Is Chennai Ready for a Zero Waste Wedding?

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This report presents the experience of Kripa Ramachandran, Researcher, and Sriram Radhakrishnan, Community Organiser, in making a wedding in Chennai zero waste. They found that hotels and caterers would be willing to adopt sustainable waste management practices. What is required for effective waste management in Chennai is the right directive for Bulk Waste Producers and improvements in the infrastructure and working conditions of the waste workers.

CAG
Citizen consumer and civic Action Group

1. Background

In October 2017, the Greater Chennai Corporation (GCC) mandated door-to-door collection and segregation of waste by issuing a notice to every household. Neither was there any information on the arrangements, in terms of specific infrastructure and methodology to handle segregation, nor was there any penal provision in place for dis-incentivising non-compliance. While the notice was issued to every household, as reported in the media, no such instruction was issued to bulk waste and institutional waste generators to enforce in-situ management of waste.

Section 3(8) of the Solid Waste Management Rules of 2016 defines a Bulk Waste Producer (BWP). It says, 'a BWP means and includes buildings occupied by the central government departments or undertakings, state government departments or undertakings, local bodies, public sector undertakings or private companies, hospitals, nursing homes, schools, colleges, universities, other educational institutions, hostels, hotels, commercial establishments, markets, places of worship, stadia and sports complexes having an average waste generation rate exceeding 100 kg per day'. It also clearly prescribes the duty of certain BWPs. Section 4 (8) mandates all hotels and restaurants to ensure "segregation of waste at source, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorised recyclers". It further adds, "the bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible and the residual waste shall be given to the waste collectors or agency as directed by the local body". The Rules also envisage a corresponding local action plan by the Urban Local Bodies for its effective implementation. Until recently, the Chennai Corporation had not passed these rules, thereby letting the BWPs and their responsibilities escape through the cracks. In addition, Rule 4(4) clearly puts the onus on the event organiser/waste generator. It reads, *'No person shall organise an event or gathering of more than one hundred persons at any unlicensed place without intimating the local body, at least three working days in advance and such person or the organiser of such event shall ensure segregation of waste at source and handing over of segregated waste to waste collector or agency as specified by the local body'.*

It is in this context that we accepted a request to support a family reduce their waste for an upcoming wedding. The family had already taken many steps to remove plastic from the gifts and activities in the run up to the wedding. They continued to support us in the interactions with the hotel, caterer, decorator and even their wedding guests.

2. ZWW Methodology

Our approach was grounded in the waste hierarchy (Figure 1), which ranks waste management options according to sustainability and what is best for the environment. The hierarchy gives top priority to preventing and reducing waste production. If waste is not produced, then there is no question of disposal. When waste is produced, the hierarchy gives precedence to preparing it for reuse without further processing. The idea is to avoid the costs of energy and other resources required for recycling and other co-processing. This is followed by recycling and then recovery. To recycle something means that it will be transformed again into a raw material that can be shaped into a new item. Where further recycling is not feasible, it may be possible to recover the energy from the material and feed that back into the economy. Last of all is disposal, which entails sending waste to a landfill or incinerator. The proper application of the waste hierarchy

can help prevent emissions of greenhouse gases, reduce pollutants, save energy, conserve resources, create jobs and stimulate the development of green technologies.

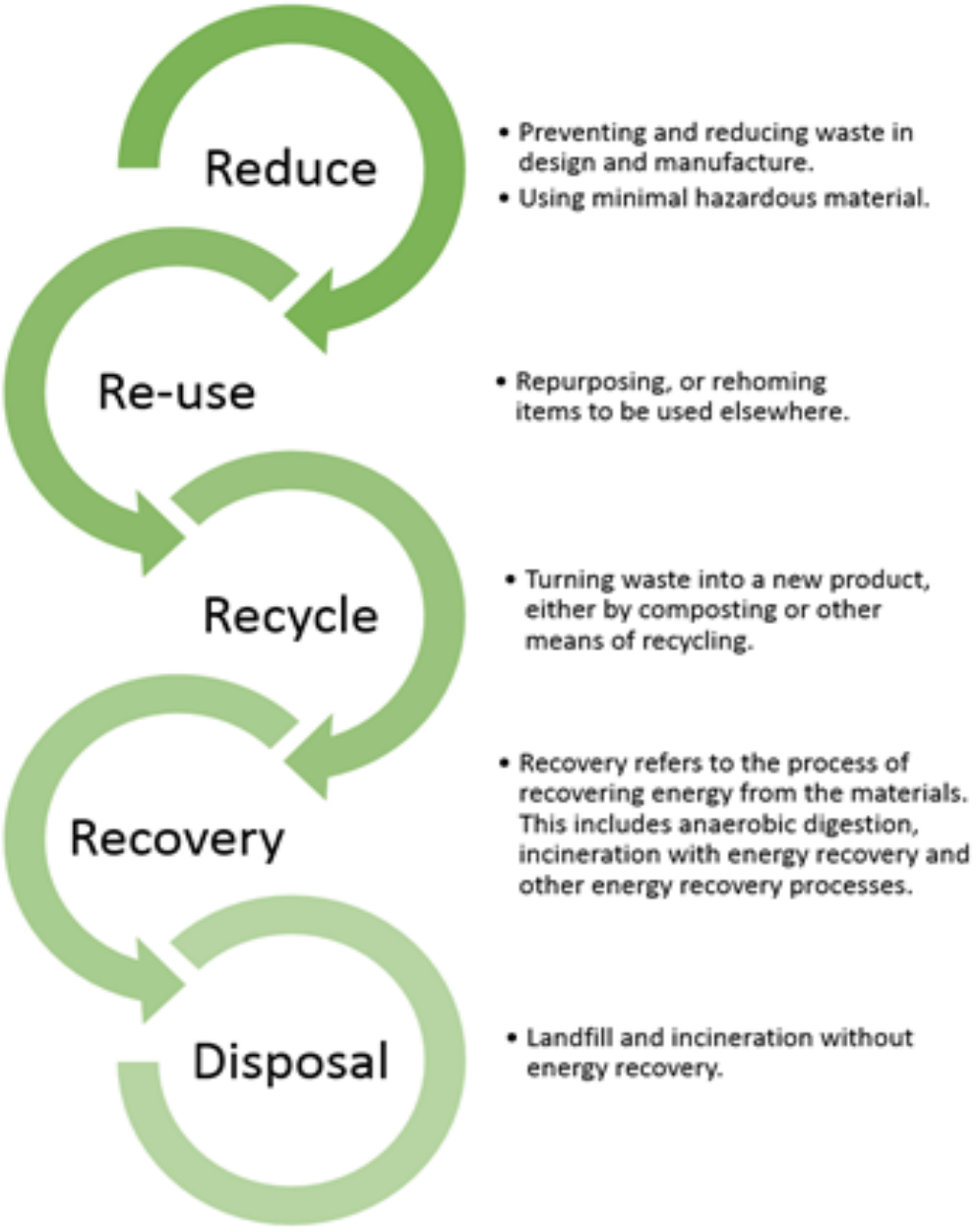

Figure 1: Waste Hierarchy

2.1. Zero Waste Wedding Protocol

We identified the most common activities of contemporary weddings and then mapped each activity to the possible actor who would be responsible for executing it. We looked at online sources, especially pinterest and wedding blogs, to identify the most commonly used materials during each of the activity, and listed potential alternatives for problematic materials and practices (Figure.2).

S.No	Activity	Actor	What to avoid	Sustainable alternatives
1	Wedding couture/saree shopping	Wedding party/immediate family	Avoid plastic covers and non-woven propylene bags	Buy sarees/ Dhotis wrapped in paper covers/ place them in cardboard boxes Carry your own bags/suitcases for shopping
2	Return gifts	Wedding party/immediate family	Avoid wrapping gifts in plastic covers	Gift seeds/ potted plants or simply the experience of a ZW wedding
3	Thamboola pai	Wedding party/ contractor	Avoid polypropylene bags that are passed off as cloth bags	Brown paper bags/newspaper bags prepared by SHGs
4	Thamboolam	Contractor	Avoid betel nut/areca nut , turmeric and kumkum sachets	Kotta paaku and small metal boxes with turmeric and kumkum in them can be given
5	Giveaway savouries and sweets	Caterer	Avoid plastic wrappers for laddu/seer murukku/adhirasam or such other sweets and savouries	Use palm leaf boxes/cases for sweets and savouries prepared by SHGs
6	Decorations	Wedding hall manager/ contractor	Avoid Styrofoam / thermocol name boards, welcome boards	Use newspaper stencils or cardboard letters
7	Stage backdrop	Wedding hall manager/ contractor	Avoid ribbons, ornamental flowers wrapped in plastics or other Styrofoam decorations	Use pre-constructed stage backdrops like bell frames, natural leaves and flowers
8	Janavasam car decoration	Wedding hall manager/ contractor	Avoid plastic wrapped flowers, ribbons etc for decorating the car	String natural flowers, leaves
9	Catering	Caterer	Avoid plastic table wraps, PET bottles for water, disposables like spoons, styrofoam cups, multi-layered cups for desserts and accompaniments like buttermilk, curd,	Use reusable cloth on the table that can be washed and reused. Serve water in steel tumblers, make sure all desserts are served in matkas or stainless steel ice-cream bowls with steel spoons. Fruits can be kept

			etc. Avoid wrapping fruits, dry fruits that are exchanged on the stage in plastic wrappers.	unwrapped on breathable cane, bamboo or wooden baskets, trays.
10	Segregation at source	Wedding contractor/ GCC Officials	Avoid mixing of organic and inorganic waste	Ensure removal of bin liners from the existing bins.Plan for separate receptacles to collect the different streams of waste and channel the organic waste to the nearest biogas plant or compost yard. Best is to insist that every Wedding Hall manage its waste within its premises as per the SWM Rules of 2016.
11	Gifts and compliments	Wedding party/ friends and family	Avoid taking bouquets, excessively wrapped gifts etc from friends and family and other guests. An enforcement team shall frisk these items at the entrance	Communicate to all the expected guests through all media – social media, whatsapp, invitations, personal calls to avoid plastic packaging and other disposable gifts. Alternately, you could set up a marriage registry and motivate people to gift cash.

Figure 2: Zero waste wedding protocol created by CAG

2.2. Reducing the waste at source

The said protocol was created to reduce the waste generated at source, without compromising on the different elements and events of the wedding. The protocol ensured that single-use plastic disposables were replaced with reusables and compostable alternatives, thereby reducing the bulk of the waste that would have to be sent to the landfill. This ensured that we were either reusing the materials or recovering energy or resources from these materials rather than disposing them at the landfill.

The second step was to ensure that the waste generated was segregated into different streams at source so as to channel them to the right destinations for recycling and recovery. But, the most important step was to ensure that the waste was collected in separate receptacles so they can be diverted to the appropriate recovery centres. The bin liners facilitate mixing of waste, so ensuring that the liners are removed before collection is important. A wedding or any celebration in our country is synonymous with sumptuous food and multiple lofty spreads, feeding anywhere between hundred and a few

thousands at once. This naturally means the generation of a lot of organic – both uncooked and cooked food waste.


Image 1, 2 : Single-use disposable cutlery replaced by reusable steel and glass cutlery

Our prime focus was the management of organic waste, since that comprised the bulk of the waste. Within the organic waste stream, there was organic dry waste such as uncooked fruits and vegetables, flowers, compostable bagasse cups and areca nut cutlery and paper, organic wet waste such as cooked food and organic non-compostable such as coconut shells, earthen pots. The second category was inorganic waste which comprised milk packets, plastic packaging and such other materials that were not organic. The third category was sanitary waste which was collected near the restrooms and hand wash areas. Given our limited engagement, we decided to keep the focus to the management of organic and inorganic waste.

2.3. Infrastructure mapping

We undertook a reconnaissance around the premises of Woodlands Hotel, situated in Ward 119, Zone 9 of the Greater Chennai Corporation, the wedding venue to ascertain the availability of in-situ infrastructure for composting/bio-methanation as per the SWM Rules of 2016. We studied the existing pattern of waste disposal at Woodlands by trailing a waste tricycle that exited the restaurant within the premises, and conducted informal interviews with the staff. This was followed by a simple mapping (Image 3) 1) exercise to identify the closest community recovery centres. Each stream of waste entailed special infrastructural arrangement that is grossly different from the other. For instance, the dry organic waste could be sent to the compost yard, but wet organic waste had to be necessarily sent to a biogas plant. We used a combination of crowd-sourced information, open-source data and RTI requests. As a part of our ongoing research on the state of SWM in the city, we had filed Right to Information petitions to solicit information on SWM infrastructure in the city. We collated the zone-wise responses for the city and used it as a starting point to understand the different kinds of processing centres operated by the GCC. We then looked up online to collect specific information on the existing infrastructure in Zone 9. To triangulate this information, we leveraged the contacts of active SWM champions in Zone 9. Based on the information available from all these

three sources, we finalised three waste processing sites for the organic waste (Map 1). We decided to deposit the inorganic waste in local scrap shops closer to the venue.

Image 3: Mapping infrastructure for resource recovery

3. Execution

3.1. Reducing the waste at source

The wedding was a two-day affair, with ancillary celebrations on Day 1 and the *muhurtham* (auspicious duration during which the wedding is solemnised) and reception on Day 2 . As a popular Tamil adage goes, 'your wedding caterer is as important as your wedding ceremony itself.' In recent times, a caterer pretty much takes care of nearly 75 % of the arrangements in a wedding as most parties choose to outsource a lot of back-end arrangements to them. As the first step, we worked with the caterer to arrest disposables at source and organize infrastructure for source segregation. Mr. K. Hariharan, Proprietor, Ayyappan Marriage catering services and a self-confessed sustainability enthusiast was very much on-board since the start. He instructed his staff to comply with our green-protocol and was himself very keen on learning about the outcomes of the exercise.

We got an opportunity to briefly chat with him on his take on the dire rise in the amount of disposables in wedding and event catering. He blamed it on the rampant consumerism, aspirational 'modernity' and the typical middle-class mindset of 'following the mob'. When we quizzed him about how many families would be willing to switch to a green-protocol which included simple measure like replacing PET bottles with steel

tumblers, his answer was not very encouraging. He again blamed it on the guest's sensibilities and their lust for everything 'convenient'. On the supply side, he also mentioned that since the demand for disposables has become the norm, labour for cleaning and re-using has not only become unavailable, but also very expensive, which pushes most people to opt for cheaper alternative that is 'use-and- throw'. In this context, he was appreciative of the host's intention and CAG's support to minimise waste. The caterer helped by substituting nearly all disposables with reusable cutlery or compostable cutlery (Image 4).

Image 4: Zero waste wedding catering spread with reusable and compostable cutlery

3.2. Segregation at source

Our first task was to remove all the black bin liners from the bins placed at different points in the venue, as suggested in the protocol. The bin liners make collection of unsegregated waste the norm and makes it convenient for the staff to dispose the mixed waste together, as was discovered during the reconnaissance. Convincing the contingent staff was the hardest part of this exercise. They resisted the removal of the liner for two reasons. First, it was going to add to their existing work, since they would now have to wash the bin after every use. The other reason was that this was contrary to the established working ways and they wanted a confirmation from the management before they could agree to work with us. We managed to remove the liner from the bins in which organic waste was collected at the kitchen, hall and other areas. However, many cleaners and support staff sneakily added them in our absence in other places, such as hand wash areas and front yard, etc. We were pleased to find the kitchen team (for the uncooked waste) in complete compliance with our protocol (Image 5).

The next challenge was to get the cleaners at the dining area to place the food waste directly into the bin without the liners. This was particularly difficult, because they were hired on sub-contract by the caterer, and at the time of hiring, they were not instructed on the change in the waste collection process. The alternate system of waste collection we proposed ensured that the paper liner and the bagasse cups and spoons (compostable alternatives to single-use disposables) were collected separately and the food remnants (banana leaves and cooked food) were collected separately (Image 6).

This again meant a layer of additional work for these workers, who were used to rolling the food waste with the table liner and disposing them into the black liners, to be cleared by other cleaning staff. A few workers came on board after much discussion, but they needed constant monitoring and supervision as they frequently slipped into their established way of doing things. With this, however, we had more or less finalised the arrangement for segregating organic waste at source. We were still left with a growing pile of other waste such as organic non-compostable like coconut shell, earthen pots (Image 7). We also had to address the inorganic waste from the stock and provision area and some PET bottles that were discarded by the guests.

Image 5: The kitchen team

Image 6: Banana leaves and food remnants Image 7: Non-compostable organic waste

3.3. Disposal

Our original plan was to have all the waste collected and disposed at different stations at the end of each day, since it would make logistics easier and cheaper. As the waste got accumulated, we were under immense pressure to have them removed from the premises,. The management wanted the waste removed as soon as possible from the mandapam for aesthetic reasons, while the contingent staff was running out of bins for collecting waste from the subsequent events. We requested the mandapam to provide more bins, but in vain.

3.3.1. Organic dry waste

We reached out to the Conservancy Inspector of Ward 119, Mr. Hazarathiah for help and he immediately turned up, despite being a Sunday (Image 8). We had already accumulated uncooked waste worth three large buckets (of capacity 75 Litres) and one drum (of capacity 100 Litres). He offered us more drums from the Zone office and promised to take as much organic uncooked waste into the compost yard tucked inside the Ward 119 office. As promised, he promptly sent two of his staff on the morning of Day 2 to collect uncooked organic waste collected in drums with a collective capacity of 425 litres. When the compost unit reached its full capacity, the waste from the second day's celebrations was sent to the compost yard in Ward 173, MRC Nagar.

Image 8: Conservancy Supervisor, Mr. Hazarathiah who offered immediate support

3.3.2. Organic wet waste

At the end of day 1, we had accumulated nearly three drums of 100 litre capacities each of cooked waste, a mixture of banana leaves and food remnants on it. This was sent to the biogas plant in Ward 173 in Zone 13. Since the biogas plant is operated at specific times of the day, the manager of the facility asked for the drums to be left the plant and that the waste would be put into the plant the subsequent morning. As instructed, the team left the left the drums in the wee hours of the night, with the hope that it would be fed into the plan the next morning.

3.3.3. Inorganic waste

We expected that the primary constituents of the inorganic waste would be milk, curd and butter milk packets from the kitchen which are primarily Low Density Polyethylene (LDPE), single-layer and multi-layer packaging from the kitchen supplies and other High Density Polyethylene (HDPE) materials such as oil and ghee bottles. As mentioned in the earlier section, we had decided to deposit the inorganic waste in the scrap shops and made an exception to the rule of removing the bin liners, by collecting inorganic waste in the tubs with liners, to facilitate easy transportation and disposal.

Image 9: The team inspecting the dry waste before disposal

As apprehended, the tubs were contaminated with a lot of food waste and other waste from the kitchen such as spoilt milk and curd. Our team tried to separate the non-contaminated ones so they can be deposited at the scrap shops, but it was almost impossible since most of them were smeared in milk and ghee which rendered washing and drying at large-scale very challenging. Multi-layer packaging waste, like single-use disposables have no recycle value and hence, they had to be sent to the landfills only.

3.3.4. Challenges

Despite creating a highly controlled environment for the segregated collection of waste within the wedding premises, there were several slips. Given the crowd and the limited

bargaining power of the cleaners, the bins in the common areas and guest areas near the wash rooms quickly filled up with mixed waste. This needed quick attention and the staff was left with no option but to empty the waste in bin liners and dispose them. As the crowd grew, there was very little scope to get everyone to segregate their waste. On Day 1, the caterer had sub-contracted the arrangements for desserts and other stalls to a different vendor who had no knowledge of the green protocol. He served ice-creams, sweets and fruit salads in plastic disposables. It was not possible to reverse this on such notice, but the vendor replaced them with compostable bagasse cutlery on Day 2 (Image 10).

Image 9: Disposable cutlery replaced with compostable cutlery on day 2

4. Discussion

The exercise helped shed light on a lot of compelling reasons for the poor state of solid waste management in the city. It was also an opportunity to witness first-hand, the inadequacies on the ground and other practical challenges that impede compliance to the SWM Rules of 2016.

4.1. Bulk-waste generators –The bitter waste picture

When we undertook a reconnaissance of the existing waste management practices at New Woodlands Hotel ahead of the wedding, we realised that there was no system in place to divert the waste from the landfill. Several interviews with the staff led us to a small bio-digester in an inconspicuous corner of the venue (Image 11). We inspected the machine to understand its capacity and functionalities. We were told by one of the security staff that some bit of the uncooked waste from the restaurant got processed at the digester, but no one was able to give us conclusive information on its capacity, output, etc. We also gathered from its dimensions that it would be too small to process the waste from the wedding. By trailing a waste tricycle (Image 12) from another hall in

the same premises, we learnt that the existing arrangement at Woodlands was set up for disposal at the landfill. We observed that the mixed waste from the halls was collected in black bin liners and sent to the rear gate of the premises, from where it was collected by the Chennai Corporation authorised waste collectors. This came as no surprise, as it was a mere reinforcement of the state of SWM practices at the city level.

Image 11: Bio-composter at Woodlands

Image 12: Existing waste disposal system at Woodlands

4.2. SWM Infrastructure- The demand-supply gap

The waste was segregated into organic and inorganic, and the organic waste was further divided into organic dry, organic wet and organic non-compostable. The organic waste

was to be taken to the compost yards or biogas plant we had identified. The compost unit in the Ward 119 (Image 13) office had a couple of raised concrete platforms, bound by a metal mesh for a compost unit. There was no information on the capacity of the unit, nor was there any sign of the unit being put to routine use. We found horticulture waste accumulated on one of the platforms, but there was no other organic waste. The Conservancy Supervisor told us that the unit was not being used because none of the households in the neighbourhood segregate their waste. When we asked about the effectiveness of the October notification that mandated segregation, he admitted that it was a failure on ground as there was no disincentive for non-compliance.

Image 13: Compost yard at Ward 119 office

We had collected nearly three large buckets with a total capacity of 325 litres and one large drum of capacity 100 litres worth of uncooked waste. The Conservancy staff emptied them into the first platform, layer by layer, sandwiching each layer with horticultural waste. The platform had reached its full capacity with the waste from just these four drums (Image 14) and the Conservancy Supervisor advised us to dump the waste that was waiting to be generated, elsewhere. We found a plastic shredder in the premises and enquired if there was a Material Recovery Facility to absorb the dry waste. The supervisor explained that the shredder had been unutilized since it was installed and had been non-functional for some time because it was left dormant and that, none of the authorities have really bothered to take stock of the facilities and their upkeep.

With respect to the processing of the organic wet waste, the biodigester design rendered it impossible to take in fibrous waste and ‘oily’ materials. This left a large part of the waste comprising banana leaves and the food remnants untreatable by the existing arrangement. On the first day, some cows fed on this waste, however, from informal interviews with the staffs in the biogas plant, we learnt that most of such waste was sent to the dumpyard.

Image 14: Compost yard at ward 119 filled with the waste from Day 1 of the wedding

Image 15: Cows feeding on banana leaves

We discovered a mound of food waste, mixed with disposable cutlery and PET bottles, packed in plastic bags on the other side. It looked like the waste from a hotel buffet. We walked closer, unable to bear the stench, but determined to rummage through the waste to confirm our conjecture. We found that it was from 'Crowne Plaza', one of the renowned star hotels in the city (Image 16). When we enquired why it had not been fed into the digester, the supervisor replied that 'it was too oily' for the digester; such waste was cleared by a compactor and taken to the dumpyard.

Image 16: Unsegregated waste from 'Crowne Plaza' at the plant

Some more interviews with the staff lead us to understand that most hotels in the neighbourhood, big and small, sent their unsegregated waste to the biogas plant so they can be processed there. However, the existing limitations of the plant force the waste to be sent to the landfill. Like the compost unit, there was no systematic log or any other information on the everyday functioning of the unit. It was as if, it was deliberately kept under the wraps, for, even the manual entry recording the input information (Image 17) was not only cryptic, but was also not made readily available for public viewing.

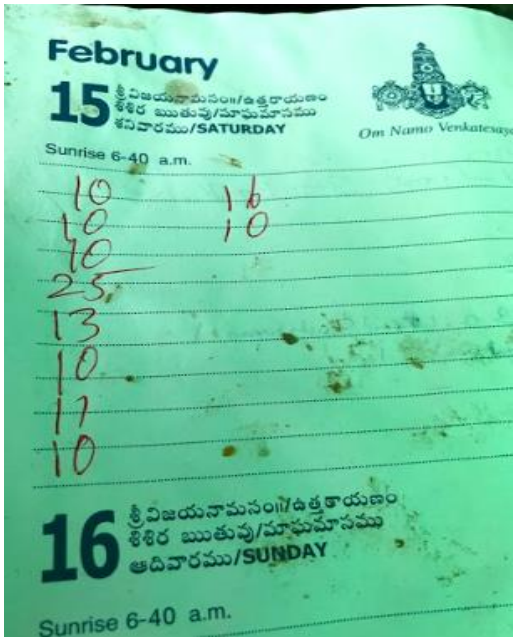

Image 17: Log book at the bio-gas plant

Image 18: Conservancy staff segregating food with bare hands

Despite a solid infrastructure and a state-of-the-art kind external set-up, the working conditions of the conservancy staff remained very poor. We saw one of the workers segregate food waste with bare hands to be fed into the digester (Image 18). We enquired if gloves, masks, shovels and other Personal Protective Equipment (PPE) were provided by the GCC. The worker told us that the masks and gloves provided were

inconvenient and unsuitable for the tasks involved. He explained that some of the tasks necessitated removing the gloves and wearing them repeatedly and the design and material of the gloves make it unfit for the purpose. The masks, he said, was made of poor material, usually fit for single-use only.

The waste from Day 2 was diverted to the compost unit at Ward 173, MRC Nagar (Image 19). A week before the wedding, we got one of the compost platforms assigned exclusively for the waste from the wedding. Here again, there were several constraints on the kinds of waste that the compost unit could absorb, like the other compost unit at Ward 119. We also realised that the supervisor of the compost yard was hesitant to take banana leaves and bagasse cutlery, because, he felt that 'composting these waste without shredding would not be as effective'. After the team made the supervisor understand the efforts that went into segregating the waste, workers were instructed to shred them 'manually'. Not only were the workers made to do what could be mechanised, the actual processing of the waste would also take longer than needed, thereby decreasing the potential for composting more waste. We also realised that the existing infrastructure and processes do not offer a space for processing and thereby diverting from the landfill, organic non-compostable waste such as coconut shells and *matkas* (earthen pottery). They were ultimately sent to the dumpyard.

Image 19: Banana leaves and remnant food left to compost after manual shredding

Despite all the inadequacies of the system, over the course of those two days, our team managed to divert nearly half a tonne organic waste and accumulated over 20 bags (74 X 94 cm) worth of inorganic and non-compostable waste. These 20 bags had to be sent to the dumpyard for the lack of better options. A very quick extrapolation and a rudimentary demand-supply analysis revealed that the existing infrastructure did not match the demand, both in terms of quality and the quantity. If the existing, functional compost yards were getting full with the waste from one of the BWPs in just one day, one can imagine the true scale of the waste produced in the city and the corresponding

infrastructure necessary to manage this. The existing process has no space for a lot of materials such as compostable bagasse cutlery, banana leaves, areca nut plates and spoons, all of which are compostable and therefore, sustainable alternatives to single-use plastics which are designed for disposal. The lack of complementary infrastructure like a dry waste sorting shed, organic waste shredder and infrastructure to process non-compostable organic waste made the attempt only partially successful. If a system is incompatible with the use of these compostable alternatives or worse, discourages its usage by routing it to the landfill, it's time for us to declare, 'Chennai, we have a problem', in an iconic Apollo Mission 13 style.

5. Is Chennai really SWM ready?

Over the course of planning and executing the zero waste wedding, our team met and interacted with several waste workers, who extended us generous support in waste management and also gave us insights into the workings of the current system. It was our experience that the state of waste management in the city is the result of the poor state of infrastructure, the lax rules, weak accountability, and the entire process designed for the landfill. With the 'tipping fee' model forming the cornerstone of SWM in the city, there is absolutely no incentive for the conservancy workforce or its agents to enforce segregation. Instead of drafting stringent bye-laws to give effect to the SWM Rules, 2016, the GCC has adopted an uninspiring route of handing 'notices' to the residents of the city to institute segregation. It is not backed by a robust process of collection of segregated waste and disposal in separate waste streams. The validity of this 'notice' hangs in thin air, with no legal sanctity and enforceability for either party. The case of the BWPs is only worse, since at the moment, no rules are applicable to them.

Even if the GCC were serious about the segregation it set out to achieve, it does not seem to have done the necessary homework to make this work on the ground. After much pushing by various pressure groups in the city, the GCC has finally framed the draft bye-laws a month ago. Instead of mandating that the BWPs manage their waste in-situ as envisaged by the Rules 2016, the GCC has offered to collect the 'segregated' waste from these non-residential entities against a user-fee. All this, when the corresponding infrastructure to manage the waste is inadequate and poor as seen in this case and multiple other visits to other processing units where the shredder was damaged and awaiting action *sine di* or the existing infrastructure was disproportionate to the volume of waste.

SWM is one of the key functions of any municipality. The GCC devotes a sizeable proportion of its resources, time and labour to SWM. In spite of this, it seems that the GCC does not seem to break-free from a system that is designed to fail the city and its residents. The Swacch Sarvekshan Report of 2018 has awarded Chennai the least rank among the Metropolitan cities. If the GCC is really serious about its SWM commitments, it has to hold public participation on the draft bye-laws, incorporate the demands of organised citizen groups and civil societies and waste pickers and make decentralised waste management as envisaged by the 2016 Rules, a reality for everyone.