

We Segregate

Final Report



August 2024



Project Team



Residents of Kasturba Nagar Association (ROKA) is a Resident Welfare Association formed for solid waste management. ROKA is leading the ground level work for this project.



Okapi Research and Advisory is tackling complex socio-ecological challenges faced by cities. Okapi is the primary implementing partner for the Urban Ocean program in Chennai and is anchoring the We Segregate project.



Bottles for Change by Bisleri International is a recycling and awareness program aimed to tackle plastic waste by creating awareness among citizens and channelizing different types of plastics for recycling into non-edible products such as - fabrics, hand bags, window blinds and other useful products.



Chennai Resilience Centre (CRC) is a unit of Care Earth Trust and supported by the Adrienne-Arsht Rockefeller Foundation Resilience Centre and the Resilient Cities Network. CRC is supporting Okapi in implementation of the Urban Ocean Program and by extension the We Segregate project

Project Highlights

- **Approx. 325 kgs of soft plastics have been diverted** through the Punch the Plastic hooks and during a public waste collection drive organised by the project team in July 2024.
- **Lane composters have diverted 4700 kgs of wet waste** which has been converted into compost. The team has been able to monetize the harvested compost, earning ~ INR 4000/- since April 2024 which is being used for expenses related to the harvest.
- Through the project period of ten months, the team noticed **an increasing trend in waste segregation** with households following three-way segregation more consistently. This can largely be attributed to the Door-to-Door awareness campaign efforts of the project team. Between October 2023 and March 2024, buildings 'not segregating' dropped from 48% to 31% and those 'segregating well' increased from 37% to 54%. Conversations with conservancy (sanitation) personnel in August 2024 also corroborate this finding as they state that streets covered in the project area have been consistently providing well segregated waste.
- For "We Segregate" to continue to scale up successfully in the long run, **a collaborative Public – Private – Partnership (PPP) model is needed** which incorporates the three components of the project and pools in financial / other resources as a combined effort of multiple organisations.

I. Background

Indian cities are grappling with solid waste management (SWM) challenges. Source segregation in our cities is minimal or inadequate and a large portion of recyclable, reusable, and compostable waste ends up in landfills/dumpsites (Joshi & Ahmed, 2016)¹. Chennai is no exception – it has low rates of source segregation (~20 to 25 percent)² and a substantial portion of the mixed and contaminated waste ends up in the city’s two dump sites – Kodungaiyur and Perungudi. The lack of segregation also results in unsafe working conditions for the city’s SWM workforce and hampers recycling efforts. Recognising these challenges in their neighbourhood and having worked on improving source segregation rates since 2018, the Residents of Kasturba Nagar Association (ROKA) collaborated with the Urban Ocean team with the aim of transforming Kasturba Nagar into a near Zero Waste Ward. A first step in this direction is the “We Segregate” project funded by The Circulate Initiative (TCI) which deploys lane composters and Punch-the-Plastic or PtP hooks as means of promoting source segregation and long term behaviour change with respect to waste management.

II. The Goal

The goal of the We Segregate project is to create awareness on sustainable solid waste management practices in three streets of Kasturba Nagar – 2nd, 3rd and 4th Main Roads covering approximately 1004 households and providing residents with opportunities to divert: a) some of their wet waste away from the dump yards by composting them using the three lane composters set up by the project team and, b) their low value plastics, specifically multi-layer plastics or MLPs including single use plastic bags, through the PtP hooks designed by Indian Institute of Technology, Madras. These two interventions are enabling space efficient collection of plastic waste and providing uncontaminated, well segregated biodegradable / food waste for use in the lane composters, as well as to the waste collectors and/or aggregators.

III. The Project Activities

a. Lane composters and segregation of wet waste

The first lane composter was installed on 2nd Main Road, towards the eastern end and was inaugurated on 11th October 2023 by Mr. Mahesan, the former Chief Engineer, Solid Waste Management Department, Greater Chennai Corporation and the local ward councillor – Ms. Subhashini in the presence of members from the project team, the Residents of Kasturba Nagar Association, the community and officials from Urbaser Sumeet (fig. 1). The inauguration was covered by local newspapers such as [The Hindu](#), [DT Next](#), [Adyar Times](#) and [GCC’s twitter page](#).

Subsequently, in November and December the other two lane composters were installed. The team had decided to install and feed one lane composter at a time so that there is continuity in waste diversion to the composters: as one gets filled up and is composting, the others can continue to take waste. Currently all three composters are in operation.

¹Joshi, R., & Ahmed, S. (2016). Status and challenges of municipal solid waste management in India: A review. *Cogent Environmental Science*, 2(1), 1139434.

² [Urban Ocean Project Statement, Chennai](#)

As such the process of getting official permission for installation of the composters from various levels of the local government – Greater Chennai Corporation and the Ward Councillor – took nearly three months and involved several meetings. After this the team was able to get Urbaser Sumeet, contracted for door-to-door collection of solid waste from households in the city, also to cooperate with the team on the project. This is critical for long term success of the initiative.

The lane composters were ordered from Endlessly Green, a Bengaluru based company whose founders are well known for transforming and maintaining their community (HSR Layout) as a zero-waste neighbourhood. Of the three lane composters ordered two were of one model – Eartha, while the third was of a different model – Eira. Two different models were ordered to test and compare efficiency. Irrespective of the model, each composter has the capacity to take a total of 600 kgs to 750 kgs of organic waste and takes only 4ft x 3ft of space. Further, showing their support for the project, Endlessly Green has provided one tonne of high quality coco peat, equivalent to Rs 40,000 for free to the team.

Figure 1 : Inaugurating the lane composters (top left), airing and layering the composters (top right), measuring temperature of the composting waste (middle left); adding food waste (middle right, bottom)





Current Status: All three lane composters are working well and have been harvested at least twice. The composters are generating interest among residents, other associations and organisations in the city who want to set up similar systems in their areas. We have had visits from other resident associations, students interested in understanding ground level SWM processes including a bunch of Urban Fellows from the Indian Institute of Human Settlements (IIHS), teams from companies such as WIPRO (fig. 2) and the British High Commission who were interested in making their estate zero-waste.

The project site was also [toured by delegates and attendees from global cities](#) (that are a part of the [Resilient Cities Network](#) of cities working to fight plastic pollution and build resilience) during the first ever [Urban Ocean Summit](#) which took place in June 2024.

Outcomes

- **4700 kgs** of wet waste has been diverted through the composters from October 11th 2023 to August 20th 2024, which is nearly **27%** more than the project target!
- **1500 kgs** of compost has been harvested during the project period. About **580 kgs** compost was sold to residents (at an average cost of INR 10/- per kg) and also used for the CRC supported edible garden set up in a government school in the neighbourhood.
- About **INR 4000/-** has been earned by the team since April 2024 through compost sales. The income has been used for labour expenses related to harvesting the compost.

Figure 2 : Visit from the British High Commission (top left); Visit from Swachh Bharath Mission Nodal Officer (top right) ; Visit from members of Kotturpuram RWA (middle) ; Visit from WIPRO CSR team (bottom right) ; Urban Ocean site visit (bottom left)



Learnings from the Lane Composters

- **Urbaser Sumeet has been very supportive of the project**, enlisting their conservancy workers who drive the battery operated vehicles (BoVs) to cooperate with our field team. Conversations with BoV drivers also reveal that they are happy to empty their green bins into the composters and would be happy if more composters are installed because it saves them trips to the Micro Composting Centres. However, there are some ground level issues. The project is dependent on BoV drivers for collecting and transporting waste to the composters which is causing some challenges as there is no back up in the event of a worker taking off, waste coming in from commercial establishments and so on. The field team is working closely with Urbaser Sumeet to resolve these issues as they arise.
- In interviews we conducted, BoV operators working in the project area have indicated that **trips to the local Micro Composting Centre (MCC) they make to deposit wet waste has reduced significantly as they deposit most of the collected wet waste into the lane composters**. This is indicative that such a decentralised system could divert a substantial amount of burden from a city's central waste processing system. In addition, one of the BoV operators also mentioned that 2nd Main Road has been consistently producing better quality of segregated wet waste collection since the inception of the project in October 2023.

b. PtP hooks and dry waste

PtP hooks had been installed in 40 buildings across the three streets during Phase 1 of We Segregate, after repeated interactions with building associations, social media messages by ROKA and DtoD promotion activities. For the residents to understand what types of plastics to punch in the hook, an illustrative poster was designed and fixed near the hooks (fig. 3).

As mentioned in the Interim report and the project proposal, the PtP hooks are designed by IIT Madras and enable easy and space saving storage of soft plastics. It was decided to collect MLPs along with other soft plastics such as LDPE since a combination of both are required to produce a material of sufficient strength to be reused in various applications. Collection, transportation and processing of the 'hooked' waste is being done through [Bisleri's Bottles for Change Program](#) where Bisleri vehicles collect and transport the soft plastics to a waste aggregator - Spreco Recycling Private Ltd³ who bails the plastics and then sends it to trusted recyclers. The team conducted a due diligence visit to the Spreco processing centre to trace the journey of the collected waste. A detailed note on the visit can be accessed [here](#).

Initially, i.e. for the first six months, Bisleri was engaged in door to door collection of the soft plastics. However after March 2024, since they were unable to break even with collection and transportation costs, Bisleri has been collecting the plastics from one or two central locations. The project team has had to employ a paid resource person to do the door to door collection and deposit the plastics in these central locations for the Bisleri vehicles pickup. While initial discussions with Bisleri suggested that they

³ Incidentally, the founder of this company was part of UO discussion from the OAT phase in her earlier job with Saahas Zero Waste.

were not going to measure costs vs returns for their pickups, their goals have changed and in fact, the team is struggling to find an aggregator who would bear the collection and transportation cost for soft plastics. In this situation, the ideal solution is for the BoV drivers themselves to pick up the plastics in their daily routine and the team is exploring this option, specifically to understand how the plastics are being processed.

Current Status: Ten PtP plastic collection drives have been held since November 2023 with pickups happening approximately once in a month. Through the PtP hooks, a total of **220 kgs** of soft plastics including MLPs have been diverted as of August 13th 2024. Additionally, **105 kgs** of soft plastics were collected during a two day multi-venue waste collection drive held across Chennai in July 2024. This waste drive and other events conducted as part of the project are mentioned in detail in the upcoming section.

Figure 3: Buildings with the PtP hooks (top); poster (bottom left), Bisleri collection vehicle (bottom right)



Outcomes

- *PtP hooks have been installed in **40 buildings** so far. There are plans to install more hooks and discussions are ongoing with apartment residents and resident associations.*
- *Nearly **220 kgs** of soft plastics including MLPs have been diverted through the 40 PtP hooks.*
- *Additionally during the public waste collection drive in July 2024, **105 kgs** of soft plastics were collected.*

Learnings from the PtP hooks

- **Diverting plastics via the PtP hooks has worked better in buildings which were already segregating their waste to an extent compared to those which were not segregating.** This is because the hooks require a second, higher level of segregation involving washing and drying
- e.g. the milk packets.
- **The decision to collect MLPs and soft plastics worked well for the team** as it was easier to convince residents and make them understand that they needed to segregate all MLPs and soft plastics from hard plastics rather than picking out only MLPs from the soft & hard plastics. Further, since soft plastics are also low value, their absence does not affect conservancy workers or waste pickers who pick out high value hard plastics to sell (for recycling) as a source of income.
- **Multiple hooks are required for buildings with several households** so that they can punch all their plastics. Once the hooks are full in apartments that have a larger number of households, residents have been asked to move their plastics collected in the hook to a temporary arrangement like a sack or a box enabling residents to continue punching their plastics till the next scheduled pick up.
- The **residents have found ingenious ways to make the most of their hooks** – in buildings where segregation is happening efficiently and the hooks get filled up fast, people are collecting the plastics in bags which are hung on the hook. This highlights the role of the hooks as nudges for residents to segregate soft plastics diligently.
- The **team did face some push back from residents** in terms of not wanting holes drilled in the walls to install the hooks and complaints about the additional waste category to be segregated. The team worked on convincing these residents to segregate their plastics in a carton box

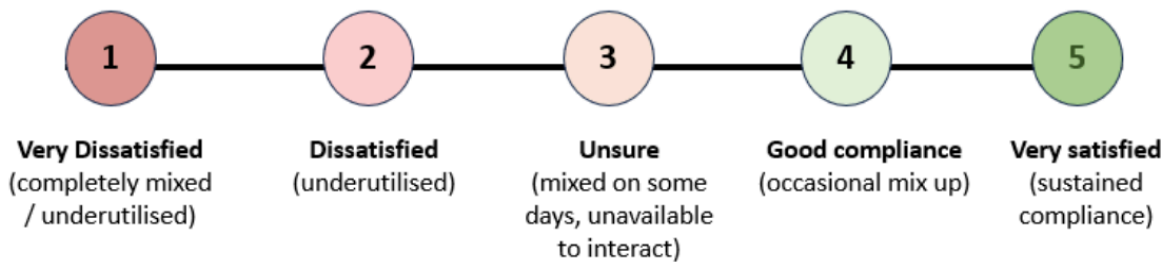
c. Door - to - Door (DtOD) campaign

The team began the DtOD campaign just before the launch of the lane composter on 1st October 2023 and continued it up to the end of July 2024. However there were disruptions after March 2024 since a new team had to be identified coinciding with summer vacation when residents were not readily available. Initially, in October 2024, two individuals were hired to help the ROKA team carry out the awareness campaign and check the common bins in each building on the three main roads. The purpose of the campaign was to promote source segregation amongst residents, to inspect the common bins in each building to ensure proper segregation is happening in practice so uncontaminated waste can be

diverted into the three waste categories and the PtP hooks. In buildings where segregation was not happening, the resource persons had to talk to the secretary or other individuals tasked with segregation – usually the watchman – on why it is important and how to segregate properly. A [brochure](#) has also been prepared and designed by the Okapi team which was used for the awareness campaign.

As the resource persons engaged in the DtoD campaign, they recorded data using a tool called KOBO. We used the data to examine changes in the segregation level in each building by using a rating system (fig. 4); the idea is to compare these ratings over a period of time to see how our efforts including the DtoD awareness campaign is transforming behaviour. Between October 2023 and March 2024, the team had rated 98 buildings (nearly 80%) of all residential buildings in the three streets more than three times. Additionally in Phase 1, 12 residents were appreciated as ‘segregating champions’, based on the door-to-door data, for their good work and were awarded with gift vouchers from an online shop selling natural home necessities.

Figure 4: Rating system used by the field team during the DtoD



Additionally, starting in Feb 2024, the team decided to change course in the DtoD campaign by going on walks with the Urbaser Sumeet BoV driver. These walks helped to better understand the ground reality of the level of segregation at apartments and the team also noticed that residents are responding better to instructions / evidence presented to them by the driver. During these walks, any lapses in segregation is communicated (through Whatsapp by sending photos) to the apartment secretary or SPOC (Single point of contact) immediately for further action (fig. 5).

Figure 5: Field team engaged in BoV walks



As mentioned earlier, the DtoD awareness campaign continued after March 2024 albeit with some challenges since the team had to hire a different set of individuals for Phase 2 (May 2024 - August 2024). The main challenge was that while the DtoD resource persons enjoyed interacting with the residents for awareness building, they found the job of monitoring bins and rating buildings accordingly, repetitive. This however is a critical part of the project and hence the team will need to think about alternatives to continue with both the direct resident interactions as well as the data collection, perhaps through different sets of people (e.g. the BoV drivers may be engaged for monitoring bins).

Lastly, as an extension of the DtoD awareness campaign, live events centred around waste segregation and sustainability were held quarterly with assistance from ROKA and other community volunteers. These events were designed to be completely zero waste, with even the medals and prizes made of recycled / repurposed materials.

a. Waste Drive: In July 2024, a two day multi-venue dry waste collection drive⁴ (fig. 6) was held across Chennai in over 10 public and private locations including the Kasturba Nagar Resident's Association Community Hall (KNRA Hall). This waste drive enabled citizens to bring in their dry waste (consisting of over 13 categories of household waste⁵) to be processed appropriately. Additionally, in KNRA hall, the drive acted as an extension of the We Segregate project by creating awareness on the importance of source segregation and the importance of bringing in high quality (clean and dry) waste so that it can be processed effectively.

ROKA coordinated with waste aggregators; Spreco Recycling, Recycle Mart and Wasted 360 Solutions who they have collaborated with during previous editions of this annual event. This established relationship is crucial as it allows for transparency in the aggregator's waste processing methods and helps the project team determine exactly whether this method adheres to the project requirements of reuse / recycling and not dumping or any form of incineration as a means of processing the waste. Across the venues, the drive was supported by community volunteers and college students who helped segregate the waste, collect data and support with logistics. The volunteers were felicitated with seed paper participation certificates in the spirit of keeping the event completely zero waste (fig. 7).

⁴ [Waste Drive Reel on Instagram](#)

⁵ Waste categories collected : Paper, hard plastic, soft plastic, cardboard, mattress, cushions, pillows, clothing, innerwear, footwear, bags, toys, books, X-rays, tablet strips, pens, metal, electronic gadgets and glass.

Figure 6 : Hand painted cloth banner for the waste collection location at KNRA Hall (left) ; Digital poster propagated on social media and through WhatsApp detailing waste categories, locations and contact number for the collection drive (right)



The drive participants were additionally enriched by a street play⁶, children’s skit and a limnology exhibition⁷ were organised at KNRA Hall. The children’s skit was scripted and directed by local volunteers and was enacted by the children of Kasturba Nagar, the latter diligently engaging in practice sessions for over a week prior to the waste drive event. Just like the drive volunteers, the skit’s participants were also felicitated with seed paper certificates. It was important for the team to have this kind of periodic engagement with the residents to keep them engaged and interested in the project.

About 7.6 metric tonnes of dry waste were collected over the two days of the drive, of which 105 kgs were soft plastics. The collected waste was handed over for appropriate recycling to the respective waste aggregators.

⁶ [F.E.E.T Society](#)

⁷ [EFI Lakes on Wheels](#)

Figure 7: A panoramic view of the waste drive at KNRA Hall (top); Street play on waste segregation (middle left); Skit by the Kasturba Nagar kids (middle right); Seed paper certificates for participants of the children's play (bottom left); Waste being dropped off at the drive (bottom centre); Segregated fabric waste (bottom right)



b. Play Cricket and Bingo for SWM: In the first week of March, the project team put together an interactive, fun event in the form of a Bingo game and a cricket match to reach out to more residents (fig. 8). The Bingo puzzle was designed keeping young children in mind and entailed a visual exercise where the participants had to cross off items they found in their household trash. The cricket match was subsequently held in a local playground on 10th March 2023 during the following weekend. The match culminated in a prize distribution for the winners and a discussion on the importance of waste segregation. As always, the event was completely zero-waste and even the medals distributed to the winners were made from recycled coconut shells. The cricket match was a huge success with over 30 residents both young and old participating in the event.

Figure 8: Cricket match participants (top left); awarding the winners of bingo (top right); medals made from dry coconut shells handed to winners (bottom left); bingo puzzle sheet (bottom right)



c. Waste Rally: On 18th November 2023, a rally was held in the streets covered by the project to promote source segregation (fig. 9). The rally was supported by Bisleri's Bottles for Change who decided to give certificates to all participants and provide placards for participants to carry. The project team were joined by enthusiastic young residents who were happy to join in this worthy cause.

Figure 9: Pictures from the Waste Rally



Outcomes

- Through the DtoD campaign, over a **1000 households** have been targeted since October 2023.
- **3 live events** have been conducted as an extension of the DtoD. This is not including numerous site visits for outsiders.
- **7.6 metric tonnes** of dry waste were collected during the public waste collection drive, of which **105 kgs were soft plastics** and **250 kgs were hard plastics**.

Learnings from the DtoD campaign

- Only after approaching the same buildings two to three times, is there some change in behaviour towards better segregation. Also, buildings doing good one month have also been found to deteriorate in the next. This suggests the **need for consistent, long term interaction and follow up with residents on a daily basis to ensure a real behaviour change**.
- **The DtoD campaign has helped to monitor and maintain hygiene and cleanliness** in and around the common bins within buildings.
- For conducting the Phase 2 DtoD, we explored the possibility of engaging volunteers from educational institutions and NGOs but we found that, for the most part, **such volunteers were more interested in short term / one time activities** that produced quick results than in a consistent assignment that needed a longer time effort and commitment.

IV. Impact of Interventions

- **Behaviour Change:** To better understand the impact of the project interventions on residents' solid waste management practices, two surveys were conducted with a gap of about 7 months. The initial offline (Survey 1) sample survey⁸ was conducted in December 2023 about three months after the commencement of the 'We Segregate' project and a second online survey⁹ (Survey 2) was conducted in August 2024 towards the end of Phase 2 of the project. The same population i.e. residents of Kasturba Nagar were selected for both surveys and the number of participants surveyed were the same i.e. 95 (~10% of the total households covered by the project i.e. 1004). Here are key findings from the surveys and the DtoD campaign :
 - Data gathered through the Phase 1 (October 2023 - March 2024) DtoD campaign suggests that at the beginning of the intervention, nearly half the buildings visited had completely mixed waste in their common bins (48%) whereas towards the end (at the end of 5 to 6 months), this percentage had dropped to 31%. **It is also encouraging to note that the buildings that are doing a good job in segregating into three categories consistently increased from 37% to 54%.**
 - Both the surveys showcase **an increasing trend in waste segregation** with more and more buildings and households following the three-way segregation system more consistently over 10 months. However, while there is an increase in the segregation levels, it is important to understand that for recycling / upcycling / reusing, it is **not enough to just segregate but ensure the segregated waste is of a high quality** (for e.g. the plastic milk packets needs to be clean and dry) that allows it to be recycled / upcycled / reused appropriately and this requires an additional effort of cleaning and drying the waste.
 - Different nudges seem to have been more effective in two phases of the project (i.e. first six months and later). Initially, 66% of respondents who segregate their waste (n=89) felt the **door-to-door awareness campaign** has encouraged them to segregate. Whereas 74% of respondents in the August 2024 survey stated that **ROKA's constant social media messaging** was what triggered them to segregate better compared to the 36% who chose the DtoD campaign. While these results are interesting, it must be noted that there were disruptions in the door-to-door campaign after March 2024 which may have influenced the result. **Therefore, more research and documentation over a longer period is required to accurately determine exactly which of the nudges impacted segregation behaviour.**
 - In terms of waste disposal, there seems to be a slight decrease in respondents using the apartment's private green coloured bins for wet waste (reduced by 19% in August 2024) and slight increase in usage of the street's public trash dumpsters (up by 6%). However, the percentage of respondents composting has significantly increased from

⁸ Survey link: <https://ee-eu.kobotoolbox.org/x/xK06rtRh>

⁹ Survey link: <https://ee-eu.kobotoolbox.org/x/0gOJb88h>

11% in December 2023 to 22% in August 2024. With respect to dry waste disposal, it is encouraging to see that survey 2 shows a **higher percentage of respondents using the PtP hook (27% in August '24 compared to 2% in December '23) and recycling their waste (48% in August '24 compared to 6% in December '23)**. The increased use of street bins suggests the need to work more closely with residents, especially those households where domestic help handles the waste and are more likely to dump waste in the street bins.

- We also find from Survey 2 that **respondents engaged in some other eco-friendly habits apart from waste segregation**, such as repairing broken possessions instead of buying new, carrying their own shopping bags and avoiding single use plastics such as cups, straws or take away boxes. This indicates that some level of environmental awareness is present and has been converted into action / habits by the residents' own volition. This state of action could further be leveraged to nudge residents to take on additional sustainable habits by creating targeted in-depth awareness on more complex topics related to waste segregation such as dignity of labour, material degradation, micro plastics, benefits of organic consumption etc. This would expose residents to the deeply interconnected nature of consumption, individual health, environmental degradation, waste disposal, pollution and how consistent yet small changes can build up to create ripple effects that convert small habits into the expected / enforced norm.

A more detailed report on findings from the surveys and DtoD campaign can be found [here](#).

- **Wet Waste Diverted:** As of August 2024, **4700 kgs** of wet waste had been diverted through all three composters
- **Dry Waste Diverted:** So far from ten soft plastic collections, nearly **220 kgs of soft plastics** including MLPs have been diverted through the **40 PtP hooks**. Additionally during the public waste collection drive in July 2024, about **7.6 tonnes of dry waste** have been diverted (fig. 10):

Figure 10: Dry waste collected at the waste collection drive in July 2024



- **Public Interest:** Other RWAs including members from Kotturpuram RWA have visited the project site. They are interested in the model and are currently exploring options to replicate this project in their neighbourhoods. Private and public organisations who wish to make their campus zero waste have also toured the project site to understand the operational nuances.
- **Residents' Response:** The Kasturba Nagar residents have taken a keen interest in the project activities right from the beginning. This was/is evident from the outcomes but also from our interactions with them during the DtoD campaign and in person events both in Phase 1 and Phase 2. As such, at the end of Phase 1 we conducted a community meeting (fig. 11) which produced valuable feedback to include in the project during Phase 2. The meeting yielded some key suggestions including ideas for targeted awareness aimed at different age groups and conducting field visits to waste recovery centres / dump yards for more impact on behaviour. Here are some other general feedback by the residents :



I don't feel guilty about my plastic getting to landfill and I can keep a count of the plastic used at my home and try to reduce it. My waste in the blue bin is almost negligible.

Well organised collection drive by ROKA. Every item had a designated collection spot to drop the same. Volunteers were helpful to guide visitors. Children performed cheerfully in the skit. Folk artists too. Really educational event organised by ROKA.

Source segregation is key in achieving better waste management at city level.

To prevent clogging of drains, rivers and oceans proper disposal of waste is important.

By following 3 bin Segregation, we can reduce waste going into landfill.

We can do it (source waste segregation) effectively if we start doing it at home and are strict about not using plastic and also use the veg and fruits feels as a manure for our garden.



Figure 11 : Compost being distributed to residents (top left) ; Community meeting in progress (top right) ; Harvesting compost tea and compost (bottom)



V. Way Forward - Sustainability Plan

The “We Segregate” project has thus far been successful due to the combined efforts of several organisations who have pooled together financial and other resources. However, for a project like this to sustain and scale up in the long run, some kind of collaborative PPP model is needed which incorporates the three components of the project :

- Maintaining the lane composters :
 - **Tap into CSR funding** to cover capital expenditure for the composters.
 - **Urbaser Sumeet staff** can conduct the operations and maintenance of the composters with ad-hoc support from ROKA community volunteers.

- Maintaining the punch the plastic hooks :
 - **Urbaser Sumeet to collect, transport and process the soft plastics.** Currently Urbaser Sumeet has established KPIs for the collection of soft plastics separately during regular waste collection shifts. These KPIs can be leveraged to continue the collection of soft plastics in the PtP hooks.
 - **Cost of installation of new hooks can be covered by building residents.** This would allow residents to choose where exactly to place the hooks according to their preferences.

- Conducting door to door awareness campaign :
 - **Collaborate with Urbaser Sumeet's Information Education Communication (IEC) team** to create awareness amongst the residents. DtoD by the IEC team could include monitoring of segregation behaviour to craft targeted content to address lapses in segregation.
 - **Create a MoU with local colleges and universities for students to act as community volunteers** to collect data, monitor progress and impart awareness as a component of their curriculum for credit requirements / community service hours.
 - **Individual building associations or building residents can set up internal systems** in their buildings to check bins and monitor compliance of their neighbours.

A detailed Sustainability Plan with current project / interventions' status and costs involved can be found [here](#).

For long term impact in SWM, there needs to be systemic change in the way waste is managed. While community initiatives can create awareness and some impact, the responsibility of running them cannot fall solely on the shoulders of the local community as it will become a burden for the RWAs. Therefore, a collaborative model where the local government, private companies contracted for SWM, corporates (through CSR money and volunteers) and community residents / RWAs all take charge of supporting sustainable waste management initiatives like the We Segregate project is necessary.