

IMPACT ASSESSMENT : WELLBEING OUT OF WASTE (DELHI)

2021 - 2022



Introduction

The national capital is home to 20 million people with 250 wards. For the year 2020-21, as per data released by the Ministry of Statistics and Programme Implementation, the city produces 10990 tonnes of solid waste every day. With less than half of it (5139 tonnes) meeting treatment while the rest is dumped in saturated landfills. There are 3 landfill sites namely Bhalswa, Ghazipur and Okhla. The key issue in Solid Waste Management (SWM) is the lack of source segregation and many wards in Delhi have poor source segregation levels. To address this issue, ITC WOW initiated a door-to-door awareness campaign on source segregation to prevent waste from reaching the landfills and to promote the concept 3Rs-Reduce, Reuse and Recycle of waste.

ITC initiated the Wellbeing Out of Waste (WOW) program in Delhi in 2017. In the period between April 2021 - March 2022, ITC through implementation partner, E Sree Foundation executed multiple programs to build a sustainable waste management ecosystem in Delhi.

Key Interventions

The following are the key interventions executed between April 2021- March 2022:

- **Door-to-Door Awareness Campaign:** In collaboration with Urban Local Bodies (ULB), the flagship program aimed to educate households on the importance of adopting source segregation behavior through door-to-door propagation and follow-up in both gated and non-gated communities.
- **Model Colony:** The program was initiated to establish model colonies that have achieved at least 80% source segregation levels and nearly 25% of the households practicing daily wet waste composting.
- **Model Camp:** The model camp was one of the initiatives under Swachh Survekshan 2022. The aim was to adopt a slum community under the Slum Development Program. Mrs. Shammi Talwar, brand ambassador for MCD Central Zone, took up the Harijan Camp in collaboration with MCD and WOW. WOW supported the initiative through door-to-door awareness campaigns, resource delivery and community activities on waste management.
- **Home Composting:** All households interested in the practice of wet waste composting were supported through hands-on trainings and follow-up.
- **Buddy Composting:** In collaboration with SDMC South Zone, experienced home composters were selected to encourage composting behavior among at least 10 residents in their colony. WOW supported the initiative by facilitating the training and resource delivery processes.
- **Central Hub:** The Central Hub was set up at Raghbir Nagar as a material recovery and processing facility for dry waste. It is a decentralized waste management unit that promotes a circular economy by diverting dry waste away from landfills, recovering valuable dry recyclable waste, converting it into a resource and improving efficiency in dry waste collection, processing and disposal.
- **Other initiatives:** WOW Delhi also organized many Single Use Plastic (SUP) awareness drives, Nigam Haat with MCD Central Zone and “Azadi ka Amrit Mahotsav” under Central Govt’s Swachh Survekshan. They have also engaged NSS students across programs and supported their initiatives related to awareness of waste management practices.

Research Objectives

1

To assess the impact of door-to-door awareness campaign on source segregation behavior at households and its impact on dry and wet waste management ecosystem of Delhi.

2

To understand the impact of contributing factors in the building of model colonies with emphasis on examining its efficient source segregation and community composting process.

3

To assess the challenges faced during waste management processes and to include a participatory approach in the improvement of the program especially in model camp.

4

To provide insights on interventions' adequacy about the effectiveness of implementation processes and recommendations for improvement.

Research Design

Approach

The choice of the research approach depends on the objectives of the research and ultimately, on the type of knowledge that the study should produce. Qualitative data is flexible and can go deep into the subjectivity and complexity of people's perspectives. However, the possibility of concluding generalizations is limited. Alternatively, quantitative data can systematically describe large collections, generating inferences that can be generalized, but this lacks subjectivity and may struggle to deal with the complexities of the study. For different objectives, quantitative, qualitative and mixed-methods approach was used to draw overall findings.

The Action Learning Cycle Framework guides program design and impact assessment through planning, action, reflection and adaptation. It ensures alignment with goals and engages stakeholders for continuous improvement.

A Participatory Approach to impact assessment involves gathering feedback, personal opinions and gather solutions from stakeholders to foster ownership and empowerment. This approach considers social, economic and political contexts to enhance accountability and program effectiveness.

In this study, the Participatory Approach wherever possible with the Action Learning Cycle Framework is incorporated. By embracing both frameworks programs can strengthen accountability, empower stakeholders and optimize impact on the ground, ultimately fostering sustainable development outcomes.

Methodology

The assessment uses both primary and secondary sources of data. Primary data is used to draw quantitative and qualitative analysis or mixed analysis depending on the various research objectives.

The primary data is collected from the different sets of residents of households, key informants and implementation staff. The quantitative data is analyzed from the desk review of program-related data shared by implementing partners along with surveys and questionnaires administered.

Scope and Limitations

The scope of the study is limited to the activities carried out by the implementing partner from April 2021-March 2022. The key interventions considered are the regular intervention of household propagation through the door-to-door awareness campaign and the experimental variations: model colony, model camp, home composters and buddy composters. The data was collected predominantly from gated and non-gated communities of the South Zone, West Zone, Central Zone and Najafgarh Zone. The available digitized data was used for the assessment and sample selection. Other required data was provided as per request by the implementing agency and is communicated through electronic correspondence.

Sampling and Data Collection Tools

A mix of convenient and strategic sampling techniques was used for surveys. Purposive sampling was used for the case studies and interviews.

Sample Type	Sample Details
Households	Residents Survey - 856 RWAs Questionnaire - 12, 1 RWA Case Study
Model Colony	RWA (Key Informant) Case Study - 1 In depth Semi-Structured Interview
Home Composters	Questionnaire Survey - 10
Buddy Composters	Case Study - 1 Semi-Structured Interview Questionnaire Survey - 11
Model Camp	Case Study- Key Informants (Swachh Ambassdor - 1; Panchayat Members - 2; Shopkeeper - 1; Volunteer - 1)
Central Hub	Case Study - Supervisor (1) Semi-Structured Interview

Data Collection Process

The resident survey and RWA questionnaire aimed to understand the effectiveness of Segregation of Waste At Source (SWAS) awareness, with Model Colony, to examine the progress, with the model camp, home composters and buddy composters to identify the bottlenecks of the program design through participatory feedback.

The tools were developed to study the quality of source segregation behavior and its contribution to the waste management ecosystem in Delhi. The data collection was co-facilitated by the implementing agencies. The household survey was prepared and administered in both English and Hindi.

Overview of Impact

URBAN LOCAL BODY

No of Colonies
418

No of Zones
6

No of Households
405782

No of RWA's
36

No of Sanitary Inspectors
36

No of Model Colonies
10

No of Swachh Ambassadors
2

No of Model Camp
1

HOUSEHOLDS

NON-GATED COMMUNITIES

No of Colonies
275

No of Households
329957

GATED COMMUNITIES

No of Colonies
129

No of Households
64545

SLUM COMMUNITIES

No of Colonies
14

No of Households
11280

AWARENESS ON SINGLE USE PLASTIC

No of Households
405000

No of Shopping
Complexes
89

No of
Shopkeepers
2032

No of Retailers
18

No of Mandi's
5

No of Worship places
2

DRY WASTE COLLECTION

Quantum of Dry Waste Collection

61.2 MT

WET WASTE COMPOSTING

Home
Composters

2397

Buddy
Composters

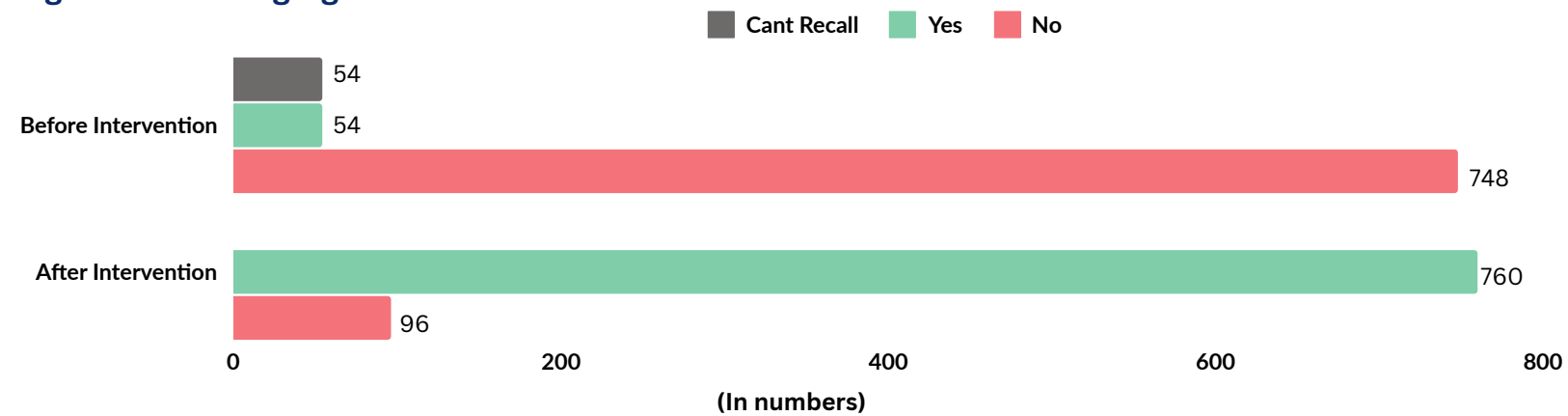
252

Door-to-Door Awareness Campaign: Households

Demographic Profile: Household Survey

Across 2021-2022, the total no of propagations done at households was 405782. The areas covered include NDMC (New Delhi Municipal Council) all circles, South Delhi Municipal Corporation - Central, West, Najafgarh and North Delhi Municipal Corporation-Karol Bagh. The no of gated households are 64545; non gated are 329957 and slums are 11280.

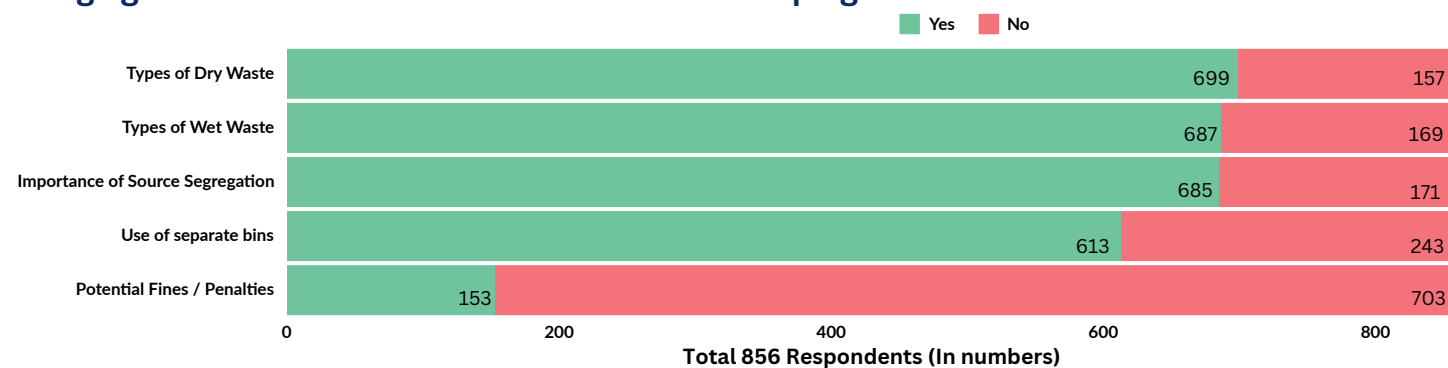
Change in Source Segregation Behaviour



Out of the total 856 survey respondents, before the intervention of the awareness campaign - 87.4% (748 respondents) were not segregating, only 6.3% (54 respondents) were segregating and 6.3% (54 respondents) could not recall.

After the intervention, out of 856 respondents - 88.8% (760 respondents) started practicing source segregation and 11.2% (96 respondents) are not practicing source segregation. This is the key indicator of improvement in segregating levels due to the awareness campaign.

Knowledge gained from Door-to-Door Awareness Campaign



The majority of the survey respondents were able to recall the topics of types of dry waste, types of wet waste, the importance of source segregation and use of separate bins. Few were able to recall the penalties.

The knowledge needed to adapt source segregation is reflected in the respondent's ability to recall the core messages of the awareness campaign which are types of dry waste, types of wet waste and the importance of source segregation. This is an indicator that the knowledge content intended to create source segregation behavior was successfully imparted.

Overall Findings

- 89% of households surveyed mentioned practicing source segregation, which is a significant improvement from 6% before intervention.
- The motivating factors for source segregation are mainly awareness of Solid Waste Management (SWM), availability of separate bins for waste disposal at households and awareness campaigns.
- There is an improved segregation level and decrease in environmental issues caused by waste after the awareness of segregation of waste at source with the households especially where there is proper segregated waste collection.
- A majority of 711 (83%) of the total 856 surveyed respondents reported that they would recommend WOW's door-to-door awareness campaign on source segregation to other citizens.
- In addition to door-to-door campaign, the facilitation of segregated waste collection system by training the waste collectors and providing separate bins to households enabled them to adopt source segregation as a practice.

Suggestions

- The availability of regular waste collection vehicles with adequate capacity and a fixed collection schedule leads to less accumulation of waste in public spaces.
- Awareness and training programs for waste collectors to ensure that they would not accept mixed waste along with providing them with safety equipments.
- Need for random monitoring either by the WOW or by waste collectors on a periodic basis.
- Provision for huge garbage bins (dhalaos) in commonly accessible public spaces, distribution of bins to encourage segregating behavior and enforcement of fines on non-segregating households.
- Demand for awareness campaigns on the disposal system especially public awareness events preferably on Sundays to foster community responsibility in the interest of refreshing the memory of the existing residents as well as for the benefit of new residents.
- Request for frequent composting workshops along with resources in order to reuse wet waste especially at the community level.

Door-to-Door Awareness Campaign: Model Colony and RWA

Building Moral Economy: First Model Colony of Delhi



Mr. Fabian Panthaki, RWA member of Sarvapriya Vihar South Zone and Swachh Ambassador of MCD, is the pioneer in establishing the model colony. The colony has an exceptional community source segregation level with a community composting pit. With the collective effort of the residents and a proactive group of volunteers, the colony diverts around 50000 tonnes of wet waste every year into the composting pit. Mr. Panthaki's experience in the UK inspired his community composting initiative. Initially, he faced difficulty in onboarding the residents onto source segregation practices as they seemed skeptical regarding effective waste disposal. Initial composting efforts were hampered by inadequate manure production and methane gas odour. These issues necessitated the creation of an underground compost pit and additional payments to waste collectors for segregation efforts.

Collaboration with WOW

Plagued by the challenge of mobilizing adequate wet waste for the compost pit, WOW's waste audit greatly aided in ensuring adequate incoming wet waste volumes from the households to maintain his composting operations efficiently. He appreciates their methodical approach, volunteer training, documentation process and strong follow-up system.

Strategies

Mr. Panthaki's comprehensive research and educational efforts highlighted the benefits of effective waste management. He fostered empathy among residents for waste collectors and integrated source segregation clauses into rental agreements. The monthly waste management events and consistent awareness programs reinforced these practices.

Information, Education and Communication (IEC) initiatives are crucial for fostering a sustainable mindset. Educating waste collectors to reject mixed waste and continuous community support are key to maintaining segregation and promoting dignified livelihoods for waste collectors.

Suggestions

To expand the model colony framework, Mr. Panthaki suggests publicizing successful programs and creating brochures and newsletters. Initiatives for responsible consumption and a waste management expert database can provide holistic support.

Mr. Panthaki now envisions establishing a zero-waste colony. He is instrumental in converting other colonies into model colonies by inspiring them with tours around the Sarvapriya Vihar Colony and by providing them with consultative hand-holding support.

Transforming Waste Management: The Devdoot Apartments Model

Devdoot Apartments in Vikaspuri D Block has revolutionized its waste management practices under Mr. Lalit Tyagi, RWA General Secretary. Through the WOW initiative, the society achieved 100% waste segregation levels in just 15 days. Mr. Tyagi led the hands-on learning and practical demonstrations supported by WOW volunteers who conducted door-to-door campaigns. Initially the efforts were met with skepticism, but Mr. Tyagi's persistence and effective communication with the residents helped him overcome the resistance in time. Continuous follow-ups and training sessions ensured compliance, despite transient tenants and helpers. Mr. Tyagi recommends boosting social media presence for awareness and sustained stakeholder involvement to maintain the waste management momentum



RWA Survey

12 RWAs from SDMC-South, West and Central zones participated in a survey on waste management.

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- Initially, waste was collected in an unsegregated manner but post door-to-door awareness campaign, segregated waste collection practice was established, involving local waste collectors.
- RWAs identified habitual discipline and constant motivation as key to successful source segregation. They faced difficulties in enforcing penalties and ensuring waste collectors reduced mixed waste collection. RWAs coordinated with WOW and conducted waste audits, door-to-door campaigns as well as mobilized community volunteers. They also held workshops at home and conducted community composting sessions.
- RWAs appreciated WOW for efficient campaign coordination and follow-ups.
- RWAs suggested regular resident and waste collector training, increased follow-up checks, creative communication strategies and mandatory recycling. They also advocated for aero bin distribution for composting and stricter enforcement of fines.
- RWAs recommended continuous collaboration with WOW through frequent checks and meetings, expanded advocacy with municipal corporations, enhanced social media presence and integrated composting awareness.
- RWAs are bridging the gap between residents and WOW, organizing community initiatives and driving behavioral change in waste segregation. RWAs are essential for the successful implementation and sustainability of WOW's waste management initiatives, fostering community-centric approaches and continued dialogue on waste management.

Door-to-Door Awareness Campaign: Model Camp and Other Awareness Initiatives

Model Camp

The following findings are based on interviews conducted with Swachh Ambassador, panchayat members, commercial shop owner, waste collector, volunteer and a survey of five households not segregating waste due to lack of door-to-door waste collection.

Mrs. Shammi Talwar, brand ambassador MCD Central Zone, spearheaded the program at Harijan Camp with MCD and WOW. She arranged for a garbage tipper to navigate the camp's narrow streets, working alongside WOW's door-to-door campaign. WOW provided households with bins for wet waste and bags for dry waste. However, challenges included limited space for waste storage and residents' resistance towards changing their habits. The "Wealth in Waste" mindset was promoted through continuous monitoring and community-level activities.

Key Findings

- **Panchayat Members' Insights:** The panchayat members noted that residents segregated waste when it was collected door-to-door by WOW and volunteers. They mentioned that residents prefer to keep waste outside their homes. Mixed opinions were expressed regarding charging fees and imposing fines. They suggested fixed collection times between 7am to 9 am and awareness programs for micro-commercial shops, which contribute significantly to street waste.
- **Commercial Shop Owner's Perspective:** The owner believed shopkeepers should be responsible for collecting the waste from the consumers and suggested for an awareness campaign for the same.
- **Volunteer and Resident Feedback:** The volunteer observed reduced street dumping and compliance with segregation during the campaign. Households knew about waste types but faced issues with consistent segregation due to a lack of awareness and family cooperation. They were unwilling to pay for door-to-door collection.
- **Waste Collector's Role:** There is erratic waste collection due to delay in wage payment to waste collector. The current waste collection timings are 9 am to 12 pm. The waste collector interviewed expressed an opinion that at least 2 persons are required for effective waste collection at the camp.

Suggestions:

- Repropagate awareness to households and micro-commercial shops.
- Implement reward-based programs to encourage segregation.
- Ensure at least 2 waste collectors with fixed collection timings.
- Organize summer camps and activities for children.
- Appoint adult and child ambassadors to monitor and reward segregation efforts.
- Address the misuse of provided bags and bins.

Overall, while the initiative saw initial success, sustained behavioural change requires ongoing monitoring, community engagement and consistent waste collection system.

Other Initiatives

Swachh Survekshan: As part of the Swachh Survekshan initiative, door-to-door campaigns were conducted in 9 slum communities covering over 8000 households to promote waste segregation and zero waste practices. WOW was recognized as a Swachh Champion by SDMC in 2021 for distributing cloth bags on Women's Day to raise awareness about Single Use Plastics (SUP). Meetings with nine stakeholders including slum panchayats and Self-Help Groups (SHGs) were held to discuss waste segregation. Four social support groups were formed and a painting competition for children was organized.

Nigam Haat: This initiative aimed to raise awareness about the 3 R's (Reduce, Reuse, Recycle) in collaboration with MCD Central Zone. Despite a weekend COVID curfew, the event attracted over 7000 citizens.

Volunteer Engagement: NSS volunteers conducted online programs on waste segregation and recycling for school children and door-to-door campaigns in slum areas covering over 1000 households.

Single Use Plastic (SUP) Drive: The "Panni se Kanni" initiative targeted public understanding of plastic pollution covering over 3 Lakh households, 5 mandis, 89 shopping complexes, 2032 shopkeepers, 2 places of worship and 18 retailers. WOW distributed 850 reusable bags to the citizens.

Public Encouragement: Various citizen groups, RWAs and waste entrepreneurs were recognized with awards such as Swachhagrahis, Saksham Award, Sampark Award and Sahas Award to name a few. WOW collaborated with SDMC South Zone for initiatives under the "Azadi ka Amrit Mahotsav" campaign, involving 18000+ participants in Swachhta Pledge Taking.

Overall Findings of Interventions related to Awareness

- Awareness campaigns on source segregation are effective when the importance is communicated and separate bins and collection systems are in place.
- Household and community ownership leads to sustainable segregation behavior and reinforces the polluter pays principle.
- Positive reinforcement and incentives are more effective than penalties for behavioral change at household and community levels.
- Children's involvement in composting and propagation activities promotes household-level segregation behavioral change.
- Single-use plastic drives lack follow-up mechanisms to evaluate changes in attitudes or practices.
- Model colony visits generate community interest and competition to become model colonies.
- Awareness campaigns in model colonies run for 3-6 months, whereas single-use plastic drives and waste changemakers programs are one-time events.
- WOW coordinates and networks with all stakeholders ensuring significant individual, community and social outreach.
- WOW's efforts are highly appreciated by all beneficiaries.

Wet Waste Composting Initiatives

Buddy Composter Initiative

The Buddy Composter was initiated by DC South MCD with WOW as the technical partner, aimed to promote home composting among residents. This analysis evaluates feedback from 11 participants to assess the program's effectiveness and suggest improvements.

The findings are:

- **Waste Segregation:** The common categories of wet waste include vegetable peels, leftover food and garden waste. Many participants have been composting for years showing long-term commitment.
- **Training Effectiveness:** WOW's trainings improved knowledge of composting techniques including layering and bio-enzymes. Practical tips for odour control were highly valued.
- **Motivation:** The motivation to become buddy composters stems from environmental consciousness and a desire to contribute to waste reduction efforts.
- **Challenges:** Resistance due to odour concerns and lack of motivation especially in densely populated areas.
- **WOW's Role:** Crucial in conducting workshops, providing training and distributing composting kits. Regular follow-ups were essential for sustaining efforts.
- **Impact:** Participants motivated up to 450 other residents to start composting as well.

Home Composter Initiative

The WOW Home Composter aimed to empower residents to manage wet waste through composting and providing hands-on training sessions. The efforts were further strengthened by providing compost bins to 2,397 participants. Feedback from 10 diverse participants, aged 43 to 71, from various SDMC South and Central zones, revealed key findings:

- **Prior Interest:** Many participants were already interested in composting but lacked practical knowledge.
- **Effective Training:** Participants found the training provided by WOW to be highly informative and hands on, particularly appreciating personal visits and demonstrations. Useful aspects of the training included guidance on managing moisture levels, controlling pests and the importance of proper waste segregation.
- **Ability to generate manure:** Participants began segregating wet waste effectively and generating manure for their gardens.
- **Motivation:** Many participants reported increased interest in home composting, motivated by environmental concerns and the desire to contribute to waste reduction efforts.
- **Advocacy:** Participants credited WOW for their new found skills and recommended the program to others, promoting wider community awareness and engagement.



Shefali, a homemaker from Sarvodaya Enclave, South Delhi began her composting journey during the COVID-19 pandemic due to improper waste management in her locality. Initially, she faced challenges such as bad odour, reptiles, flies and family disagreements. With guidance from WOW, she successfully started composting on her terrace.

Home Composter to Buddy Composter: WOW provided training and a composting kit which included cocopeat, enzymes and a compost bin. Shefali became a "Buddy Composter" tasked with supporting ten other home composters.

Role of WOW: WOW recognized Shefali's enthusiasm around composting and encouraged her to participate in a webinar to share her knowledge and encourage the participants to start home composting. This webinar boosted Shefali's confidence and she brought in almost 50 home composting enthusiasts to be part of this great initiative.

Challenges and Strategies: She interacts with them regularly through WhatsApp group and assists in their composting journey. This keeps members motivated as they constantly learn from each other. Though composting comes with its own challenges of odour; attraction of lizards, rats, flies; outstation gap; and adoption of seasonal composting methods - Shefali strongly believes that home composting can greatly help the environment and divert waste from getting into landfills.

Use of Manure: Through the generated compost she was able to grow a kitchen garden consisting of tomato, clove, mint, peppermint, bottle gourd, onions & capsicum. The extra manure generated by the composters is used for their own plants as well as donated to neighbours & public parks.

"I was just a housewife living in my shell, now I am an ambassador for home-composting"

Overall Suggestions

- **Enhanced Training and Support:** Continuous and frequent training sessions with follow-up support is essential to maintain momentum and ensure the sustainability of composting practices. Improved content for training sessions including more interactive and visually engaging materials could enhance learning and retention.
- **Community Involvement:** Increased involvement of children and schools in composting initiatives could foster early education on sustainability. Organizing community events and competitions related to composting could further engage residents and create more community composters.
- **Incentives and Recognition:** Providing incentives such as discounts or recognition at community events could motivate more residents to start composting. Implementing small, localized incentives like creating "green credits" for households that successfully compost could also be explored.

Dry Waste Management Facility

Reach: Dry waste is collected from schools, shopping malls, RWA- households, hospitals, hotels and government offices across different zones in Delhi.

Operations: The hub sorts a minimum of 500 Kg and a maximum of 1000 Kg of mixed dry waste such as plastics cardboard, metals, glasses and papers per day. Additionally, the confidential waste from entities like MCD and HCL undergoes proper shredding before being sent to the central hub. The hub has a balling machine to store higher volumes of waste to avoid space issues.

Livelihood and Income Opportunity: The hub generates sustainable and dignified livelihood opportunities for nearly 15-20 daily waste handlers on a regular basis. There are 2 regular staff members who receive monthly payments ranging from Rs 12000 to Rs 15000 providing a regular income stream. Other waste collectors earn Rs 500 per day.

Environmental Impact: Nearly 61.2 metric tonnes of waste with roughly 15 tonnes of reject waste is collected per month. The rejected waste mostly comprises of rubber, low-value plastic (LVP) and mixed waste.

Core Strengths of the WOW Program

Wide Community Engagement: Intensive door-to-door awareness campaign strategy ensures that diverse household groups are engaged in fostering individual and communal responsibility towards effective waste management behaviour. These efforts enhance rapport within the community thereby facilitating ownership of the program at the local level.

Multi-Stakeholder Collaborative Approach: Key stakeholders across the waste management ecosystem primarily Urban Local Bodies (ULB), NGOs, Volunteers and Corporates are brought together for a common cause. This collaborative effort promotes a unified approach to source segregation, fostering social and environmental change through waste management practices.

Wet Waste Management: Initiatives such as home composting and community composting are implemented to manage wet waste effectively. This action diverts methane-producing organic waste from landfills and significantly reduces pollution of natural resources.

Strong Handholding Support: The program provides comprehensive support including training and resource mobilization to stakeholders in need. This approach fosters collaboration and enables effective problem-solving for day-to-day challenges.

Proactive Effort: Through various initiatives like buddy composting and awareness campaigns, the program encourages and supports waste management initiatives by individuals and government bodies. This support and mobilization amplify the waste management awareness movement - translating ideas into actionable solutions.

3R Endeavour: The program promotes the principles of Reduce, Reuse and Recycle through awareness campaigns and practical measures like distributing jute bags. By emphasizing source segregation and recycling efforts, the program significantly reduces waste sent to landfills and contributes to environmental conservation efforts.

Conclusion and Recommendations

Conclusion

WOW is taking significant strides in revolutionizing the Solid Waste Management (SWM) landscape in Delhi. From April 2021 to March 2022, the program has facilitated various initiatives focusing on end-to-end sustainable management of dry and wet waste involving the key processes of segregation, collection, sorting and disposal.

The impact assessment finds that WOW has effectively taken on the role of the enabler with respect to all initiatives undertaken with the focus on Segregation of Waste At Source (SWAS) in the waste management ecosystem of Delhi.

The program has conducted awareness generation campaigns that cover nearly 405782 households (gated, non-gated, slum communities) from 418 colonies across 6 zones in Delhi. In addition to this, the initiatives have supported and nurtured nearly 2397 home composters, 252 buddy composters (south zone), 36 RWAs, NSS students, student volunteers and community volunteers as well.

Collaboration with Urban Local Bodies (ULB) with the established goodwill and legacy of ITC has been an instrumental factor in undertaking community level public engagement thereby resulting in higher social awareness value.

The program focuses strongly on Information, Education and Communication (IEC) campaigning to ensure engagement with all stakeholders, especially with households. By adopting the recommended measures and continuing multi-stakeholder engagement, the city can reach the normative stage of the behavioral habit adoption of source segregation, maximum reuse as well as recycling of dry waste and diversion of wet waste from landfills in the future.

Recommendations

Based on the findings and evaluation for future cycles of the programs, the implementation partner should consider the following:

Participatory Approach: The initiatives undertaken by WOW should have a strong feedback mechanism that captures inputs across all beneficiary groups and stakeholders alike. While conducting the baseline assessment, the needs of the beneficiaries and the knowledge-practice gap can also be captured using the Knowledge-Attitude-Practice (KAP) survey model. The same survey can be used for the end line for program evaluation.

Exit Strategy: A retention mechanism can be established by setting up a waste segregation club/committee at the ward level or an ambassador at the colony level to ensure the continuation of conditions that impact behavioral change.

Upgradation of IEC Material: Update IEC materials to include information related to the value chain of waste management through QR video links to emphasize the importance of source segregation.

Intervention Design: To promote home composting, a module with stage-wise reward system may be designed. For the model colony and camp initiative, reward reinforcement strategies may be used.

Use of Digital Resources: Higher leverage needs to be placed on digital resources for documentation and digital platforms for communication with different sets of stakeholders.