

Chapter II: Planning and strategy for solid waste management

This chapter deals with the planning for SWM, availability of human resources, Information, Education & Communication and Public Awareness (IEC&PA) for behavioural changes among citizens for managing their waste and training of human resources deployed for SWM activities.

Brief snapshot of the Chapter:

- Due to lack of SWM plan in 93 *per cent* test-checked ULBs, there was absence of systematic approach for solid waste management from generation to disposal.
- Only 27 *per cent* test-checked ULBs framed bye-laws, even these bye-laws framed lacked uniformity and did not cover all the issues outlined in SWM Rules, 2016. Besides, ULBs were unable to levy user charges for waste management impacting their revenue.
- The sanctioned posts remained vacant, particularly at supervisory level ranging from 16 *per cent* (Sanitary & Food Inspector) to 50 *per cent* (Chief Sanitary Inspector).
- IEC&PA activities witnessed less utilisation of funds as more than 50 *per cent* IEC&PA fund remained unutilised in one third test-checked ULBs. Further, there was diversion of fund from IEC&PA component of SBM (Urban) Scheme.
- Targeted training of human resources for SWM was not organised due to inadequate funding.

2.1 Entities involved in SWM

The framework for administration and management of SWM in India is broadly divided into three tiers - Central, State and Urban Local Bodies (ULBs). Other stakeholders that play a crucial role are households, businesses, industries, informal sector, non-governmental organizations (NGOs), community-based organizations (CBOs), self-help groups (SHGs), *etc.* Involvement of all these stakeholders is necessary at several stages of SWM.

Under SWM Rules, 2016, the Ministry of Environment, Forest and Climate Change, Government of India is responsible for overall monitoring of implementation of these rules in the country. Further, Ministry of Urban Development is responsible to take periodic review of the measures taken by the States and local bodies for improving SWM services. Central Pollution Control Board (CPCB) is responsible to co-ordinate with the State Pollution Control Board (SPCB) and prepare an annual report on implementation of these rules. The list of major roles and responsibilities of State Government and ULBs in SWM is detailed in **Table 2.1**.

Table 2.1: Roles and responsibilities of State Government and ULBs in SWM

Authority/ Responsible Institution	Significant Roles and responsibilities in SWM
Urban Development Department (UDD)	<ul style="list-style-type: none"> • prepare a state policy and solid waste management strategy in consultation with stakeholders. State policies and strategies should acknowledge the primary role played by the informal sector of waste pickers, lay emphasis on waste reduction, reuse, recycling, recovery and optimum utilisation of various components of solid waste to ensure minimisation of waste going to the landfill and minimise impact of solid waste on human health and environment; • ensure identification and allocation of suitable land to the local bodies; • arrange for capacity building of local bodies in managing solid waste; • notify buffer zone for the solid waste processing and disposal facilities of more than five tons per day; • start a scheme on registration of waste pickers and waste dealers; • ensure implementation of provisions of SWM Rules by all local authorities.
State Pollution Control Board	<ul style="list-style-type: none"> • responsible for enforcement of SWM Rules through local bodies; • monitor environmental standards; • may give direction to local bodies for safe handling and disposal of domestic hazardous waste;
District Magistrate	<ul style="list-style-type: none"> • facilitate identification and allocation of suitable land for setting up solid waste processing and disposal facilities to local authorities; • review the performance of local bodies, at least once in a quarter on waste segregation, processing, treatment and disposal and take corrective measures ;
Local Authorities (ULBs)	<ul style="list-style-type: none"> • primarily responsible for provision of municipal SWM services; • prepare SWM plan, arrange door-to-door collection (DTDC) services, recognise waste pickers or informal sector waste collectors, frame bye-laws, set up material recovery facility, establish waste deposition centres, impart training to waste pickers and waste collectors, <i>etc.</i>

(Source: Paragraph 1.4.1.4 of MSWM Manual 2016)

2.2 State policy and strategy of SWM

Rule 11 (a) of the SWM Rules, 2016 stipulates that the Secretary-in-charge of the Urban Development Department shall prepare a State policy and SWM strategy for the State in consultation with stakeholders including representatives of waste pickers, self-help groups and similar groups working in the field of waste management. This should be done within a period not later than one year from the date of notification of the SWM Rules, 2016.

Audit observed that the State policy, which should have been prepared within one year from the date of notification (April 2016) of the SWM Rules, 2016, was actually prepared in June 2018, *i.e.*, with a delay of 14 months. However, the State policy could not be effectively put into

operation leading to ineffective implementation of various waste management activities, such as segregation at source, recycling, disposal, decentralised waste management and waste to composting/energy. These issues are discussed in the succeeding Chapters of this report.

The State Government stated (June 2023) that after the promulgation of SWM Rules in 2016, the same were immediately adopted in the State and instructions were issued to all the ULBs to immediately initiate action on various SWM matters. State Government further stated that approach towards developing SWM policy involved multiple interaction with stakeholders which was an elaborate and exhaustive process, hence the delay.

2.3 Absence of SWM plan

Rule 15(a) of the SWM Rules, 2016 stipulates that the local authorities should prepare a solid waste management (SWM) plan within six months from the date of notification of the State policy and strategy on SWM. MSWM Manual 2016 provides a seven-step approach for developing SWM plan in ULBs, which *inter alia* includes identification of overall goals for ULBs, assessment of current situation of SWM and gap analysis, stakeholder consultation and preparation/approval of SWM plan.

Audit observed that SWM plans were prepared by three ULBs, viz., NPP Bulandshahr¹ (November 2017), NPP Deoria (December 2021) and NPP Ramnagar Varanasi (May 2022). However, in remaining 42 test-checked ULBs, SWM plans were not prepared. Due to lack of SWM Plan, test-checked ULBs did not adopt systemic approach in respect of collection, transportation, treatment and disposal of solid waste. Shortcomings noticed have been discussed in succeeding paragraphs.

The State Government stated (June 2023) that letter was issued (May 2019) to all ULBs for preparation of action plan for SWM. Gap assessment was carried out in all ULBs which supplemented the preparation of comprehensive SWM action plans. Out of 762 ULBs, action plans for 536 ULBs have been prepared and remaining are scheduled to be completed by June 2023.

The reply is not tenable, as the action plans of 536 ULBs are gap analysis of resources under SBM (Urban) 2.0 scheme whereas as per MSWM Manual, SWM plans are required to be prepared for 20-25 years embedded with several short term plans (five years).

2.4 Status of Detailed Project Report for SWM

As per Paragraph 7.2 of SBM (Urban) Guidelines (October 2017), ULBs were to prepare Detailed Project Reports (DPRs) for SWM of their cities in consultation with the State Government.

Audit observed that during the fifth meeting of the State High Powered Steering Committee (SHPS) in June 2018, the Detailed Project Reports

¹ For collection, storage and transportation of Solid Waste.

(DPRs) for the collection and transportation of solid waste in 17² Urban Local Bodies (ULBs) were approved. It was also decided in the meeting that the DPRs for the remaining ULBs would be prepared in the near future.

Audit observed that out of 45 test-checked ULBs, DPRs for SWM were prepared in three³ ULBs. In other nine⁴ ULBs, DPRs were prepared for processing of solid waste and one ULB (NPP Bulandshahr) had prepared DPR for the collection, secondary storage and transportation of solid waste to processing plant. Thus, 32 test-checked ULBs (71 *per cent*) had not prepared DPRs for SWM in their cities as required under SBM (Urban) Guidelines.

In reply (June 2023), the State Government informed that the preparation of DPR was under progress in three test-checked ULBs (NP Baldeo Mathura, NPP Mahmudabad Sitapur and NPP Muzaffarnagar).

2.5 Framing of bye-laws

Rule 15 (e) of the SWM Rules, 2016 stipulates that ULBs should formulate bye-laws incorporating the provisions of SWM Rules 2016 within one year from the date of notification (April 2016) and ensure timely implementation.

Audit observed that SWM bye-laws were formulated in only five⁵ out of the 45 test-checked ULBs. Further, seven⁶ other ULBs formulated bye-laws only relating to user charges for collection of solid waste and penalty for littering. Thus, bye-laws framed by these 12 ULBs lacked uniformity as detailed in **Appendix 2.1**. The remaining 33 ULBs did not formulate SWM bye-laws. Due to the absence of bye-laws in these ULBs, the provisions specified in the SWM Rules 2016, such as levy of penalty for violation of SWM Rules and levy of user charges for collection of solid waste, were not implemented. This also resulted in the ULBs being unable to generate revenue for SWM activities as user charges could not be levied in these ULBs in the absence of bye-laws.

The State Government stated (June 2023) that presently Uttar Pradesh Solid Waste Management Rules, 2021 has been notified and its provisions were implemented as bye-laws in 35 ULBs.

² NN Allahabad, NPP Khurja Bulandshahr, NPP Bulandshahr, NPP Shikandarabad Bulandshahr, NPP Jahangirabad Bulandshahr, NPP Saina Bulandshahr, NPP Galauthi Bulandshahr, NPP Muradnagar Ghaziabad, NPP Modinagar Ghaziabad, NP Niwari Ghaziabad, NP Patla Ghaziabad, NP Faridnagar Ghaziabad, NP Dasana Ghaziabad, NP Bugarasi Ghaziabad, NP Kithaur Meerut, NP Kharkhoda Meerut, NP Babugarh Hapur.

³ NPP Raebareli, NPP Shamli and NP Kaptanganj Kushinagar.

⁴ NN Kanpur, NN Lucknow (also prepared DPR for collection/transportation of waste), NPP Deoband Saharanpur, NPP Deoria, NPP Etah, NPP Hatharas, NPP Loni Ghaziabad, NPP Muzaffarnagar and NPP Pilibhit..

⁵ NN Ghaziabad, NPP Muzaffarnagar, NPP Sahabad Hardoi, NPP Bulandshahr and NP Khanpur Bulandshahr.

⁶ NN Kanpur, NPP Loni Ghaziabad, NPP Hathras, NPP Deoria, NPP Chitrkootdham Karwi Chitrakoot, NPP Baheri Bareilly and NPP Raebareli.

The reply is not tenable as the cited notification (October 2021) was not for SWM bye-laws of ULBs rather it was for seeking objections/suggestion on the draft Uttar Pradesh Solid Waste Management Rules, 2021. Further, the information provided by 31 out of 35 ULBs (as received with the State Government’s reply) mentioned that 15 ULBs were yet to notify SWM bye-laws. Besides, audit did not find evidence in respect of notification of bye laws during audit nor was evidence furnished with reply.

2.6 Generation and assessment of waste

Section 1.4.3.3 of the MSWM Manual 2016 stipulates that each Urban Local Body (ULB) should assess the quantity and composition of waste generated as an essential requirement to effectively plan for and design Municipal Solid Waste Management (MSWM) systems. The details of MSW generated by the 45 test-checked ULBs in the State from 2016 to 2022 are depicted in **Chart 2.1** and *Appendix 2.2*.

Chart 2.1: Solid waste generated in test-checked ULBs



(Source: information furnished by test-checked ULBs)

Chart 2.1 indicates that solid waste generation increased by 31 per cent in 2021-22 as compared to 2016-17. Further, there was decrease of solid waste generation during 2018-19 by 333 tonnes per day (TPD) mainly due to decrease of 586 TPD solid waste generation reported by NN Kanpur as compared to previous year. However, the information provided by test-checked ULBs could not be verified in audit due to the lack of maintenance of weighbridge records or volumetric measurements based on the number of trips made by vehicles on a day-to-day basis. Moreover, the ULBs had also reported similar figures for solid waste generation over multiple years raising concerns about the reliability of the data provided.

In reply (June 2023), the State Government stated that due to time constraints for planning MSW processing facilities, waste generation was

assessed based on proven studies mentioned in the CPHEEO⁷ (MSWM) manual. However, weighbridges are being installed at all processing facilities to accurately measure the waste being collected and processed. State Government further stated that due to reduce and reuse campaigns by the ULBs, the per capita waste generation has also slightly reduced.

The reply is not tenable, as test-checked ULBs had not adopted provisions of MSWM Manual 2016 prescribing five *per cent* annual increase in waste quantities per year for forecasting waste generation rates due to which similar figures for solid waste generation were reported over multiple years.

2.7 Decentralised Waste Management Systems

Rule 15 (m) of the SWM Rules 2016 provides that ULBs shall collect waste from vegetable, fruit, flower, meat, poultry and fish markets on a daily basis and promote establishment of decentralized compost plants or bio-methanation plants at suitable locations within or near the markets ensuring hygienic conditions.

Audit observed that none of the test-checked ULBs (except NN Ghaziabad⁸) had set up decentralized compost plants or bio-methanation centres for the proper disposal of waste generated from the markets. Consequently, waste collected from vegetable, fruit, flower, meat, poultry and fish markets was dumped directly in the landfill, as evidenced during the joint physical verification of the dumping ground or waste dumping site.

In reply (June 2023), the State Government stated that Material Recovery Facility⁹ (MRF) centers had been established for the disposal of dry waste and provisions were made for the establishment of compost pits for the disposal of wet waste in all Urban Local Bodies (ULBs). Additionally, efforts were underway to establish processing plants, bio-CNG plants and waste-to-energy plants in large ULBs so that generated waste could be processed safely.

The reply is not tenable, as test-checked ULBs (except NN Ghaziabad) had informed during the performance audit that decentralized compost plants or bio-methanation centres had not been established.

2.8 Non-integration of the Informal Sector

Rule 11 (m) of the SWM Rules 2016 stipulated that the State government would initiate a scheme for the registration of waste pickers and waste dealers.

⁷ Central Public Health & Environmental Engineering Organisation (CPHEEO) is a technical wing of the Ministry of Housing and Urban Affairs, Government of India

⁸ Five TPD pit composting at Sanjay Nagar, one TPD flower composting at Sai Upvan Sanjay Nagar, one TPD vermi composting in Nandi Park and one TPD waste to compost at Jatwara.

⁹ Materials Recovery Facility (MRF) is a facility where non-compostable solid waste is temporarily stored by ULBs to facilitate segregation, sorting and recovery of recyclables from various components of waste before the waste is delivered or taken up for its processing or disposal.

Audit observed that although the State Policy aimed to integrate informal sector workers into formal waste management processes as of June 2018, the State Government neither issued operational guidelines for waste pickers nor initiated the scheme for their registration. Additionally, the test-checked ULBs (except NN Ghaziabad¹⁰) failed to recognize informal waste collectors and integrate them into SWM activities.

In reply (June 2023), the State Government stated that ULBs were directed to identify informal waste pickers and issue identity cards after their registration. State Government further stated that this process had been completed in most of the ULBs. State Government also forwarded the response of 31 test-checked ULBs out of which 13 ULBs¹¹ mentioned that the identification and registration of waste pickers were carried out by them and five ULBs mentioned that the process of identification was under progress. However, these ULBs did not provide any documentary evidence for identification/registration of waste pickers.

2.9 Manpower for SWM activities in ULBs

According to Section 1.4.5.4 of the MSWM Manual 2016, the planning of an efficient and advanced MSWM system necessitates the presence of an efficient institutional structure in addition to adequate infrastructure and equipment. It further recommends that ULBs should have an SWM cell or SWM department having staff with technical and managerial skills specific to MSW management.

Audit observed that none of the test-checked ULBs had a dedicated SWM cell to handle SWM activities exclusively. The existing staff members managed both SWM and sanitation activities. Further, shortfall of manpower was noticed in 43 out of 44¹² test-checked ULBs in respect of personnel for SWM and sanitation activities as detailed in **Appendix 2.3** and summarised in **Table 2.2**.

Table 2.2: Shortfall of personnel for SWM cum sanitation activities in test-checked ULB as of March 2022

Post	Particulars	NN	NPP	NP
Zonal Sanitary Officer (ZSO)	Sanctioned Strength (SS)	9	0	0
	Persons-in-position (PIP)	5	0	0
	Vacancy in percentage	44	0	0
Chief Sanitary Inspector (CSI)	SS	20	1	0
	PIP	10	1	0
	Vacancy in percentage	50	0	0

¹⁰ NN Ghaziabad identified informal sector workers (rag pickers) in five zones of the city. Waste pickers (named as Safai Mitra) were associated with door to door collection vehicles.

¹¹ NN Ghaziabad, NN Lucknow, NPP Deoband Saharanpur, NPP Deoria, NPP Mahoba, NPP Mahmudabad Sitapur, NPP Raebareli, NPP Sahabad Hardoi, NPP Shamli, NP Bithoor Kanpur Nagar, NP Jarwal Bahraich, NP Kapatanganj Kushinagar and NP Kulpahar Mahoba.

¹² Out of 45 test-checked ULBs, in NP Rudhauri Bazar Basti had no sanctioned strength of personnel for SWM cum sanitation activities and 75 sanitary workers were outsourced for the purpose. Further, NP Usawan Budaun had no shortfall *vis-à-vis* sanctioned strength.

Performance Audit of Solid Waste Management in Urban Areas

Post	Particulars	NN	NPP	NP
Sanitary & Food Inspector (SFI)	SS	81	24	0
	PIP	68	18	0
	Vacancy in percentage	16	25	0
Sanitary Supervisor (Safai Nayak) (SS)	SS	305	132	16
	PIP	177	92	10
	Vacancy in percentage	42	30	38
Sanitary Worker (SW)	SS	14729	5473	916
	PIP	9957	3328	564
	Vacancy in percentage	32	39	38

(Source: information furnished by test checked ULBs)

Audit noticed that out of 45 test-checked ULBs, 42 ULBs had shortage of sanitary workers which was addressed through outsourcing, except in seven¹³ ULBs where shortage remained even after outsourcing of sanitary workers. However, the shortage of supervisory staff was not outsourced in test-checked ULBs.

In reply (June 2023), State Government stated that SBM Cells had been formed in nine test-checked ULBs for effective institutional mechanism and implementation of SWM.

2.9.1 Avoidable expenditure due to excess engagement of sanitation workers in NPP Hathras

According to the 2011 census, the population of NPP Hathras was 1.43 lakh. Using the incremental increase method, the estimated population of NPP Hathras for 2021 worked out to 1.58 lakh, as detailed in **Appendix 8**. Based on norms¹⁴, a maximum of 440¹⁵ and 444¹⁶ sanitation workers in 2020-21 and 2021-22 respectively were required to serve the current population for sanitation work. However, NPP Hathras deployed excess number of outsourced sanitation workers ranging between 49 and 280 during the period of 2020-22¹⁷. This resulted in avoidable expenditure of ₹ 2.33 crore, as detailed in **Appendix 2.4**, which could have been avoided if the norms for engagement of sanitary workers were followed.

In reply (June 2023), the State Government stated that due to the addition of 30 villages, the population of NPP increased to 2,57,487 in 2021-22 and 724 sanitation workers were required to serve the current population.

¹³ NN Kanpur (2,101 outsourced against shortage of 4730 SWs), NPP Sahabad Hardoi (96 outsourced against shortage of 119 SWs), NPP Mahmudabad Sitapur (46 outsourced against shortage of 54 SWs), NPP Ramnagar Varanasi (80 outsourced against shortage of 90 SWs), NP Bithoor Kanpur Nagar (10 outsourced against shortage of 12 SWs), NP Chitbaragaon Ballia (22 outsourced against shortage of 24 SWs) and NP Sahaspur Bijnor (22 outsourced against shortage of 34 SWs).

¹⁴ As per norms recommended (July 1992) by the Committee constituted at the State Government level, 28 sanitation workers per 10,000 population were to be engaged by ULBs.

¹⁵ Required no of sanitation workers in 2020-21 = $(1,57024 \times 28)/10000 = 440$.

¹⁶ Required no of sanitation workers in 2021-22 = $(1,58,461 \times 28)/10000 = 444$.

¹⁷ Audit could not assess the avoidable expenditure during 2018-20 due to deficient information in the vouchers for payments related to outsourced sanitation workers, viz., number of days/mandays and rate of payment per mandays.

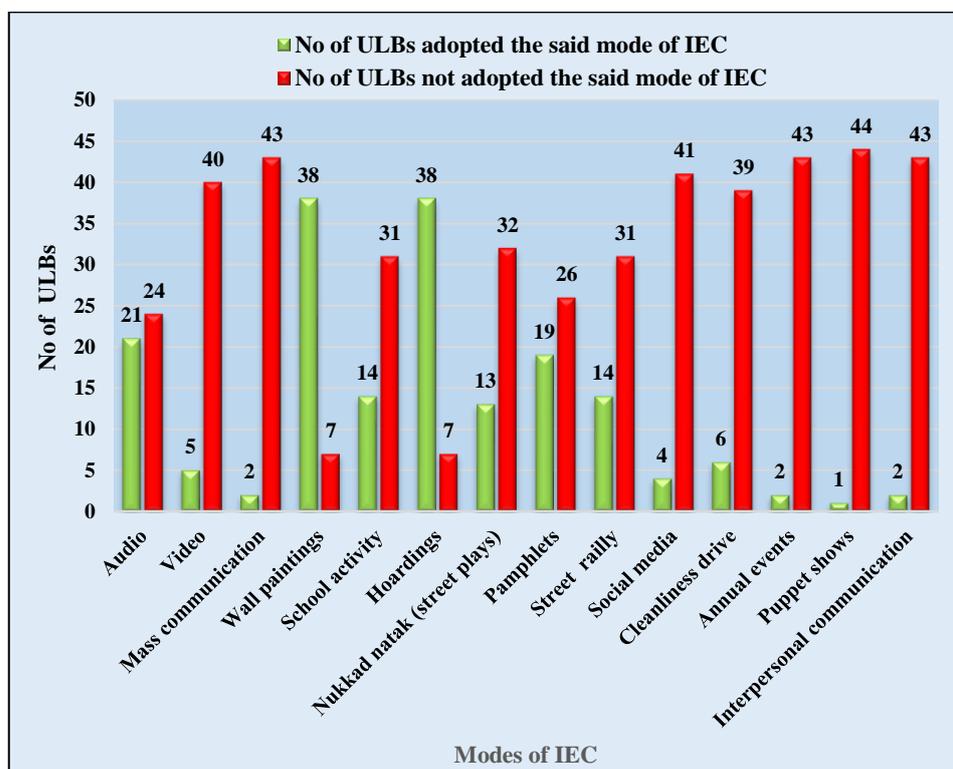
This reply is not tenable as the notification¹⁸ for the reconstitution of wards of NPP Hathras became effective in November 2022 and the excess engagement of sanitation workers pertains to the period of 2020-22.

2.10 Information, Education & Communication and Public Awareness (IEC&PA) activities

Section 1.4.5.13 of MSWM Manual stipulates that awareness and education campaigns are crucial for fostering behavioral change among citizens in managing their waste. Further, IEC&PA is one of the components of SBM (Urban) scheme for which Annual Action Plan is to be prepared by the State Government.

Audit noticed that Annual Action Plans for IEC&PA during 2016-22 provided for public awareness in ULBs through hoardings, pamphlets, wall writings, thematic drive, activity in schools, road shows, *nukkad natak etc.* The status of various modes of IEC&PA activities used in 45 test-checked ULBs was as depicted in **Chart 2.2**.

Chart 2.2: IEC&PA activities conducted in test-checked ULBs



(Source: information furnished by test-checked ULBs)

It is evident from **Chart 2.2** that in most of the test- checked ULBs, IEC&PA activities were conducted through wall painting and hoardings. Moreover, IEC&PA activities through social media and mass communication were adopted in four and two test-checked ULBs respectively.

The State Government stated (June 2023) that IEC&PA activities was being carried out through various medium since 2017, such as radio jingle,

¹⁸ Notification No 3408/9-1-2022-56 Pari./22 dated 04 November 2022 issued by UDD.

posters, newspaper advertisement, hording, wall painting, *etc.* Participation of all stakeholders, viz., executive officers of municipalities, elected representatives, schools, non-government organisations and media, was ensured in the IEC campaign. Information for behavior change has been/is being continuously given through various means.

Fact remains that outcomes of IEC&PA activities carried out by the State Government or ULBs was yet to yield desired result. As discussed in the succeeding chapters, no effort was made by 49 *per cent* of 34 test-checked ULBs¹⁹ to distribute bins for encouraging households to ensure source segregation of waste, waste was not segregated at source in 98 *per cent* of test-checked ULBs and mixed waste was being dumped at landfill sites polluting environment.

• ***Less Utilisation of fund for IEC&PA activities***

Audit observed that State Mission Director (SMD), SBM (Urban) had ₹ 256.88 crore available for IEC and public awareness activities under the SBM (Urban) scheme during the years 2016-22. Out of this, ₹ 21.19 crore was utilised at SMD level and ₹ 212.54 crore was released to ULBs. The balance amount ₹ 23.15 crore was neither utilised at the State level nor released to ULBs as of March 2022 (***Appendix 2.5***).

In reply (June 2023), the State Government stated that ₹ 23.15 crore remained unutilized as of March 2022 due to Covid-19 restrictions during 2019-20 and 2020-21. State Government further stated that the funds were released to ULBs based on their demands and in accordance with the instructions issued by the Government of India.

Fact remains that unutilized fund for IEC & PA activities was 78 *per cent* in 2016-17, 96 *per cent* in 2017-18, 29 *per cent* in 2018-19 and 37 *per cent* in 2021-22, thus, even prior to or after Covid-19 pandemic affected years (2019-20 and 2020-21) available funds under IEC & PA activities could not be utilized at the State level nor released to ULBs.

Pendency of Utilisation Certificates (UCs) against ULBs

During October 2014 (since beginning of SBM (Urban) scheme) to March 2022, SMD released ₹ 218.19 crore to ULBs for IEC&PA activities. However, ULBs had submitted utilization certificate (UCs) of ₹ 121.82 crore (55.83 *per cent*) to SMD.

Audit further noticed that out of available fund of ₹ 39.93 crore during 2016-22 in 45 test-checked ULBs for IEC&PA activities, ₹ 7.87 crore (20 *per cent*) could not be utilised in 44 ULBs as of March 2022 (***Appendix 2.6***). Unutilized amount under IEC&PA ranged from 53 to 80 *per cent* of total fund available during 2016-22 in 15 out of 45 test-checked ULBs.

In reply (June 2023), the State Government stated that most of the UCs in respect of fund released to ULBs for IEC&PA activities during October 2014 to March 2022 had been obtained. However, State Government did not provide information on the amount for which UCs had been received.

¹⁹ Out of 45 ULBs, 11 ULBs did not provide information on distribution of bins to households for source segregation of waste.

In the absence of UCs, there is no assurance that funds disbursed were actually incurred for the purpose for which these were sanctioned/ authorised by the Legislature.

- ***Diversion of IEC&PA fund***

Audit noticed that out of expenditure of ₹ 1.58 crore incurred by NN Ghaziabad on IEC&PA activities during 2020-21, ₹ 15.98 lakh was utilised for purposes other than IEC&PA, viz., maintenance of toilets and purchase of fixtures and other consumable items.

In reply (June 2023), the State Government accepted that expenditure was incurred on cleanliness and sanitation. Thus, NN Ghaziabad diverted ₹ 15.98 lakh of IEC&PA fund for other than IEC&PA activities in contravention with the guidelines of SBM (Urban) scheme.

- ***Suspicious payment of ₹ 10.90 lakh in NP Chitbaragoan Ballia***

Scrutiny of records revealed that SMD released ₹ 14.41 lakh (April 2018 to November 2021) to NP Chitbaragoan Ballia for IEC&PA activities. NP invited quotations on 11 occasions during October 2020 to March 2021 for hoarding and poster in all wards, wall painting and wall writing, videography and photography, nukkad natak and distribution of lunch packets. Against these notices seeking quotations, same three²⁰ firms participated in each quotation process and the work was awarded to the same firm (M/s Om Computers and Supplirs, Ballia) on all occasions. Further, the firm M/s Om Computers and Supplirs, Ballia was paid ₹ 10.90 lakh during August 2021 against work orders for above IEC&PA activities. Out of 11 bills of firms, payment of ₹ 3.97 lakh was made without verification of four bills and remaining seven bills of ₹ 6.93 lakh were verified by Executive Officer, NP Chitbaragoan Ballia. However, the work order, bills of firm and the records of the NP did not have details of schools in which nukkad natak was performed and lunch packets distributed, spots for fixing hording/posters, places of wall painting and wall writing and photography/videography evidence of works executed.

In reply (June 2023), State Government stated that as per NP Chitbaragoan Ballia, the work was sanctioned by the then EO and Chairman and payment of ₹ 10.90 lakh was made to the firm M/s Om Computers and Supplirs, Ballia, however, no evidence regarding execution of work was available.

Unutilised amount (₹ 51.41 lakh) not refunded to SMD

SMD released (November 2018) ₹ 3.75 crore to Prayagraj Mela Pradhikaran for IEC&PA activities under 'Paint My City campaign' during Kumbha Mela 2019. Out of this, ₹ 3.24 crore was utilized. However, Prayagraj Mela Pradhikaran did not refund unutilized balance of ₹ 51.41 lakh to SMD.

²⁰ M/s Maa Sharada Enterprises (GSTN No. 09BYMP83966A120 – audit noticed that this GSTIN was invalid), M/s Sanjay Kumar Singh Ballia (GSTN No. 09BQAPS7565RIZQ) and M/s Om Computers and Supplirs Ballia (GSTN No. 09AVDPD5774G1ZH).

In reply (June 2023), the State Government stated that Prayagraj Mela Pradhikaran had been requested to refund ₹ 51.00 lakh to SMD.

2.11 Status of Capacity Building

Rule 11(k) and 15(zc) of the SWM Rules, 2016 mandate the Urban Development Department (UDD) and Urban Local Bodies (ULBs) to organize training and capacity building programmes for their staff, including contract workers.

Audit noticed following issues with respect to efforts of SMD and ULBs for Capacity Building activities:

- A proposal for conducting 112 training programmes²¹ by RCUES²² for capacity building of officers/personnel of ULBs was approved in the second meeting (August 2016) of the State High Power Steering Committee (SHPS). However, RCUES organized only 53 training programmes²³. The shortfall in training programme was attributed (June 2023) by RCUES to delay in administrative approval by the State Government for the training programme and delay in advance payment/non-payment of bills for the training programme.
- Government of India directed (October 2017) implementation of a new Integrated Capacity Building Framework encompassing all urban missions including SBM. RCUES was designated as the nodal agency responsible for conducting training, workshops and exposure visits for which a Memorandum of Understanding (MoU) was executed (August 2018) between the State Government and RCUES. Each participant was to receive training through a total of three Capsules of three days each.

Audit observed that only 10 training programmes for Capsule 1 were conducted during October 2018 to January 2019 with 180 participants out of the 300 nominated participants. RCUES incurred an expenditure of ₹ 23.36 lakh for these programmes, which remained unpaid as of March 2022. RCUES stated (June 2023) that the remaining training programmes could not be conducted due to the non-payment for 10 training programmes.

The State Government stated (June 2023) that GoI was being requested for release of fund for 10 training courses conducted by RCUES. The action plan approved by SHPS could not be implemented due to non-receipt of fund from GoI.

²¹ Sanitation & Solid Waste Management: 56 training programmes; Public Private Partnership for Infrastructure Development and Asset Management under SBM: 35 training programmes; Hands on Training programme on SBM portal: 21 training programmes.

²² Regional Centre for Urban & Environmental Studies, Lucknow (established by Ministry of Housing and Urban Affairs, Government of India).

²³ Hand Holding Workshop on ODF: 11 programmes; Hand Holding Workshop on waste collection and transportations equipment for SWM DPR preparation: Nine programmes; Hand Holding Workshop on Swachh Survekshan /ODF: 27 programmes; Study tours: six programmes.

The reply is not acceptable, as funds for the capacity building component were available at SMD level.

- Audit noticed that ₹ 3.46 crore was released to 39 out of 45 test-checked ULBs during the period of 2016-22 for capacity building and Administrative & Office Expenses (CB & AOE) as detailed in *Appendix 2.7*. Out of this release of fund, 32 ULBs incurred expenditure of ₹ 2.93 crore. However, only two test-checked ULBs²⁴ provided details of training imparted to their staff. Nine other ULBs²⁵ said they imparted training, but did not provide any detail in this regard. Out of six ULBs which were not provided fund for CB & AOE, one ULB²⁶ stated that training was conducted based upon the module prepared by the SBM portal. Thus, training efforts at the ULBs level remained lacking.

To sum up, the State policy on SWM was prepared in 2018 with delays of 14 months. However, SWM plans, which was to be prepared within six months of notification of State's SWM policy, were not prepared in 93 per cent of test-checked ULBs. Further, 73 per cent of test-checked ULBs did not formulate SWM bye-laws for implementation of SWM Rules. ULBs were not maintaining records for measuring solid waste generated in cities. There was shortage of manpower for management of solid waste in ULBs. Funds for IEC&PA were not fully utilised. The training programmes were not organized according to the set targets.

Recommendation 1: *The State Government may expedite effective implementation of the State policy for waste minimisation and management.*

Recommendation 2: *The State Government needs to devise better information systems on generation, collection and processing of solid waste to assist ULBs in preparation of SWM plans for effective waste management.*

Recommendation 3: *The State Government should ensure that bye-laws incorporating the provisions of SWM Rules, 2016 are framed and implemented by ULBs in a time bound manner.*

Recommendation 4: *The State Government should ensure proper utilisation of funds for Information, Education & Communication and Public Awareness (IEC&PA) activities to effectively sensitize citizens for behavioural changes in managing solid wastes.*

²⁴ NN Ghaziabad and NPP Deoria.

²⁵ NPP Chitrakootdham Karwi Chitrakoot, NPP Bulandshahr, NPP Pilibhit, NPP Shamli, NPP Sahabad Hardoi, NP Kulpahar Mahoba, NP Jiyanpur Azamgarh, NP Chitbaragaon Ballia and NP Reoti Ballia.

²⁶ NP Rudhauri Bazar Basti.