

Chapter V

Information, Education & Communication activities

5.1 Introduction

Behavioural change is vital for effective SWM. Information, education and communication (IEC) is a multilevel tool for promoting and sustaining risk-reducing behaviour change in individuals and communities. The IEC campaign should target households, shops, and commercial and institutional premises as well as other stakeholders such as municipal officials, elected representatives, schools, non-government organisations (NGOs), the informal sector, media, *etc.*, to ensure their participation in managing city waste by discharging their role effectively.

Provisions of MSW Rules, 2000 (S. No. 2 of Schedule II) and SWM Rules, 2016 (Clause 15 (zg)); Manuals on MSWM, 2000 (Section 25.4.2.12) and 2016 (Section 1.4.5.13) underscored the importance of IEC activities and required the State Government and ULBs to create public awareness and educate waste generators to achieve the overall objectives of MSWM.

5.2 Deficiencies in Information, Education & Communication activities

The State Government developed (August 2004) a strategy document for IEC with the objective of creating awareness among citizens, bulk waste generators and agencies involved in handling of Municipal Solid Waste. The document detailed various IEC activities for target groups from public to municipal staff and officers including various associations.

Thirty-three out of 35 test-checked ULBs conducted IEC activities, encouraging waste generators to 'segregate waste into wet and dry' and 'not to litter' by issue of bills, banners, stickers, wall paintings, advertisement in local channels, *etc.* **Table 5.1** indicates the status of various modes of communication used in the test-checked ULBs.

Table 5.1: Modes of communication used in the test-checked ULBs

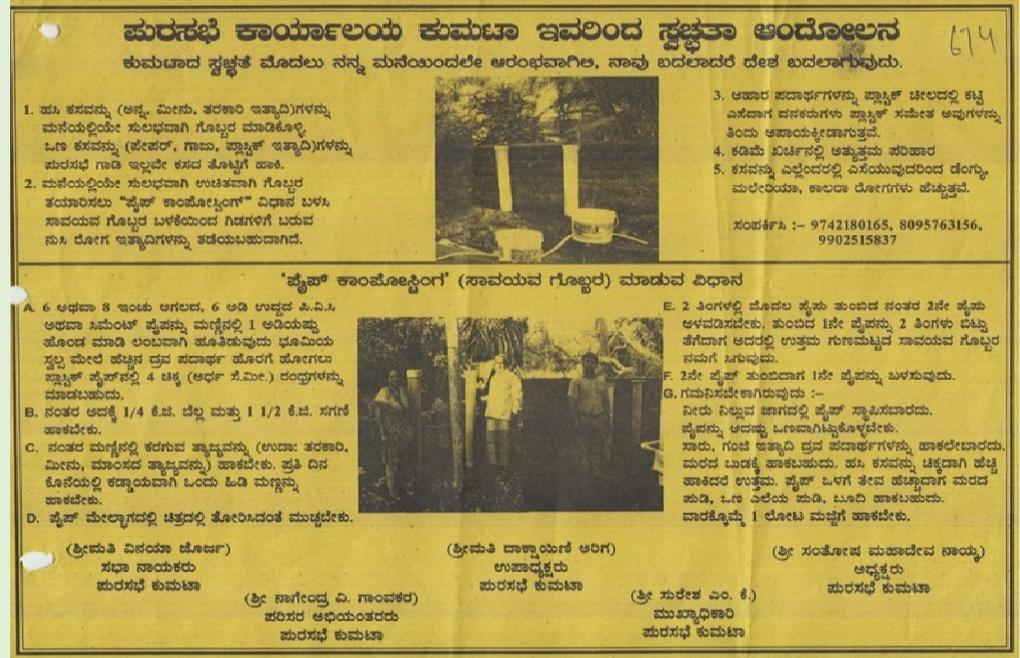
Sl. No.	Modes of communication used	Number of ULBs		
		Yes	No	Details not available
1	Audio	13	19	3
2	Video	10	22	3
3	Mass communication	10	22	3
4	Wall Paintings	7	25	3
5	Schools	13	19	3
6	Hoardings	11	21	3
7	Street <i>Jathas</i>	8	22	5
8	Pamphlets	24	8	3

Source: Records of test-checked ULBs

ULB-wise details are given in **Appendix 5.1**.

Good practice

TMC, Kumta, promoted (October 2016) production of biogas from domestic waste by creating awareness through handbills. Based on the meeting conducted with street vendors and shop owners in October 2016, the TMC tied sack bags on street light poles to address littering issues. The TMC also made (March 2017) a documentary film on pipe composting and aired it in local channels.



(Handbill on Swachhta Andolan by TMC, Kumta – Promoting behaviour change through segregation of dry and wet waste and use of wet waste for production of bio gas through pipe composting)

Source: Records of TMC, Kumta

We, however, observed that the following issues related to IEC were not addressed:

- The State Government claimed to have prepared six booklets for various target groups namely children, public, NGOs, ULBs, elected representatives and *pourakarmikas* and distributed them to ULBs during the year 2004. The Government, through Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC), also produced two documentary films on SWM (a) for general awareness and (b) exclusively on municipal landfill, for creating awareness and educating ULBs. We observed that these booklets and Compact Discs (CDs) were not available/accessible in any of the test-checked ULBs. DMA stated (June 2017) that the booklets were not in use at present.
- CMC, Shidlaghatta and TP, Honnavara did not conduct any IEC activity during the period 2012-13 to 2016-17.
- Domestic hazardous waste included both toxic and bio-medical wastes. However, neither the State level authorities (UDD, DMA and KSPCB) nor district/ULB level authorities notified and publicised the list of

domestic hazardous waste. We observed that ULBs in Uttara Kannada district (as shown below) and TP, Kudligi distributed pamphlets that indicated segregation of domestic hazardous waste. In the remaining test-checked ULBs, segregation of waste at source was not encouraged.

Pamphlet circulated by DC, Uttara Kannada



- E-waste consists of different components that are both hazardous and non-hazardous. Hence, e-waste should be segregated at source and should not be mixed with MSW. The estimated quantum of e-waste generated in the State was 86,118 metric ton (MT) per annum. However, no specific IEC activity focussed on e-waste segregation or Extended Producer Responsibility (EPR) was carried out.
- None of the test-checked ULBs created awareness on provisions regarding levy of penalty (Section 224 of KM Act, 1964 and Section 431A of KMC Act, 1976) for littering, non-segregation of different waste, etc.
- IEC activities conducted by test-checked ULBs did not emphasise 'not to burn' and 'not to bury' solid waste, and did not propagate the waste minimisation through 3R concept.
- None of the test-checked ULBs (except CMC, Bagalkote) encouraged community participation adequately to conduct awareness programme. In CMC, Bagalkote, though the segregation of waste was not adequately promoted, the CMC ensured active community participation in maintaining cleanliness in the city. It also supported the cause of Bagalkote Social Workers Group, which is a non-political group of social workers striving to ensure overall development of Bagalkote City and make it more peaceful through the community service. The impact of community involvement was evident during JPV conducted (August 2017) with ULB staff as general level of cleanliness in the areas visited was significantly better as compared to other cities (**Exhibit 5.1**).

- We also observed that ULBs did not create adequate awareness amongst the work force for utilisation of protective equipment as detailed in Paragraph 6.2.5.

The State Government stated (May 2018) that issues observed by audit would be addressed and DMA floated tenders to select suitable agencies to carry out various IEC programmes at ULB level.

Recommendation 10: The State Government should accord required priority to IEC and ensure that IEC activities are appropriate and create awareness about the harmful effects of ineffective SWM management on health and environment. It may explore usage of more effective means of communication for increasing the impact and efficacy of IEC activities.

The IEC activities should be undertaken, keeping in view the particular wastes in particular areas and particular seasons. This may be taken up consequent to assessments and pilots.

Exhibit 5.1: Status of cleanliness (Paragraph 5.2)

CMC, Bagalkote (29.8.2017)



CMC, Shidlaghatta (7.6.2017)



CMC, Bidar (10.8.2017)

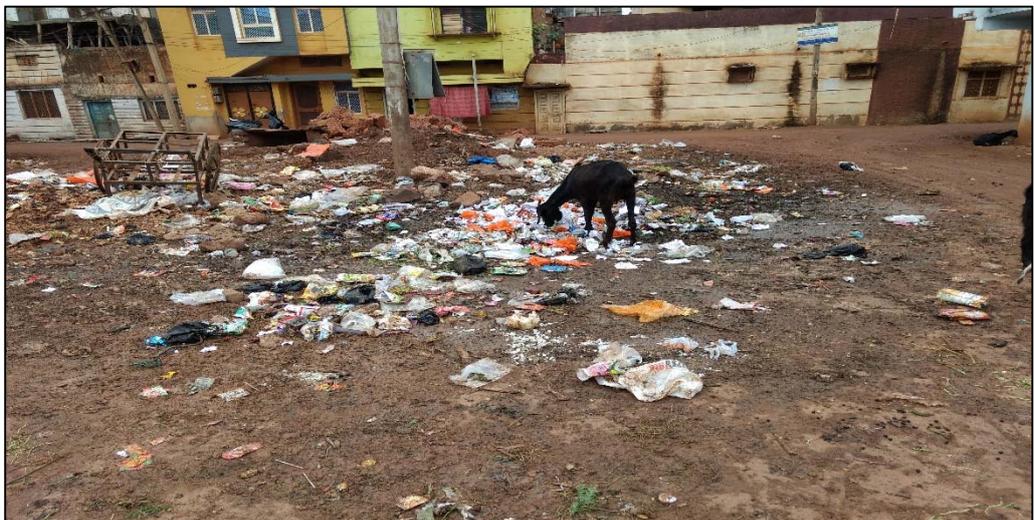


Exhibit 5.1: Status of cleanliness (Paragraph 5.2)

CMC, Bagalkote (29.8.2017)



CMC, Hosapete (11.5.2017)



HDMC (28.4.2017)

