MSW dumped (From July 2022 to February 2023)	4.96	5.17	5.11	15.24
Total Legacy waste as of February 2023	89.96	50.17	78.11	218.24
Total Quantity of Legacy Waste Bio-mined from July 2022 to Feb 2023	11.50	7.50	4.95	23.95
Balance Legacy waste at Dumpsites (As on February 2023)	78.46	42.67	73.16	194.29
Average Monthly Bio mining Rate (Based on July 2022 to February 2023)	1.44	0.94	0.62	2.99
Bio mining Timeline (Legacy plus fresh waste)	50% till Aug 2023			
	75% till Feb 2024			
	100% till May 2024			

[23] DPCC Website : Action Plan and timeline

Inference:

- The Action Plan 2023 aims to clear 194 lakh tonnes of legacy in MCD landfills by December 2024.
- The timeline for clearing all the legacy waste is as follows: 50% of the waste will be cleared by August 2023, 75% by February 2024, and 100% by May 2024.
- The average rate of bio-mining for legacy waste is 2.99 lakh tonnes per month, which implies that at this rate, it would take approximately 5.5 years to clear all the legacy waste. In order to meet the timeline, set by December 2024, the MCD needs to implement proper waste management strategies and potentially increase the rate of bio-mining to expedite the clearance process.

G. Status of Waste-to-Energy plants in MCD as of 2021-22

As per the DPCC Annual Report 2021-22, MCD has three Waste to Energy Plants (WtE Plants) with a total capacity of 4,550 TPD, located in Okhla, Ghazipur, and Bawana. MCD has built a new waste-to-energy plant with a capacity of 2,000 TPD at Tehkhand in October 2022 and proposing a new waste-to-energy plant with a capacity of 3,000 TPD Narela-Bawana.

- **Table 11: Status of the 3 Waste to Energy (WtE) plants in MCD[24] as of 2021-22**

	Okhla	Ghazipur[25]	Bawana
Exact Name of the plant	Timarpur Okhla Waste Management Company Ltd., Old NDMC Compost Site	East Delhi Waste Processing Company Ltd. Ghazipur	Delhi MSW Solutions Ltd Narela Bawana Road, Bawana
Type of collection	Processes waste for production of RDF for electricity production	Processes waste for production of RDF for electricity production.	The plant has provision for Collection, transportation, processing, composting, WTE plant and engineered landfill facility.
Waste Processing in TPD	1,950 TPD	1,300 TPD	1,300 TPD
Electricity Generation in MW	23 MW	12 MW	24 MW

TPD: Tonnes per day; MW: Megawatts

Inferences:

- The Okhla WtE plant generates 23 MW of electricity, the Ghazipur WtE plant generates 12 MW, and the Bawana WtE plant generates 24 MW, resulting in a total electricity generation of 59 MW from the waste-to-energy (WtE) plants combined.
- Proposed expansions include increasing the Okhla WtE plant's capacity from 1,950 TPD to 2,950 TPD (23 MW to 40 MW) and expanding the Bawana WtE plant from 24 MW to 60 MW (up to 3000 TPD).

[24] DPCC Website : Annual Report Solid Waste Management

[25] WtE Plant was under revamp and was shut down w.e.f 09.11.2021. The plant restarted its operation w.e.f 15.06.2022 after revamping.

H. Threats caused by landfill sites[26]

1. Waste segregation at the source is not practised.

The SWM Rules 2016 mandates waste generators to properly segregate waste into six categories: non-biodegradable, residential-hazardous, sanitary, construction-demolition, and horticulture. MCD's SWM Bye-laws 2017 also emphasise the waste generators' responsibility to separate waste at the source. Nonetheless, despite the existence of penal statutes in the bye-laws aimed at facilitating waste segregation, composting, and preventing biodegradable and recyclable waste from entering the dump sites, the current state of the three sanitary landfills (at Okhla, Ghazipur, and Bhalswa) demonstrates a failure to meet the standards.

2. Landfills are contributing to Delhi's air pollution.

As per the World Air Quality Report, Delhi was ranked the world's most polluted capital city in 2021 for the fourth consecutive year. Delhi dumps untreated waste in the dumpsites. This waste, coupled with rising temperatures, leads to methane emissions and fire breakouts. Since 2016-17, 121 fire incidents took place in Ghazipur Dumpsite. Out of 121 fire incidents, 68 were major and 53 were minor incidents. At the Bhalswa landfill, there were 12 fire incidents in 2022, while two fires were reported in 2023. **There were a total of 2,07,752 cases of respiratory disease reported in the MCD and State hospital for the year 2021.**

- **Table 12: Number of Fire Incidents at Ghazipur Dumpsites in the Last Seven Years[27]**

Year	Total No. of Fire incidents	No. of major fire incidents	No. of minor fire incidents
2016-17	54	23	31
2017-18	31	26	5
2018-19	18	10	8
2019-20	6	2	4
2020-21	6	4	2
2021-22	3	1	2
2022-23	3	2	1
Total	**121**	**68**	**53**

3. Air pollution and Leachate affects the health of the residents.

High levels of chemical oxygen demand (COD) and Iron were found in groundwater at all three sites. It is due to the contamination of leachate from the dumpsite. Leachate from the Bhalswa dumpsite also caused chlorides, total dissolved solids (TDS), total soluble solids (TSS) and turbidity in the surface water body of Bhalswa lake, which is located within a radius of 0-1 km from the landfill. Surface water as well as groundwater can become contaminated by even small amounts of landfill leachate and highly concentrated heavy metals, rendering them unfit for human consumption. In the long run, these leachates and heavy metals may affect natural and human resources because they may eventually enter the food chain

4. Landfills cause ecological damage and financial loss.[28]

According to a study conducted by experts from National Environmental Engineering Research Institute (NEERI), the Central Pollution Control Board (CPCB) and IIT-Delhi, the damage due to Bhalswa was worth Rs 155.9 crore, Okhla caused ecological damage to the tune of Rs. 151.1 crore and Ghazipur has led to environmental damage of Rs. 142.5 crore.

[26] https://www.firstpost.com/india/explained-why-bhalswa-and-other-landfills-are-a-concern-for-delhi-10615921.html
[27] Ghazipur Dumpsite fires
[28] https://cpcb.nic.in/uploads/MSW/Reports_swm_4.pdf

I. Status of SWM Complaints Registered by Citizens in Municipal Corporation of Delhi (MCD)[29]

- **Table 13: Solid Waste Management Related Civic Complaints from 2016 to 2022**

Issue	Numbers of Complaints							% Change from 2016 to 2022
	2016	2017	2018	2019	2020	2021	2022	
Garbage not collected	1,068	6,663	7,606	5,571	5,164	2,798	4,117	285%
Collection point not attended properly	7,033	2,686	1,810	860	168	590	1,032	-85%
Removal of dead animals	12,025	13,540	14,537	12,664	18,684	10,898	8,255	-31%
Removal of Debris	1,545	1,481	1,465	1,377	988	665	833	-46%
Solid Waste Management Related	2,886	3,111	2,931	3,083	3,145	1,713	2,002	-31%
Total	**24,557**	**27,481**	**28,349**	**23,555**	**28,149**	**16,664**	**16,239**	**-34%**

Inference:
From 2016 to 2022, there was a 34% decrease in overall solid waste management-related complaints. Despite the Municipal Corporation of Delhi (MCD) claiming 100% door-to-door waste collection, complaints regarding 'garbage not collected' increased by 285% from 2016 to 2022.

J. Municipal Budget Related to Civic Issue related Department (DEMS Department)[30]

- **Table 14: Non Plan Budgetary Allocation of Departments Related to Civic Issues for FY 2018-19 to 2023-24 (in lakhs)**

Year		Total Budget for Civic Issue Department	Department Of Environment Management Services (DEMS)	% assign to DEMS
2018-19	BE	6,91,457	3,80,046	55%
	RBE	7,09,399	4,13,378	58%
	Actuals	4,64,628	2,87,219	62%
	% Utilisation	**65%**	**69%**	**-**
2019-20	BE	7,15,613	4,19,122	59%
	RBE	6,68,077	4,27,635	64%
	Actuals	4,90,973	3,05,833	62%
	% Utilisation	**73%**	**72%**	-
2020-21	BE	7,28,885	4,41,869	61%
	RBE	5,79,491	3,42,472	59%
2021-22	BE	6,26,378	3,81,560	61%
2022-23	BE	6,63,438	4,15,328	63%
2023-24	BE	7,00,329	4,46,585	64%

Note: BE: Budget Estimates, RBE: Revised Budget Estimates,

Inference:
Out of the total budget allocated to civic issues (6,63,438 Lakh), DEMS, responsible for overseeing the overall process of solid waste management, has been assigned 63% of the budget, which amounts to 4,15,328 Lakh.

[29] As per RTI Response.
[30] https://www.mcgm.gov.in/irj/portal/anonymous/qlBudgetapp

Part II. Sewerage Treatment and Drainage

There are various national level policies related to sewerage. The Atal Mission for Rejuvenation and Urban Transformation **(AMRUT)** policy[31] of the Union government declares providing a sewerage connection to every household as one of its mission statements. Similarly, the **National Water Mission**[32] aims at incentivising recycling of water including wastewater and development of an eco-friendly sanitation system. The **Jal Shakti Abhiyan**[33] of the ministry has 'reuse of sewage water' as one of its targets.

If we look at Delhi's performance in this context, currently there are 20 Sewage Treatment Plants (STPs), which treat 2,896 MLD (87%) out of the total 3,330 MLD of sewage generated.[34]

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

Biochemical Oxygen Demand (BOD): Refers to the amount of dissolved oxygen in the water required to decompose the organic matter. When the water contains higher levels of organic matter such as sewage and pollutants, the BOD increases, resulting in a decrease in the oxygen available for aquatic life. Central Pollution Control Committee (CPCB) norms for BOD from STP outlet are 20mg/lt. Delhi Pollution Control Committee (DPCC) has a norm of 30mg/lt. The CPCB norm followed for BOD of waterbodies is 3mg/lt.

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 DPCC.

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[35]/100ml and for drinking water, detectable faecal coliform has to be nil.

[31] http://amrut.gov.in/content/innerpage/the-mission.php
[32] http://nwm.gov.in/
[33] http://geourbanmissions.gov.in/
[34] http://www.sulabhenvis.nic.in/Database/STST_wastewater_2090.aspx
[35] Most Probable Number (MPN) is a method to estimate concentration of microorganisms in liquid.

A. Status of Delhi's Sewerage Treatment Plant[36]

- **Table 15: Status of Delhi's Sewerage Treatment Plant's Waste Water Quality from Jan-2022 to Dec-2022**

Name of the Plant	Capacity (in MGD)	Parameter		
		Type	BOD (mg/l)	TSS (mg/l)
Okhla	12 MGD	Inlet	161	272
		outlet	22	42
	45 MGD	Inlet	162	272
		outlet	18	33
	37 MGD	Inlet	162	272
		outlet	26	49
	16 MGD	Inlet	162	272
		outlet	5	8
	New 30 MGD	Inlet	160	286
		outlet	5	7
Kondli	10MGD Phase-I	Inlet	186	336
		outlet	12	14
	25 MGD Phase-II	Inlet	167	383
		outlet	16	19
	10 MGD Phase-III	Inlet	186	337
		outlet	34	21
	45 MGD Phase-IV	Inlet	182	380
		outlet	91	127
Chilla	9 MGD	Inlet	181	249
		outlet	6	7
Yamuna Vihar	10 MGD Phase-I	Inlet	195	325
		outlet	12	19
	10 MGD Phase-II	Inlet	192	320
		outlet	19	31
	25 MGD Phase-III	Inlet	274	496
		outlet	26	42
Rithala	40 MGD (PH-I)	Inlet	160	252
		outlet	11	16
	40 MGD (PH-II)	Inlet	158	291
		Outlet	12	15
Keshopur	12 MGD (PH-I)	Inlet	184	302
		outlet	6	10
	40 MGD (PH-III)	Inlet	200	350
		outlet	142	179
	20 MGD (PH-II)	Inlet	199	351
		outlet	123	121
Nazafgarh	5 MGD	Inlet	187	354
		outlet	27	34

Name of the Plant	Capacity (in MGD)	Parameter		
		Type	BOD (mg/l)	TSS (mg/l)
Pappan Kalan	20 MGD Phase-I	Inlet	189	360
		outlet	38	58
	20 MGD Phase-II	Inlet	189	362
		outlet	7	7
Corronation pillar	20 MGD Phase-I &II	Inlet	143	200
		outlet	34	49
	10 MGD Phase-III	Inlet	298	355
		outlet	37	63
	70 MGD	Inlet	132	234
		outlet	13	23
Delhi Gate-I	2.2 MGD	Inlet	153	247
		outlet	5	7
Delhi Gate-II	15 MGD	Inlet	148	231
		outlet	4	6
Sen Nursing Home	2.2 MGD	Inlet	154	249
		outlet	5	8
Narela	10 MGD Phase-III	Inlet	150	223
		outlet	31	49
Nilothi	40 MGD Phase-I	Inlet	149	233
		outlet	63	87
	20 MGD Phase-II	Inlet	168	260
		outlet	8	13
Molarband	0.66 MGD	Inlet	168	299
		outlet	13	25
Mehrauli	5 MGD	Inlet	167	294
		outlet	14	25
Vasant Kunj	2.2 MGD	Inlet	169	309
		outlet	13	24
	3 MGD	Inlet	163	285
		outlet	8	14
Kapashera	5 MGD	Inlet	172	345
		outlet	8	14
Ghitorni	5 MGD	Inlet	183	362
		outlet	25	45
Rohini	15 MGD	Inlet	209	395
		outlet	16	27

Note – 1) Metric Gallon Per Day (MGD).

2) Light green refers to CPCB criteria met; Red is where average outlet quality is worse than DPCC limit

STP's Index

Colour	Remark
	CPCB criteria met (***CPCB: BOD: 20mg/l, TSS: 50 mg/l***)
	Average outlet quality is between CPCB and DPCC norms
	Average outlet quality is worse than CPCB/DPCC norms (***DPCC: BOD: 30mg/l, TSS:50mg/l***)

[36] DJB Website : Daily STP Report

Inference:

- In 2022, 6 out of 20 STPs failed to meet the DPCC criteria for BOD (30mg/lt.) and 5 out of 20 STPs meet the TSS norm (50mg/lt.), while a total of 10 out of 20 STPs failed to meet the CPCB criteria for BOD (20mg/lt.)
- The average BOD at Kondli (34mg/lt. & 91mg/lt), Keshopur (142mg/lt. & 123mg/lt.), Coronation pillar (34mg/lt. & 37mg/lt.), Nilothi (63mg/lt.), Narela (31mg/lt.) and Pappan Kalan (38mg/lt.) were higher than the prescribed limit of BOD of 30mg/lt. by DPCC and 20mg/lt. by CPCB, reflecting that even after treatment the water was polluted. If water is to be reused in the long run for sustainability of the water-sewerage system, it will be important to ensure that the STPs meet the treatment norms.

- **Table 16: Quality of Water Bodies in Delhi[37] in accordance with CPCB norms (2021)**

Station name	B.O.D. (mg/lt.)		Faecal Coli form (MPN/100ml)	
	<3 mg/lt.		<2500MPN/100ml	
	Min	Max	Min	Max
Yamuna At Palla	2.5	11	68	22,000
Yamuna At Nizamuddin	22	48	47,000	49,00,000
Yamuna At Okhla Bridge (Inlet of Agra Canal)	22	56	49,000	1,10,00,000
Yamuna At Okhla After Meeting of Shahdara Drain	38	83	70,000	2,20,00,000

Colour	Remark
	CPCB criteria met
	Quality is worse than CPCB

Inferences:

- Yamuna river is highly polluted due to the large amounts of untreated waste released through municipal sewage and various other industrial wastes let out.
- According to CPCB norms, the prescribed BOD should be less than 3mg/lt. for river bodies, yet maximum BOD at all 4 quality check stations for Yamuna was much higher. Highest BOD was at Yamuna-Okhla (at Shahdara drain) with 83 mg/lt. which is even higher than the prescribed norm for a STP.
- Yamuna River shows high contamination due to faecal coliform at Nizamuddin (49 lakh MPN/100ml), Okhla Bridge (110 lakh MPN/100ml) and Okhla Shahdara drain (220 lakh/100ml), while the prescribed limit is less than 2,500MPN/100ml, highlighting that highly untreated sewage is being let into the river.

[37] Data from CPCB reports on quality of water bodies: CPCB Website : Water Quality – River data

- **Drainage & Sewerage related issues[38]**

- **Table 17: Drainage and Sewerage Related Civic Complaints from 2016 to 2022 Registered in Delhi**

Issue	Numbers of Complaints							% Change from 2016 to 2022
	2016	2017	2018	2019	2020	2021	2022	
Drainage	**19,865**	**18,522**	**14,025**	**10,859**	**8,352**	**8,184**	**12,139**	**-39%**
Drainage chokes, blockages & Cleaning and overflowing manholes	19,152	16,812	12,329	9,453	7,221	7,214	10,554	-45%
Repairs and reconstruction of drain line Related	713	1,710	1,696	1,406	1,131	970	1,585	122%
Sewerage	**88,225**	**73,088**	**84,683**	**78,997**	**83,647**	**1,02,711**	**1,38,545**	**57%**

Inference:

- The number of complaints registered dropped in 2020 during Covid-19 pandemic. However, following that period, the number of complaints began to rise.
- Within the sub-issue of drainage complaints, related to repairs and reconstruction of drain lines, there was a significant increase of 122% from 2016 to 2022.
- Complaints related to sewerage increased by 57% from 2016 to 2022.

[38]As per RTI response.

Recommendations for Solid Waste and Sewerage Management

1. **Effective Segregation and Processing of Waste at the Source:** There is a need to create awareness among the public about the importance of waste segregation, reuse, and recycling. This can be done through public campaigns, awareness programs, and outreach activities. Encourage the implementation of decentralised waste management systems and waste processing at source to reduce the burden on centralised facilities. This can be achieved through incentives and support from the government.

2. **Zero Waste to Landfill:** Promote the circular economy model, where waste is treated as a resource and reused, recycled, or repurposed. Encourage government support for sustainable waste management practices and incentivise businesses and individuals to adopt zero waste practices

    a. **Composting:** Biodegradable waste processing units should be developed in each constituency. Different treatment methods used for waste segregation like Vermi-composting, Organic Composting for Biogas should also be carried out to ensure optimum recycling. For decentralised composting, Indore adopted mobile compost machines, for composting waste from markets. Vellore in Karnataka and Alappuzha in Kerala have adopted successful micro composting centres for composting biodegradable waste in every constituency.

3. **Monitoring:** The process of monitoring SWM activities should be active to tackle issues. MCD should ensure all provisions mentioned in the MCD SWM Bye-laws are effectively implemented. In addition, targeted solutions must be carried out to timely solve complaints received in all areas. A robust monitoring system can ensure a better functioning SWM in Delhi.

4. **Strengthening institutional capacity:** Build the capacity of SWM officials to manage waste effectively by providing them with training and resources. Adequate staff should be hired to ensure that all aspects of the SWM process are covered, including collection, transportation, processing, and disposal. Incentives should be provided to motivate SWM personnel to perform their duties efficiently and effectively

5. **Collaboration and partnerships:** Foster collaborations and partnerships among government agencies, NGOs, and private entities to promote sustainable waste management practices. In addition, map innovative learnings from other cities that can help BMC achieve effective waste management.

6. **Waste Water Treatment:** Treatment of sewerage generated needs to be 100% and tertiary treatment needs to be done in all the STPs to reduce river pollution and prevent water and vector-borne diseases.

7. **Reuse of Waste Water:** MCD can use the treated wastewater for various purposes such as cleaning roads, watering gardens, traffic islands, road dividers etc. in the city. The corporation can also earn revenue by sale of treated waste water- Nagpur for example treats 90% of its sewerage and sells part of it to National Thermal Power Corporation and Maharashtra State Power Generation Company. Recycling of sewerage should also be incentivised where possible (for example: housing societies, large commercial establishments, industrial establishments) so that treatment of sewerage can be done locally and can reduce the water demand of that unit.

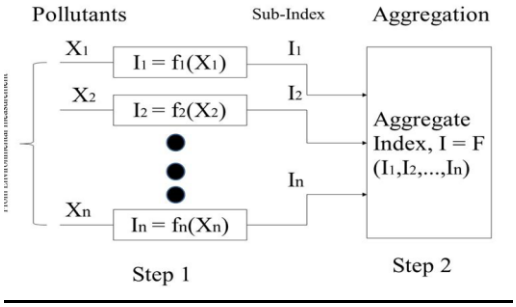
Part III: Air Quality Index (AQI)

A. Key Highlights

- In the past seven years, the average AQI levels in Delhi have consistently been categorised as poor, except for 2020 when it was classified as 'moderate'.
- In 2022, 55% of the days (201) had poor or worse than poor AQI.
- Worst AQI days were recorded in November 2022, highest being an AQI of 446.

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: Image from the 'National Air Quality Index' Report released by the Central Pollution Control Board (2014)

The National Air Quality Index Report of the Central Pollution Control Board provides station wise live data on air quality based on the following air pollutants: Particulate Matter (PM2.5, PM10), Nitrogen Dioxide (NO2), Ammonia (NH3), Sulphur Dioxide (SO2), Carbon Mono-oxide (CO), and Ozone. AQI index range and corresponding severity of pollution are mentioned in the table below.

Colour	Air Quality Index	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 Delhi

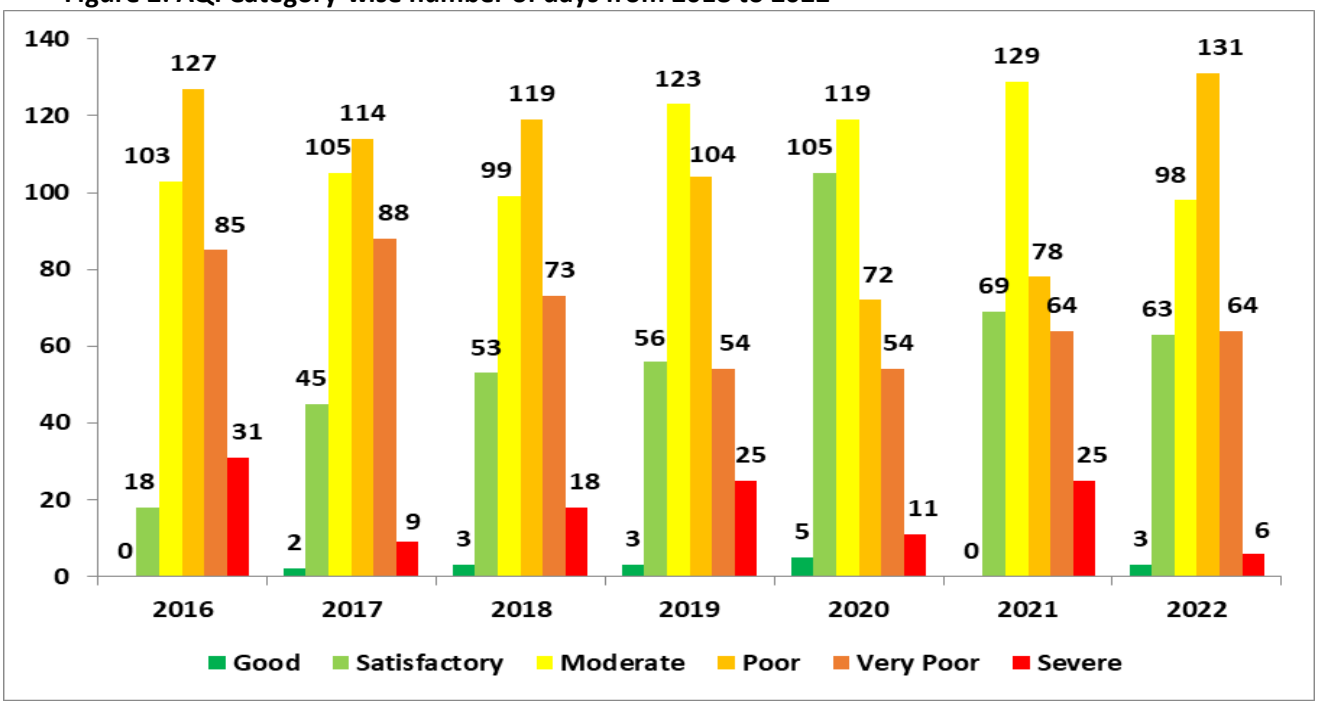
- **Table 18: Average Month-wise AQI from January 2016 to December 2022**

Years	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	371	301	237	264	238	203	144	112	160	276	377	367
2017	304	267	211	227	249	174	98	103	139	285	361	316
2018	330	262	213	220	215	199	100	111	109	267	335	360
2019	328	247	182	209	220	184	134	86	98	237	313	337
2020	287	243	129	103	137	117	84	64	115	265	327	331
2021	325	285	220	196	137	142	112	108	79	174	377	338
2022	280	224	215	255	211	192	88	92	105	213	321	319

Inference:

- Monthly seven-year trend of AQI shows the worst air quality was constantly reported in the winter months (From October to January).
- The yearly average AQI levels in Delhi have been 'poor' in the past seven years except for 2020; 255 in 2016, 227 in 2017, 223 in 2018, 214 in 2019, 188 in 2020, 210 in 2021 and 213 in 2022.
- In 2022, 55% of the days (201) had poor or worse than poor AQI.
- Worst AQI days were recorded in November 2022, highest being an AQI of 446.

- **Figure 2: AQI Category-wise number of days from 2018 to 2022**



Inference:

- A total of 195 days had poor and worse than poor AQI in 2022 of which 6 days registered severe AQI.
- In 2022, a total of 201 days recorded poor, very poor, and severe Air Quality Index (AQI).

- **Table 19: AQI of Year-wise Best and Worst Days from 2020 to 2022**

	Best AQIs		Worst AQIs	
2020	28-03-2020	42	01-01-2020	439
	08-07-2020	48	02-01-2020	421
	07-08-2020	53	05-11-2020	455
	13-08-2020	54	07-11-2020	425
	16-08-2020	54	08-11-2020	409
	20-08-2020	49	09-11-2020	470
	22-08-2020	54	10-11-2020	478
	23-08-2020	52	15-11-2020	450
	24-08-2020	46	23-12-2020	435
	31-08-2020	40	24-12-2020	425
	01-09-2020	51		
2021	20-05-2021	54	02-01-2021	452
	20-06-2021	60	15-01-2021	460
	28-07-2021	63	16-01-2021	427
	29-07-2021	62	05-11-2021	460
	31-07-2021	61	06-11-2021	442
	22-08-2021	56	07-11-2021	430
	02-09-2021	62	12-11-2021	464
	12-09-2021	59	13-11-2021	440
	17-09-2021	63	02-12-2021	427
	18-10-2021	57	25-12-2021	427
			26-12-2021	460
2022	30-07-2022	58	02-01-2022	402
	15-09-2022	58	03-01-2022	389
	16-09-2022	46	29-10-2022	398
	23-09-2022	52	01-11-2022	423
	24-09-2022	55	03-11-2022	444
	25-09-2022	52	04-11-2022	446
	07-10-2022	55	05-11-2022	390
	08-10-2022	55	04-12-2022	408
	09-10-2022	47	19-12-2022	408
	10-10-2022	43	30-12-2022	394

Inference:

The lowest AQI (best air quality) in a month was reported in September 2022 (5 out of 10 best days). The worst AQI days were recorded in November 2022, with the highest being 446, showing that there has been no improvement in the air quality situation in the past five years.

- **Table 20: Sub-Issue wise Pollution Complaints from 2016 to 2022**

Pollution Sub-Issues	2016	2017	2018	2019	2020	2021	2022	% Change from 2016 to 2022
Average Air Quality Index	255	227	223	214	188	210	213	-16%
Air Pollution	*115*	*90*	*140*	*128*	*60*	*29*	*32*	*-72%*
Noise Pollution	*6*	*43*	*30*	*22*	*6*	*9*	*13*	*117%*
Factory Water Pollution	*1*	*1*	*0*	*1*	*0*	*0*	*1*	*0%*
Nuisance due to Masala Mills/ Flour Mills	*2*	*5*	*1*	*2*	*0*	*1*	*0*	*-100%*
Pollution due to Chemical Effluents	*1*	*8*	*7*	*11*	*4*	*0*	*3*	*200%*
Pollution Related	*91*	*64*	*73*	*76*	*27*	*23*	*14*	*-86%*
Total	**216**	**211**	**251**	**240**	**97**	**62**	**64**	**-71%**

Inference:
Over the last seven years, pollution complaints have decreased from 216 in 2016 to 64 in 2022. However, despite the decrease in complaints, the average air quality index (AQI) has remained consistently poor throughout this period.

Recommendation:

National Climate Action Plan (NCAP): It is important to promptly implement the indicators outlined in the NCAP and establish a robust monitoring system to track their progress. This will ensure the timely adoption of effective measures to address the escalating climate changes in Delhi.

Section II: Civic Complaints of Municipal Corporation of Delhi (MCD) and Delhi Jal Board (DJB)[39]

Lack of unified complaint mechanism:

- Currently, there are separate complaint numbers and mechanisms for lodging complaints, which are not integrated into a unified management system or complaint repository. For different issues, different agencies have to be approached. If a citizen has a water related complaint for example, they have to file a complaint at the DJB, if they have a complaint regarding state health/education they have to file a complaint in the state complaint management system, and if they have a complaint related to solid waste, they have to approach the respective MCD or zone.
- Further, agencies of all three (Central, State and Local) governments are involved in providing basic civic services creating a confusion of jurisdiction in the minds of citizens (Major-minor roads are managed by agencies from all the three governments). Thus, this gets further complicated as multiple agencies have multiple methods of complaining, for example, different telephone numbers, apps and so on.

Example of the MCD Complaint Management System
The MCD has separate complaint numbers for each of its 12 zones, complaints from which are written down in a register. A separate mobile application for each of the 3 MCDs along with a phone number for each MCD was recently started and complaints from here are entered in a management system. However, complaints registered at the zone are not entered in the MIS. Therefore, there is no one place where all the complaints are available and tracked.

Lack of Proper Tracking and Monitoring of Complaints:

- Both the MCD and DJB complaint management systems do not have a mechanism where the citizen can track the status of their complaints.
- There is no centralised mechanism for citizens to ensure that complaints are resolved on time.
- Action Taken Reports (ATR) are not generated in the MCD complaints system.
- ATRs generated by the DJB are not shared with the citizens.

Example of the DJB Complaint Management System
Currently, the DJB Management Information System (MIS) includes a category called 'others' to register certain complaints that are not part of the main complaints system. This category is used for registering complaints related to issues like lack of water or contaminated water in areas that are not under the jurisdiction of DJB. However, it is essential to appropriately categorise such complaints and forward them to the respective department responsible for proper monitoring and resolution tracking.

Lack of Citizen Feedback and Transparency:

- The complaint management system including information on number and type of complaints, time taken to resolve complaints etc. is not available on public domain.
- Citizens have no way to provide feedback on their satisfaction regarding complaints made and action taken by the concerned department.

[39] As per an RTI response.

A. Overall Complaints:

- **Table 21: Zone-wise Civic Complaints of MCD and DJB from 2016 to 2022**

Zones	Year[40]							% Change from 2016 to 2022
	2016	2017	2018	2019	2020	2021	2022	
Central	46,089	38,350	30,336	27,007	24,171	25,020	28,555	-38%
City	9,528	6,297[41]	-	-	-	-	-	-
City & Sadar Paharganj	-	2,347[42]	15,623	14,303	13,531	11,324	12,973	-
Civil Lines	54,768	51,553	26,493	23,578	20,720	19,945	22,031	-60%
Karol Bagh	29,672	30,539	29,009	28,036	23,322	25,437	32,296	9%
Keshav Puram	-	3,651[43]	24,492	24,343	18,910	21,183	22,186	-
Najafgarh	36,990	25,229	22,636	25,850	33,063	35,521	49,432	34%
Rohini	48,908	43,913	28,040	29,343	35,692	38,146	51,755	6%
Rural Narela	16,343	12,252	17,047	16,269	19,767	22,562	26,232	61%
Sadar Paharganj	16,951	14,469[16]	-	-	-	-	-	-
Shahdara North	42,187	34,769	29,559	29,907	31,579	28,430	39,677	-6%
Shahdara South	35,966	33,742	41,098	40,324	41,689	37,599	47,647	32%
South	52,153	43,439	33,739	29,869	27,990	34,567	43,380	-17%
West	61,939	47,934	40,076	40,276	44,835	55,480	71,304	15%
Other[44]			**61,167**	**994**	**1,599**	**-**	**-**	**-**
Total	**4,51,494**	**3,88,484**	**3,99,315**	**3,30,099**	**3,36,868**	**3,55,214**	**4,47,468**	**-1%**

Inference:

- The total number of civic complaints decreased by 1%, from 4,51,494 in 2016 to 4,47,468 in 2022.
- From 2016 to 2022, while there was a decrease in overall complaints, specific zones experienced an increase in complaints i.e. Rural Narela zone 61% increase in complaints, followed by a 34% in Najafgarh, 32% in Shahdara South, 15% West zone and a Rohini zone increased by 6%.
- From 2016 to 2022, the Civil Line zone had the highest decrease in complaints, with a significant reduction of 60% followed by Central zone with a 38% and the South zone with 17% decrease in complaints.

[40] As per RTI response.

[41] Represents data from Jan '17 to Jun '17. In April 2017, after the Civic elections, Zones were delimited and revised according to population changes. In July 2017, City & Sadar Paharganj Zones were merged to form City & Sadar Paharganj Zone.

[42] Represents data from July '17-Dec '17. In July 2017, City & Sadar Paharganj Zones merged to form City & Sadar Paharganj Zone.

[43] Represents data from Sept '17 – Dec '17. In August 2017, Keshav Puram Zone was formed.

[44] Refers to complaints of DJB which were not provided zone wise

- **Table 22: Issue wise Civic Complaints in MCD from 2016 to 2022**

Issue	Numbers of Complaints[45]							% Change from 2016 to 2022
	2016	2017	2018	2019	2020	2021	2022	
Buildings	**41,250**	**55,473**	**65,277**	**59,896**	**45,107**	**42,750**	**54,085**	**31%**
Unauthorised Construction/Development	40,187	54,530	64,270	59,063	44,190	41,864	53,507	**33%**
Dilapidated Condition of Building	500	620	721	520	650	745	472	**-6%**
Building related	563	323	286	313	267	141	106	**-81%**
Drainage	**9,868**	**10,731**	**10,384**	**7,641**	**5,413**	**4,592**	**6,367**	**-35%**
Drainage chokes, blockages & Cleaning and overflowing manholes	9,155	9,021	8,688	6,235	4,282	**3,622**	**4,782**	**-48%**
Repairs and reconstruction of drain line Related	713	1,710	1,696	1,406	1,131	**970**	**1,585**	**122%**
Fire in house/building	**1,032**	**936**	**759**	**370**	**120**	**69**	**125**	**-88%**
Footpaths	**27**	**16**	**21**	**18**	**6**	**15**	**17**	**-37%**
Garden	**4,055**	**4,315**	**5,087**	**4,045**	**4,224**	**3,541**	**3,953**	**-3%**
Tree cutting/Trimming	1,685	1,702	1,985	1,812	1,917	1,541	1,676	**-1%**
Collecting Trimmed/Cut Trees	1,413	1,305	1,992	1,136	1,589	1,370	1,569	**11%**
Maintenance of Garden	803	964	881	667	537	264	436	**-46%**
Garden related	154	344	229	430	181	366	272	**77%**
License	**4,423**	**5,079**	**5,083**	**4,704**	**2,912**	**2,469**	**2,853**	**-35%**
Unauthorised Hawkers Related	3,359	3,126	2,676	2,506	1,603	1,416	1,960	**-42%**
Hawking /Shop license Related	1,064	1,953	2,407	2,198	1,309	1,053	893	**-16%**
Municipal Corporation Delhi	**550**	**805**	**742**	**501**	**270**	**248**	**365**	**-34%**
Maintenance of Municipal Property	268	264	194	206	151	192	289	**8%**
Human Resources Related	282	541	548	295	119	56	76	**-73%**
Nuisance due to stray dogs, monkeys etc.	**19,890**	**22,574**	**21,518**	**19,013**	**11,390**	**9,586**	**11,576**	**-42%**
Pest Control	**11,118**	**5,903**	**4,835**	**3,618**	**6,972**	**3,797**	**2,224**	**-80%**
Mosquito Nuisance & Fogging	11,099	5,856	4,796	3,574	6,923	3,760	2,178	**-80%**
Pest Control Related	19	47	39	44	49	37	46	**142%**
Pollution	**216**	**211**	**251**	**240**	**97**	**62**	**64**	**-70%**
Roads	**2,448**	**3,150**	**3,720**	**3,100**	**1,787**	**1,383**	**1,666**	**-32%**
Potholes/Trenches related	821	1,101	786	561	461	343	439	**-47%**

[45] Please refer to note in Point 1 of Sources of Data

Issue	Numbers of Complaints[46]							% Change from 2016 to 2022
	2016	2017	2018	2019	2020	2021	2022	
Relaying and repairs of roads / New Road	649	605	636	566	305	314	490	**-24%**
Road Related	978	1,444	2,298	1,973	1,021	726	737	**-25%**
Sewerage	**111**	**196**	**35**	**171**	**290**	**200**	**151**	**36%**
Solid Waste Management (SWM)	**24,557**	**27,481**	**28,349**	**23,555**	**28,149**	**16,664**	**16,239**	**-34%**
Garbage not collected	1,068	6,663	7,606	5,571	5,164	2,798	4,117	**285%**
Collection point not att ended properly	7,033	2,686	1,810	860	168	590	1,032	**-85%**
Removal of dead animals	12,025	13,540	14,537	12,664	18,684	10,898	8,255	**-31%**
Removal of Debris	1,545	1,481	1,465	1,377	988	665	833	**-46%**
Solid Waste Management Related	2,886	3,111	2,931	3,083	3,145	1,713	2,002	**-31%**
Storm Water Drainage	**2,248**	**2,093**	**2,101**	**1,547**	**1,053**	**1,086**	**889**	**-60%**
Toilet	**333**	**424**	**410**	**465**	**285**	**195**	**213**	**-36%**
Water Supply	**238**	**234**	**181**	**149**	**115**	**87**	**82**	**-66%**
Others Civic Issue Related	**1,867**	**1,431**	**1,085**	**932**	**705**	**505**	**537**	**-71%**
Total	**1,24,231**	**1,41,052**	**1,49,838**	**1,29,965**	**1,08,895**	**87,249**	**1,01,406**	**-18%**

Inference:

- Maximum numbers of complaints made in MCD are related to buildings (54,085), solid waste management (16,239) and nuisance due to stray dogs and monkeys (11,576) in 2022.
- Overall complaints registered in MCD have decreased by 18% from 2016 to 2022 while 16% complaint increase compared to last year.
- The registered complaints have seen a decline in most of the issues, however, there is an increase in complaints related to Buildings (31%) and sewerage (36%) from 2016 to 2022.
- 32% (5,149) of total (16,239) solid waste management (SWM) complaints were related to garbage not lifted and collection point not attended while 56% (9,088) were related to lifting of dead animals/debris in 2022.
- Complaints related to repairs and reconstruction of drain line has increased by 122% from 2016 to 2022.

[46] Please refer to note in Point 1 of Sources of Data

- **Table 23: Issue-wise Complaints registered in Delhi Jal Board (DJB) from 2016 to 2022**

Complaint Type	2016	2017	2018	2019	2020	2021	2022	Increase % from 2016 to 2022
Drainage	**2,554**	**1,732**	**3,641**	**3,218**	**2,939**	**3,592**	**5,772**	**126%**
Missing / Repairing of Manholes Cover	2,554	1,732	3,582	3,218	2,939	3,592	5,727	**124%**
Water Logging	-	-	59	-	-	-	45	**-**
Road	**1,946**	**1,248**	**1,511**	**1,661**	**1,017**	**989**	**2,774**	**43%**
Pits On Road	1,946	1,248	1,511	1,661	1,017	989	2,774	**43%**
Sewer	**88,114**	**72,892**	**84,648**	**78,826**	**83,357**	**1,02,511**	**1,38,394**	**57%**
Sewer Blockage / Sewer Overflow	88,114	72,892	84,648	78,826	83,347	1,02,480	1,38,328	**57%**
Unauthorised Sewer Connection					10	31	66	**-**
Water Supply	**2,27,206**	**1,65,501**	**1,59,677**	**1,16,429**	**1,40,603**	**1,60,873**	**1,99,168**	**-12%**
Water Contamination	37,648	33,884	36,426	35,679	38,663	40,840	49,492	**31%**
Disconnection of Water Supply	171	122	-	-	-	-	-	**-**
Illegal Boring	29	15	999	-	-	-	-	**-**
Leakages of Water of Pipe Line	15,471	9,890	13,137	13,206	10,712	9,344	13,377	**-14%**
Low Pressure Water	-	-	2,118	2,130	2,846	2,424	3,599	**-**
No Water	54,224	52,100	86,637	51,965	62,191	71,934	94,462	**74%**
Rain Water Harvesting	-	-	88	-	-	-	-	**-**
Short Supply of Water	4,074	4,282	3,740	3,274	3,811	3,637	2,412	**-41%**
Water Connection Commercial or Bulk	63	29	-	-	-	-	-	**-**
Water Tanker Related	1,15,526	65,179	16,532	10,175	22,048	31,741	34,052	**-71%**
Unauthorised Water Connection	-	-	-	-	117	358	689	**-**
Wastage Of Water Supply	-	-	-	-	215	595	1,040	**-**
Other Dept.	-	-	-	-	57[47]	-	-	**-**
Total Complaints	**3,19,820**	**2,41,373**	**2,49,477**	**2,00,134**	**2,27,973**	**2,67,965**	**3,46,063**	**8%**

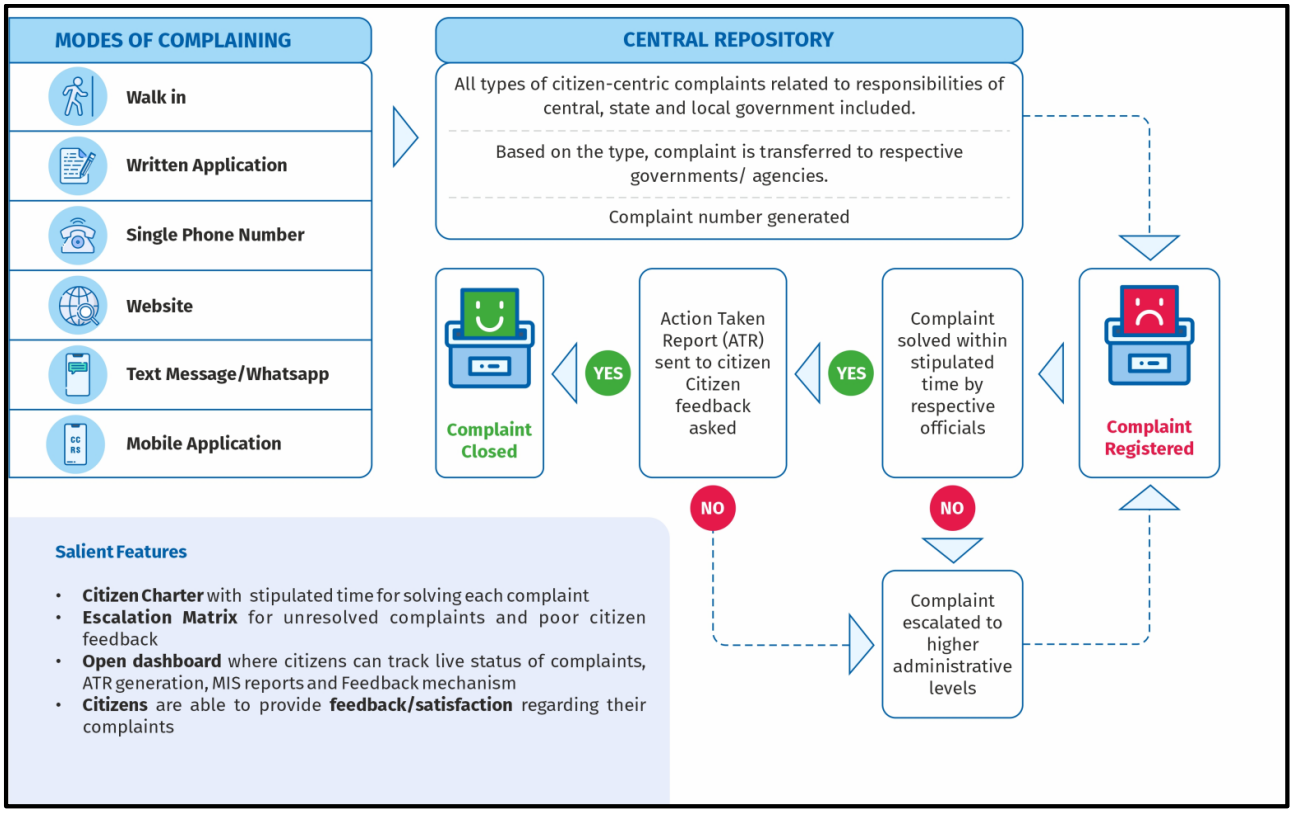
Note: In 2018 the DJB MIS was shifted to private party management, hence there were some changes in complaint sub-categories.

Inference:

- Overall complaints in DJB have increased by 8% from 2016 to 2022. The highest increase is regarding overall drainage – 126% and Sewer – 57% from 2016 to 2022.
- Complaints relating to 'No Water' have increased by 74% from 54,224 in 2016 to 94,462 in 2022. In addition, complaints of 'Water Contamination' have increased by 31% from 2016 to 2022.
- In 2022, 25% of complaints of water were related to water contamination (49,492) while 49% of the total water complaints were related to Shortage of Water (2,412) and No Water Supply (94,462).
- In 2022, 58% (1,99,168) of total DJB complaints were related to water supply and 40% (1,38,394) were registered under Sewer Blockage / Sewer Overflow.

[47]Complaints made for issues with 'Septic Tank, Revenue Related, Others' which is 'registered' as complaints in the DJB CRM by mistake

Ideal Working of Centralised Complaint Registration System for City Governments



D. Recommendations

a. **Unified Complaint Mechanism:** A complaint management system which registers complaints through a single number needs to be adopted. Even if there are multiple modes of registering complaints, all the complaints must be registered in one single MIS. There needs to be a uniform complaint mechanism for different government agencies in Delhi and managed for example from the office of the Lieutenant Governor. Here, all complaints related to central, state and local government are registered and complaints from this central repository are then transferred to the respective agencies/departments.

b. **Citizen Charter:** The complaint mechanism has to be coupled with a citizen charter that details the proper authority that deals with the complaint and the time limit in which the complaint has to be solved. The timely closure of complaints should be done based upon the citizen charter.

c. **Robust MIS:** After a unified complaint mechanism is developed there needs to be proper registering and coding of complaints. The status and details of complaints should be available for viewing by the complainant on a complaint's dashboard. Currently there is no information about how many complaints were solved and in what time period. An action taken report and timely closure of complaints needs to be an integral part of the complaint system to ensure accountability.

d. **Complainant Feedback:** The complaint management system should also have a feedback mechanism and conduct a regular complaint audit through a survey to find out whether complainants are satisfied with the resolution provided by the concerned authority.

Section III: Analysis of Municipal Budget Related to Civic Issues[48]

A. Key Highlights

- Since the year 2019-20, after delimitation of wards in 2022, the MCD has not published the actual figures of its Non Plan budget, making it challenging to monitor the utilisation of funds and assess the proper execution of the budgetary process.
- The budget allocation for the DEMS department has an increase of 17% from the fiscal year 2018-19 to 2023-24.
- The fund utilisation for the Swachh Bharat mission in the Plan budget was remarkably high, reaching 401% for the year 2020-21.
- The budget utilisation for the Water, Sewerage and Sanitation, as well as the Road and Bridges departments in DJB, experienced a small decrease from 99% in 2020-21 to 94% in 2021-22.

B. Municipal Corporation of Delhi's Budget

i) Non Plan Budget: This budget is the Revenue Budget of the MCD. It includes expenditures carried out by MCD with funds generated through their own revenue generating system. The budget heads mentioned in the Non Plan Budget are:

1. **Veterinary Department:** It includes control of stray dogs, Monkeys, cattle, slaughter houses, etc.
2. **Department of Environment Management Services (DEMS):** It includes Composting plants, Refuse/Waste removal, Scavenging, Drains and Sewers, Motor workshop, Conservancy and Sanitation, Community toilet & Public toilet.
3. **Public Works:** Engineering-Civil, Electric, Building Dept., Town Planning, Architect department, etc.
4. **Licensing:** It includes Trade, Factory, Encroachment Removal licenses.
5. **Horticulture Department**: It includes expenditure done for maintain/creation of gardens in the city.
6. **Community Services Department**: It includes expenditure done on managing and maintain Community halls with the city under the jurisdiction of MCD, stipends to the poor (old age pension), specially abled & widows.

ii) Plan Budget: This budget is the Capital Budget of the MCD. It includes funds generated by the MCD for their capital expenditure and also includes funds provided by the State and Central Government under various schemes. The budget heads for the Plan Budget are:

1. **Mechanisation of Conservancy and sanitation services[49]:** it includes Sweeping of Roads and Common Public Spaces, Waste Collection from Dhalaos/ Bins/ Open Sites, Transportation, Processing and Disposal at SLF sites, Maintaining Sanitation in Public Conveniences like Toilets, Urinal Blocks, Dustbin/Dhalaos, Open Sites etc., De-Silting of Drains less than 4ft. Depth/ width under the Jurisdiction of MCD.
2. **Environmental Improvement through Horticulture Development:** This includes but not limited to expenses made for various horticulture activities, like gardens, public green spaces, various trees and plants planted around the city for environmental schemes.
3. **Swachh Bharat Mission:** Expenses made to construct/establish various SBM provisions in the city.
4. **Roads:** Expenses carried out for maintaining and construction of roads under the MCD.

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

[49] Excel+DMCs.pdf (delhi.gov.in)

C. Department-wise MCD & State Budgetary Allocation:

i) MCD: Non-Plan Budget

- **Table 24: Non Plan Budgetary Allocation of Departments Related to Civic Issues for FY 2018-19 to 2023-24 (in Lakhs)**

Year	Type	Total Veterinary Department	Department of Environment Management Services (Dems)	Total Public Works	Total Licensing	Horticulture Department	Community Services Department	Total
2018-19	BE	16,260	3,80,046	2,11,100	1,062	63,431	19,560	6,91,457
	RE	17,611	4,13,378	2,01,791	1,163	56,347	19,108	7,09,399
	Actuals	4,595	2,87,219	1,28,488	743	37,691	5,891	4,64,628
	% Utilised	**26%**	**69%**	**64%**	**64%**	**67%**	**31%**	**65%**
2019-20	BE	16,305	4,19,122	2,00,069	1,343	57,800	20,974	7,15,613
	RE	9,879	4,27,635	1,63,654	1,023	47,137	18,748	6,68,077
	Actuals	4,889	3,05,833	1,36,676	592	37,178	5,806	4,90,973
	% Utilised	**49%**	**72%**	**84%**	**58%**	**79%**	**31%**	**73%**
2020-21	BE	13,506	4,41,869	1,93,256	1,103	52,877	26,276	7,28,885
	RE	7,416	3,42,472	1,67,230	981	43,366	18,026	5,79,491
2021-22	BE	11,131	3,81,560	1,64,684	977	46,958	21,067	6,26,378
2022-23	BE	9,583	4,15,328	1,73,215	1,176	52,148	11,989	6,63,438
2023-24	BE	8,619	4,46,585	1,82,028	1,131	54,580	7,385	7,00,329

ii) MCD: Plan Budget

- **Table 25: Plan Budgetary Allocation of Departments Related to Civic Issues for FY 2018-19 to 2021-22 (in Lakhs)**

MCD	2018-19			2019-20			2020-21			2021-22
	BE	Actuals	Utilisation	BE	Actuals	Utilisation	BE	Actuals	Utilisation	BE
Strengthening & Mechanisation of Conservancy & Sanitation (XLIID)	32,313	12,955	**40%**	58,240	45,799	**79%**	66,160	65,400	**99%**	51,200
Environmental Improvement through Horticulture Dev. (XLVIIIK)*	236	95	**40%**	200	67	**33%**	0	0	**0**	0
Swachh Bharat mission*	10,404	4,044	**39%**	8,658	3,117	**36%**	1,001	4,010	**401%**	0
Road	4,314	4,148	**96%**	11,151	796	**7%**	3,849	443	**12%**	0
Total	**47,268**	**21,242**	**45%**	**78,249**	**49,779**	**64%**	**71,009**	**69,853**	**98%**	**51,200**

Note: (*) '0' value given against this Budget head in particular year

Inference:

- Citizens' complaints related to "Nuisance due to stray dogs, monkeys etc." are consistently amongst the highest in MCD, yet the veterinary department in charge of tackling this issue has consistently underutilised funds in 2019-20.
- The has always been a reduction in the veterinary department's Revised Budget Estimates compared to Budget Estimates since 2017-18. Moreover, the budget estimates drop down by 47% from 2018-19 to 2023-24.

iii) State Budget

- **Table 26: State Budgetary Allocation of Departments Related to Civic Issues (Water, Sewerage and Sanitation & Road and Bridges) for FY 2018-19 to 2023-24 (in Lakhs)**

Sub Major Head		Water Supply		Sewerage and Sanitation		Roads & Bridges		Total
Type		Capital Exp	Revenue Exp	Capital Exp	Revenue Exp	Capital Exp	Revenue Exp	
2018-19	BE	74,050	108,000	57,400	38,300	159,100	70,500	**507,350**
	RE	78,313	103,350	60,836	35,252	109,600	60,125	**447,475**
	Actuals	78,313	103,100	60,835	31,850	92,385	57,931	**424,414**
	% Utilised	**100%**	**100%**	**100%**	**90%**	**84%**	**96%**	**95%**
2019-20	BE	96,840	95,875	52,000	39,310	189,500	61,005	**534,530**
	RE	83,265	97,175	47,950	44,635	88,600	60,616	**422,241**
	Actuals	83,265	96,900	47,950	44,635	78,306	58,910	**409,967**
	% Utilised	**100%**	**100%**	**100%**	**100%**	**88%**	**97%**	**97%**
2020-21	BE	103,540	105,425	134,900	86,560	164,800	43,200	**638,425**
	RE	74,043	117,597	149,900	71,560	98,133	46,067	**557,300**
	Actuals	74,043	117,597	149,900	71,560	93,739	44,950	**551,790**
	% Utilised	**100%**	**100%**	**100%**	**100%**	**96%**	**98%**	**99%**
2021-22	BE	74,542	110,850	89,808	52,200	201,820	53,680	**582,900**
	RE	37,472	106,300	65,302	18,326	142,510	67,613	**437,523**
	Actuals	37,472	99,728	65,302	13,925	127,420	65,815	**409,662**
	% Utilised	**100%**	**94%**	**100%**	**76%**	**89%**	**97%**	**94%**
2022-23	BE	186,336	132,300	129,100	223,264	197,600	52,500	**921,100**
	RE	81,118	108,172	101,573	89,137	163,300	66,100	**609,400**
2023-24	BE	90,100	112,361	167,600	174,139	301,700	10,900	**856,800**

Capital Exp: Capital Expenditure; Revenue Exp: Revenue Expenditure

Inference:

- The total funds in the State Budget allocations have been utilised well above 90% since 2018-19.
- The water supply department had the maximum utilisation (94%) in 2021-22, still in 2022, 1,99,166 citizen complaints were registered on water supply.
- In 2021-22, 95% sewerage budget was utilised yet in 2022, 1,38,394 complaints were registered for sewer related issues.

Section IV: Performance of Wards Committees

A. Key Highlights

Overall Performance:

- **In 2022** (January 2022 to March 2022), **231 issues raised by councillors in ward committees.**
- **53 issues raised on other civic responsibilities** (such as on environment, crime, corporation management related, building, estate etc.). These issues raised were more than the issues on SWM (16), water (10) and drainage (4) put together.
- **92 issues raised on naming and renaming** of roads/monuments/etc., reflecting a need for more deliberation on core civic services.
- The second most issues raised by councillors in ward committees were related **to roads (33).**

B. Performance of Ward Committees

The 74th Constitutional Amendment Act (CAA), 1992 provides for the formation of ward(s) committees in municipalities with a population of more than three lakhs, intending to decentralise governance and strengthen grassroots democracy.

In 2020, Praja's pan-India study of 29 cities across 28 States and the National Capital Territory (NCT) of Delhi[50] shows that, as per the 74th Constitution Amendment Act, 1992 there is a provision for formation of ward(s) committee in the Municipal Corporation Act of all States except Meghalaya, Nagaland and Sikkim. But ward(s) committees are constituted only in 12 cities namely Agartala, Ahmedabad, Aizawl, Bhubaneswar, Bhopal, Delhi, Dharamshala, Imphal, Ranchi, Kochi, Mumbai, and Udaipur. Of these, ward(s) committees are functional in only 9 cities namely Ahmedabad, Aizawl, Bhubaneswar (functional until last term i.e., until January 2019), Agartala, Delhi, Dharamshala, Imphal, Kochi and Mumbai. Ward committees in Delhi, Mumbai, Panaji, Coimbatore, Vijayawada and Raipur are formed at zonal level while in other cities, ward committees are at councillor ward constituency level.

There are 12 Wards Committees in Delhi at the administrative zonal level, consisting of all the councillors within the administrative jurisdiction of the respective zones. Wards 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 roads, drainage, SWM etc. including budgetary suggestions can be taken up and redressed effectively in this forum.

Issues raised and debated in the wards committee show how the councillors have performed in bringing up and solving civic issues. There are various devices used in the ward committee including Supplementary Question, Discussion on a Matter of Public Importance, Resolutions under provision to Sec 74, Point of Order, Questions, etc.

[50] https://praja.org/praja_docs/praja_downloads/UGI2020.pdf

a. Ward Committee Performance of Councillors[51]

- **Table 27: Attendance and Issues raised by Councillors in Ward Committees from Jan 2017 to Mar 2022**

Years	Attendance (%)	Number of issues
2017	74%	7704
2018	68%	12,336
2019	61%	7,904
2020	57%	6,096
2021	56%	7,606
Jan'2022 to Mar'2022	51%	1,656

Inference:

- Councillor attendance has drastically fallen in the last five years from 74% in 2017 to 51% in 2022.

b. Performance of MLAs in the State Assembly sessions in 2020

- **Table 28: Issues raised by MLAs (under respective MCDs) on Civic issues in State Assembly Sessions from 2020 to 2022[52]**

Years	Number of issues on civic issues	Total Issues raised
2020	37	57
2021	420	838
2022	390	873

Inferences:

- In the overall performances by MLAs a total of 390 civic related issues were raised.

[51] Councillor issues raised have been considered from April 2017 to March 2022, since Corporation elections were held in April 2017

[52] Delhi has 70 MLAs, however, only 60 have been counted as 7 MLAs are Ministers, 2 Speaker/Deputy speaker, 1 is a Delhi Cantonment Board MLA.

- **Table 29: Civic Issue wise Deliberations by Elected Representatives in Assembly Session in 2020, 2021, 2022 and Ward Committees from January 2017 to March 2022**

Service Provide By	Issue	MLA			Councillor					
		2020	2021	2022	2017	2018	2019	2020	2021	Jan-22 to Mar-22
MCD	**Buildings**	**1**	**69**	**59**	**385**	**805**	**503**	**384**	**484**	**81**
	Unauthorised Construction/Development	0	22	13	116	295	246	199	236	53
	Dilapidated Condition of Building	0	0	0	2	22	18	14	6	0
	Building related	1	47	46	267	488	239	171	242	28
	Drainage	**0**	**6**	**8**	**148**	**188**	**134**	**80**	**145**	**20**
	Drainage chokes, blockages & Cleaning and	0	2	0	29	42	33	31	66	3
	Repairs and reconstruction of drain line Related	0	4	8	119	146	101	49	79	17
	Fire in house/building	**0**	**5**	**2**	**0**	**1**	**3**	**3**	**0**	**0**
	License	**3**	**28**	**31**	**1,117**	**1,696**	**1,235**	**762**	**880**	**269**
	Unauthorised Hawkers Related	0	0	0	272	485	201	157	231	63
	Hawking /Shop license Related	3	28	31	845	1211	1034	605	649	206
	Municipal Corporation Delhi (MCD) Related	**10**	**43**	**30**	**1,125**	**1,761**	**1,028**	**1,016**	**1,040**	**254**
	Maintenance of Municipal Property	9	27	24	722	979	679	633	727	176
	Human Resources Related	1	16	26	403	782	349	383	313	87
	Nuisance due to stray dogs, monkeys etc.	**0**	**2**	**3**	**182**	**330**	**293**	**232**	**281**	**101**
	Pest Control	**0**	**0**	**0**	**65**	**78**	**70**	**45**	**109**	**8**
	Mosquito Nuisance & Fogging	0	0	0	57	60	52	40	80	4
	Pest Control Related	0	0	0	8	18	18	5	29	4
	Solid Waste Management (SWM)	**3**	**7**	**8**	**1,096**	**2,011**	**1,621**	**1,052**	**1,480**	**334**
	Garbage not collected	0	0	0	34	157	85	50	96	19
	Collection point not attended properly	0	0	0	35	98	44	49	67	3
	Removal of dead animals	0	0	0	3	1	8	20	10	1
	Removal of Debris	0	0	0	25	63	85	43	50	11
	Solid Waste Management Related	3	7	8	999	1692	1399	890	1,257	300
SM	**Toilet**	**0**	**9**	**7**	**108**	**275**	**186**	**136**	**169**	**40**
SMC	**Footpaths**	**0**	**4**	**3**	**3**	**3**	**6**	**9**	**6**	**0**
	Garden	**1**	**12**	**11**	**722**	**802**	**493**	**528**	**570**	**175**
	Tree cutting/Trimming	1	2	2	34	70	33	67	88	17
	Collecting Trimmed/Cut Trees	0	0	0	7	6	1	5	9	0
	Maintenance of Garden	0	2	1	99	292	223	161	250	61
	Garden related	0	8	8	582	434	236	295	223	97
	Roads	**6**	**96**	**83**	**795**	**1,439**	**877**	**627**	**810**	**150**
	Potholes/Trenches related	0	9	1	34	61	87	39	77	28
	Relaying and repairs of roads/New road	4	21	15	32	70	76	92	87	26
	Road Related	2	66	67	729	1308	714	496	646	96
	Storm Water Drainage	**0**	**42**	**26**	**20**	**251**	**147**	**131**	**206**	**48**
S	**Pollution**	**0**	**14**	**7**	**15**	**15**	**28**	**10**	**8**	**0**
	Sewerage	**0**	**7**	**9**	**24**	**64**	**3**	**28**	**8**	**1**
	Water Supply	**6**	**58**	**55**	**29**	**53**	**46**	**53**	**42**	**8**
Others Civic Issue Related		**7**	**18**	**28**	**1,870**	**2565**	**1231**	**1000**	**1,368**	**158**
Total		**37**	**420**	**390**	**7,704**	**12,337**	**7,904**	**6,096**	**7,606**	**1,656**

Note: MCD- Municipal Corporation; S-State; SMC-State, MCD and Central; SM- State and MCD.

Inference:

- Most of the Civic issues raised by councillors in ward committees were on Solid waste management (7,594), MCD related issues (6,232) and License (5,959). Of this only SWM is a major issue when compared to citizen complaints from 2017 to 2022 (1,40,437).
- In 2022, 55 issues were raised by MLAs on water supply issues and complaints registered under this issue was 1,99,205 and only 9 issues were raised on Sewerage related issues and complaints registered for the same were as high as 1,38,545.
- While 1,419 questions were raised for nuisance of stray animals related issues in the ward committees with 95,657 complaints registered for the period 2017 to 2022.
- 58% of issues raised by councillors were for those that come only under MCD duties from 2017 to 2022, while the rest were a mix of issues falling under the jurisdiction of the central, state and local governments.

Section V: Annexures

Annexure I: RTI Replies received with regards to Solid Waste Management

Annexure A
[See rule 3]
Format for obtaining information under the Right to Information Act 2005

To,
Public Information officer
Asst. Commissioner, Municipal Corporation of Delhi
Dr. S.P.M. Civic Centre, Minto Rd, SKD Bahi,
Press Enclave, Ajmeri Gate, New Delhi - 110002

1) Full Name of the Applicant: **POOJA VERMA**
2) Address: **Praja Foundation, N-27, Mezzanine Floor, Munshi Lal Building, N-block Connaught Place, Middle Circle, New Delhi - 110001**
3) Particular of information: -
(I.) Subject matter of information: **Statistical Information about Municipal Solid Waste in Municipal Corporation of Delhi (MCD) Jurisdiction.**
(II.) Period to which the information relates: **1st January 2022 to 31st December 2022.**
(III.) Description of the information required:

a) **Please provide statistical information zone wise and month wise of total weight of waste generated and waste collected by MCD. Also please share month wise Solid Waste Management Information Report (as per attached) of Municipal Corporation of Delhi (MCD) from 1st Jan 2022 to 31st December 2022.**

b) **Please provide statistical information zone wise and month wise total weight of all types of waste segregated (Dry, Wet, Hazardous, E-Waste, C & D Waste, Bio Medical, Clinical waste) by MCD from 1st January 2022 to 31st December 2022.**

c) **Please provide statistical information zone wise and month wise of total number of colonies/societies declared as 'Zero Waste' and how many colonies/societies received the 5% incentive (as per the Sahbhagita Scheme).**

d) **Please provide zone wise number of 'Decentralization Waste Processing Facilities' (operational/non-operational) as of December 2022.**

e) **Please provide statistical information zone wise, month wise and type wise (wet or dry waste) total weight of waste sent to each of these 'Decentralization Waste Processing Facilities' from 1st January 2022 to 31st December 2022.**

4) Whether the information is required by post or in person: **In person**
5) In case by post (Ordinary, Registered or Speed): **N.A.**
6) Whether the applicant is below poverty line (if yes, attach the photocopy of the proof thereof): **No**
7) Purpose of information is required: **In public interest**

Signature of the applicant
Pooja Verma(9654098994 / 9654366222)
Place: **Delhi**
E-mail-pooja@praja.org
Date: 06/04/2023
Court fee Stamp of Rs. 10/- affixed 57F 508485

Kindly Note: 1. Due to COVID-19 pandemic I request to kindly provide me the information in soft copy. Kindly Email the information on pooja@praja.org or what's app on 9654098994.
In case of speed post, I request you to call me on 9654098994 and I will collect the requisite informati person.

दिल्ली नगर निगम
प्रशासनिक अधिकारी (मु0) का कार्यालय
दूसरा तल, डॉ0 एस0पी0एम0 सिविक सेण्टर
जवाहर लाल नेहरु मार्ग, नई दिल्ली–110002
दूरभाष नं0–011–23225222

क्र0सं0 183 / प्र0अ0(मु0) / दि0न0नि0 / 2023 दिनांक 13/4 2023

सेवा में,

PIO | DEMS | HQ.

विषय :– सूचना का अधिकार अधिनियम, 2005

श्री / श्रीमती Pooja Verma से आवेदन प्राप्त हुआ है / का आवेदन .... से हस्तान्तरित हो कर प्राप्त हुआ है।

1. अधोहस्ताक्षरी ने इस कार्यालय की डायरी संख्या 56 दिनांक 6/4/23 को आर0टी0आई आवेदन / अपील की मूल / फोटो कापी प्राप्त की है। जिसके साथ रु. 10/- नकद / आई0पी0ओ0 / चैक संलग्न है।

2. यह आर0 टी0 आई0 आवेदक को अपेक्षित सूचना देने के लिए आपको अग्रेषित की जाती है यदि यह आपके क्षेत्राधिकार के अन्तर्गत नही आती है तो इसे अगले जन सूचना अधिकारी को भेज दिया जाये जिससे सीधे ही यह विषय अधिक सम्बंधित है एवं इसके हस्तांन्तरण की सूचना आवेदक को दी जाये।

संलग्न : –

1. उपरोक्तानुसार
2. G8 रसीद संख्या 387209. दिनांक 12/4/23
3. अतिरिक्त आई0पी0ओ0 संख्या. .... दिनांक

(signature) 12/4/23
प्रशासनिक अधिकारी (मु0)
O/C

प्रतिलिपि
श्री / श्रीमती Pooja Verma, Foundation
[illegible] Mezzanine Floor, Municipal Building
[illegible] Connaught Place, Middle Circle
New Delhi - 110001

SOUTH DELHI MUNICIPAL CORPORATION
DEPARTMENT OF ENVIRONMENT MANAGEMENT SERVICES (HQ)
Room No. 01, SDMC Office Complex, Dr. B.R. AMBEDKAR STADIUM, NEW DELHI-110002
E Mail Address. acdemssdmc@gmail.com

No. 89 /PIO/AO/DEMS/HQ/MCD/2023 Dated 24/4/2023

To,

1. PIO/EE/SLF/OKHALA
2. PIO/EE/SLF/GAZIPUR
3. PIO/EE/SLF/BHALASWA

SUB: - Transfer of RTI/Appeal Application Ref. /ID. No. ----182---------Received from AO/HQ/MCD---------- RTI application of Sh./Smt./Ms. Pooja Verma-Dated 13/4/2023 under section (5) of RTI Act, 2005 sub-para (3) para 6/para 5(5).

1. The RTI application had received in this office on 18/4/2023 under RTI Act, 2005.
2. The requisite information does not fall within my jurisdiction.
3. The RTI application/ Appeal original /part of the application is therefore transferred to you under section 5 of RTI Act, 2005 sub-para (3) para 6/para 5(5) for further necessary action for appropriate reply to Q. No. _____.
4. In case it does not fall under your jurisdiction it may please be further transferred to the Public Authority to which the subject matter is more closely connected directly under intimation to the applicant.
5. You are also requested to send information **directly** to the applicant under intimation to the undersigned and quoted the ID of this department.
6. The applicant has submitted required fee Rs. 10 /- under RTI Act vide G-8\PO

No..... Dated.....

Encl. Complete copy of application.

24/4/23

PIO/AO/DEMS (HQ)
MCD

Copy to RTI Application for information

Sh./Smt./Ms. Pooja Verma
Address: - N-27 Mezzanine Floor
Municipal Building N. Block Connaught Place
Mobile: Middle Circle New Delhi-110001
M.No. 9654098994

MUNICIPAL CORPORATION OF DELHI
OFFICE OF THE PIO/EXECUTIVE ENGINEER (SLF) OKHLA
ROOM NO. 06, GATE NO. 04, AMBEDKAR STADIUM,
DELHI GATE, NEW DELHI – 110002

Sub: Transfer of RTI application Ref / I.D. No. 183 dated 13.04.2023 under RTI Act, 2005, received in this office vide dairy no. EE/SLF/Okhla/MCD/2023-24/D-81 dated 24.04.2023 on transfer from PIO/AO/DEMS/HQ, MCD bearing no. 90/PIO/AO/DEMS/HQ/MCD/2023 dated 24.04.2023.

Applicant: Ms. Pooja Verma, Praja Foundation, N-27, Mezzanine Floor, Munshi Lal Building, N-block, Connaught Place, Middle Circle, New Delhi-110001.

The reply of the RTI application under RTI Act 2005 is as under:-

Point no. a to d : The information sought by the applicant closely pertains to PIO/ SE (DEMS) HQ, MCD. As such, the RTI application is being transferred to PIO/ SE (DEMS) HQ, MCD for providing information under RTI Act, 2005.

28/4/23
AE-I (SLF) Okhla

28.4.2023
JE (SLF) Okhla

NORTH DELHI MUNICIPAL CORPORATION
OFFICE OF THE EXECUTIVE ENGINEER (SLF) BHALSWA
3rd FLOOR, SUB ZONAL BUILDING, SEC-17
DELHI-110085

Dated: 18/05/2023

No. EE/SLF/B/MCD/2023/ 32

Sub:- Reply information of RTI application ID No. 187/PIO/AO/HQ/MCD dated 18.04.2023 received 114/EE/SLF/B dt. 28.04.2023 from Sh. Pooja Verma under RTI Act 2005 is as under.

S. No.	Questions	Reply
a.	Please provide month wise and zone wise total weight of waste received at all MCD's Decentralized Waste Management Facilities. And if you maintain a report for each of the Decentralized Waste Management Facilities, then pleas provide the month wise reports from 1st Jan-2022 to 31st Dec-2022	As per record maintained in this office the daily MSW received from 03 zones (namely Narela Zone, Karol Bagh Zone and City SP Zone) is approximately 2200 per MT.
b.	Please provide month wise and zone wise waste information of total weight of all type of waste segregated at each of the Decentralized Waste Management Facilitates" from 1st Jan-2022 to 31st Dec-2022.	Such type of record is not available in this office.
c.	Please provide month wise and zone wise total weight of wet waste sent for composting and bio-methanation. Also total weight of compost generated sold and revenue generated at each of the 'Decentralized Waste Management Facilities' from 1st Jan-22 to 31st Dec-22.	Such type of record is not available in this office.
d.	Please provide statistical information on number of Decentralized Waste Management Facilities, that have a bio-methanation plant present and month wise volume of bio-methane gas generated at each of these "Facilities from 1st Jan-22 to 31st Dec-22.	Such type of record is not available in this office.

JE (SLF) Bhalswa

AE (SLF) Bhalswa

EE (SLF) Bhalswa 17/05/23

Municipal Corporation of Delhi

Office of the Executive Engineer (SLF) Ghazipur
Adjacent to MC Primary School, Lalita Park
Near Metro Station Laxmi Nagar, Delhi-110092

स्वच्छ भारत
एक कदम स्वच्छता की ओर

No. EE(SLF)/G/MCD/2023-24/D- 55 Dated: 04-05-2023

Sub:- Reply of transfered application filed by Ms. Pooja Verma, N-27, Mezzanine Floor, Munshi Lal Building, N-Block Connaught Place Middle Circle, New Delhi-110001 under RTI Act. 2005.

Ref: 90/PIO/AO/DEMS/HQ/MCD/2023 dated 24.04.2023 (ID No. 183)

The Point wise reply of the above said online RTI application is as under:-

S.No.	Reply
1	The sought information pertain to EE(EMS) SNZ & SSZ. Therefore the RTI application is being transfered to EE(EMS) SNZ & SSZ.

As per Central Right to information Act-2005 under Rule-19, First Appellate Authority is "Superintending Engineer (SLF) Ghazipur, 19th Level Dr. SPM Civic Centre, JLN Marg, New Delhi-110001.

4/5/23
(MULA SINGH)
PIO/EE (SLF) Ghazipur

Ms. Pooja Verma
N-27, Mezzanine Floor, Munshi Lal Building,
N-Block Connaught Place Middle Circle, New Delhi- 110001

Annexures II: Note on Functioning of Civic Services provided by Central, State and Local Governments in Delhi

Agencies responsible for Civic Services: The Delhi Municipal Corporation is not the sole authority in carrying out all Civic duties. In fact, there are certain duties which don't fall within the ambit of the Municipal Corporation, although they should be under the purview of the civic body. Water, Sewage, and Electricity, for example, are the responsibility of the State. Similarly, the issues relating to the Big Roads/Highways are the responsibility of the Central/State Government, while the issue of small roads only comes under the Municipal Corporation. Similarly, Primary Education and Public Health & Primary Health come under the Jurisdiction of the Municipal Corporation and Secondary Education and rest come under the State. The following list mentions which services are provided by different agencies:

Departments/Services and their respective providers:

SERVICE	AUTHORITY		
	STATE (NCT of Delhi)	MCD	CENTRE
DTC (Delhi Transport Corporation)	√		
Agriculture, Animal Husbandry and Fisheries	√		
Pollution	√		
Water supply	√		
Sewage	√		
Industry	√		
Electricity	√		
Ration Shops	√		
Forestry	√		
Footpaths	√	√	√
Garden	√	√	√
Storm Water Drainage	√	√	√
Education	√	√	√
Slum Rehabilitation Authority (SRA) Related	√	√	√
Disaster Management	√	√	√
Hospitals/Dispensaries [Health Care]	√	√	√
Drainage		√	
License		√	
Nuisance due to stray dogs, monkeys, etc.		√	
Pest control		√	
Mosquito nuisance & Fogging		√	
Solid Waste Management		√	
Naming/Renaming of Roads/Chowks/ Monuments/ Buildings/ Stations		√	
Slaughter House related		√	
Town Planning		√	
Environment Management Services		√	
Shop and Establishment		√	
Public Health		√	
Policing			√

Annexure III: Complaint Redressal Mechanism in the Three Municipal Corporations of Delhi (MCD) and Delhi Jal Board (DJB)

As Delhi has multiple agencies providing various services, it is difficult for citizens to know which service is provided by which agency. Also, there are certain services like road where overlap of services takes place. In such cases, it is extremely difficult for citizens to understand which agency to approach for which service. Hence, Delhi should have only one gateway for citizens to submit requests or complaints related to any civic service.

Why is a Grievance or Complaint Redressal System necessary?

Grievance or Complaint Redressal Mechanism is a feature, which has to be provided by all forms of government or administration to ensure accountability. The state acts as the largest agency or service provider to its citizens through bureaucratic institutions or agencies; hence, the need for such redressal mechanisms is all the more important to guarantee efficiency. Corrective measures should be taken while redressing the grievances and actions initiated to remove inefficiencies in the delivery of the services and/or against officials for their dereliction of duty.

MCD's Grievance Redressal Mechanism:

In order to lodge a complaint one can:

- Walk into the MCD office to lodge the complaint
- Write a letter
- Phone the MCD office (To zones and Central Control Room)

Zone	Phone Number
City & Sadar Paharganj	011-23913775/23913773
Civil Lines	011-23942700/25448062
Karol Bagh	011-25812700/25754339/41
Rural Narela	011-27783261/01127783783/85
Rohini	011-27042700/011-27051132/33
Keshav Puram	27183146/27183149/27183147
Central zone	011-29812228
Najafgarh	011-28013283
South zone	011-26522700/011-26517191/011-26517188
West zone	011-25191014/16/011-25422700
Shahdara North	011-22822700/011-22821484
Shahdara South	011-22303700/011-22300171/75

- **File an online complaint on the MCD website, CPGRAMS, Listening post of LG:**
  - E Mail: some complaints are directly sent to the commissioners through email: commissioner@mcd.org.in
  - CPGRAMS portal: http://pgportal.gov.in/GrievanceNew.aspx
  - LG portal: http://listeningpostdelhilg.in/AuPages/login.aspx
  - PGMS:
  - PGCGNCTD portal: http://delhi.gov.in/wps/wcm/connect/pgc1/public+grievances+commission/home

Grievance Redressal Mechanism of Delhi Jal Board:

- For registering a grievance related to wrong reading, billing, and arrears, The Customer Care Centre number 1916 (Toll Free) used to be in service for 24X7. It requires the KNO (Connection no.) & Mobile no. while registering a complaint. Consumer can also register grievance directly through Revenue Management System portal on www.djb.gov.in.
- A grievance may be lodged with concerned Zonal Revenue Officer (ZRO). In case it is not resolved within 10 days it may be taken up to the concerned Deputy (Dy.) Director/ Joint (Jt.) Director.
- If a consumer is not satisfied, he may contact the DJB Headquarters by referring earlier communications.

Annexure IV: List of AQI stations as per National Air Quality Index Report of the Central Pollution Control Board

Station Name	Zone
Dr.Karni Singh Shooting Range, Delhi - DPCC	Central
CRRI Mathura Road, Delhi - IMD	Central
Jawaharlal Nehru Stadium, Delhi - DPCC	Central
Nehru Nagar, Delhi - DPCC	Central
Okhla Phase-2, Delhi - DPCC	Central
Lodhi Road, Delhi - IMD	Central
Major Dhyan Chand National Stadium, Delhi - DPCC	City and Sadar Paharganj
ITO, Delhi - CPCB	City and Sadar Paharganj
Chandni Chowk - IITM	City and Sadar Paharganj
North Campus, DU, Delhi - IMD	Civil Line
Jahangirpuri, Delhi - DPCC	Civil Line
Shadipur, Delhi - CPCB	Karol Bagh
Mandir Marg, Delhi - DPCC	Karol Bagh
Pusa, Delhi - DPCC	Karol Bagh
Pusa, Delhi - IMD	Karol Bagh
IGI Airport (T3), Delhi - IMD	Najafgarh
Dwarka-Sector 8, Delhi - DPCC	Najafgarh
Najafgarh, Delhi - DPCC	Najafgarh
NSIT Dwarka, Delhi - CPCB	Najafgarh
Mundka, Delhi - DPCC	Najafgarh
Bawana, Delhi - DPCC	Narela
Alipur, Delhi - DPCC	Narela
Narela, Delhi - DPCC	Narela
Wazirpur, Delhi - DPCC	Rohini
Ashok Vihar, Delhi - DPCC	Rohini
DTU, Delhi - CPCB	Rohini
Rohini, Delhi - DPCC	Rohini
Patparganj, Delhi - DPCC	Shahadra South
Anand Vihar, Delhi - DPCC	Shahadra South
IHBAS, Dilshad Garden, Delhi - CPCB	Shahdara North
Sonia Vihar, Delhi - DPCC	Shahdara North
Vivek Vihar, Delhi - DPCC	Shahdara North
Aya Nagar, Delhi - IMD	South
Sirifort, Delhi - CPCB	South
R K Puram, Delhi - DPCC	South
Sri Aurobindo Marg, Delhi - DPCC	South
Punjabi Bagh, Delhi - DPCC	West
Lodhi Road, IITM	New Delhi