

Championing Smart and Sustainable Solid Waste Management in the MMR

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Present situation of Waste Management

Today the policy of all Municipal Corporations is to pick-up all the waste of the city and dump it at one place - the Dumping Ground. They call this Solid Waste Management. Even this is not done properly, large quantities of waste are not picked up.



Amritsar Dumping Ground



Lucknow Processing Plant - Contractor Now Changed



Closed Processing plant at Pune Dumping Ground

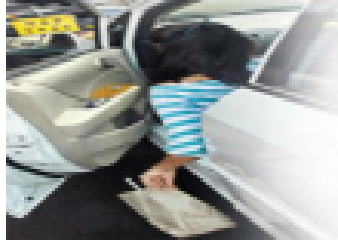


Pune Initiatives



Goa Initiative





Solution?



No authority anywhere can do proper waste management without involvement & active participation of the local community. Today there is awareness among citizens about waste management, environment etc. but there is need for change of mindset. The citizens need to realise that the problem is created by them and can be solved only if they get involved and dispose their waste in a proper manner. S
Our proposal is - Community & Municipal Co-ordination in waste management



Plan of Action - With Chembur As a Model

In M-Ward there are different kinds of waste generators

- 1) Bulk Generators - Marriage halls, Restaurants, hotels, Clubs, gymkhanas, religious places, markets, Etc.
- 2) Corporates / PSUs – BPCL, HPCL, RCF, BARC, TATA Power, Navy and their residential areas etc.
- 3) Industrial Estates, schools, colleges etc
- 4) Large housing colonies/complexes.
- 5) ALMs, Dattak Vasties, Slums, Roads etc.



Step 1 – Bulk Generators

There is a night (garbage) collection system for collecting waste from restaurants, hotels etc., in M-West Ward but due to lack of coordination very little garbage is collected as compared to the amount generated. As a result most of this garbage ends up on the roads, drains, overflowing bins. This is mainly due to the lack synchronisation of timings of the collection vehicle and the time of disposal by the generator.

We propose to have a meeting of all the bulk generators in M (East & West) Ward along with the conservancy staff to fix the timing and route for the night (garbage) collection.

This will result in cleaner roads and drains and fewer over-flowing



Step 2 - Corporates / PSUs

We have many big companies like BPCL, HPCL, RCF, BARC, TATA Power, Navy, etc. They generate more than 30 tons of garbage per day. They do not take care of their own garbage, but send their waste to the dumping ground.

We propose that since all these companies have enough resources i.e. funds, open area, man-power etc. they should take care of their garbage within their premises. The bio-degradable waste should be composted within their premises and the dry waste can be sold to recyclers or given to the agency that is permitted to collect the dry waste in the Ward by the MCGM.

We have written to them and had meeting with the concerned officers to convince them to take care of their waste. We also had two joint meetings with representatives of these companies to plan and support in implementing this proposal. Their response has been very positive.



Step 3 – Industrial Estates, schools, collages etc.

We have over a hundred schools, more than a dozen collages, many industrial estates, office and commercial premises like Bazolla Complex, Corporate Park, Swastik Chambers etc. All these places generate mainly dry waste so it is very easy to keep the “wet & dry” waste separately. A little bit of persuasion can easily give the required results.

We plan to visit all schools and colleges to make presentations and create awareness about the environment and waste management. We hope to involve other groups and NGOs also for this awareness program. We feel the stake-holders of this sector will be easiest to convince. Actually we feel that the students will play a very important role in making M-Ward a Model Zero Garbage Ward. Most importantly we are sure that the children in the Municipal Schools will be very helpful in convincing the slum dwellers and keep the ward garbage free.



Step 4 – Large housing colonies/ complexes

- Chembur has many large housing colonies / complexes. These are also of two kinds. The Housing Board, MAHADA colonies like Subhash Nagar, Tilak Nagar, Shell Colony etc. and private colonies like Chedda Nagar where we had managed to convince all the residents to segregate their garbage and also implement “House to House” collection. Overnight bins from eight different locations were removed and “House to House” collection was started. But due to lack of support from the conservancy Department the system was slowly destroyed.
- **We plan to** start with the private colonies like Chedda Nagar, Pestom Sagar, Mysore Colony where lots is already being done, Atur Park, Suman Nagar, etc. We have met the office bearers, sweepers, the JO, etc. of few of these societies to explain and implement our proposal and received a good response. After starting segregation and composting in these areas we will start with the Housing Board, MAHADA colonies like Subhash Nagar, Shell Colony etc.



Meeting with Housing Societies



Step 5 – ALMs, Dattak Vasties, Slums, Roads etc.

- We have noticed that even though some people may want to do composting in their buildings, they are unable to find any appropriate place in their compound to do so. For this we feel that, if permission is given by the MCGM, the ideal place for a building to do composting is ***ON THEIR TERRACE***. This will solve many problems related to Solid Waste Management. There will be ample space to do composting, no one will complain about bad odour, dirty looks, mosquitoes, cockroaches, rodents etc.
- **We propose** to do this slowly, few roads at a time. We plan to involve ALMs, Dattak Vasties, SSP (Slum Sanitation Project) groups) in slums, NGOs, Students etc. for this campaign.
- *We firmly believe that the slum areas cannot be ignored if we have to have a clean M-Ward; especially when 80% of the M-East Ward is slums. Since long the ALMs, the Dattak Vasties and the SSP (Slum Sanitation Project) groups have started working together.*

Terrace Composting



First ALM in a Slum

First ALM in a Slum formed in Lotus Colony in Chembur, Mumbai
People preferred to form an ALM & not have a Dattak Vasti.



Work in Lotus Colony After Forming ALM



Help From Corporates & Authorities

- We propose to approach the Corporates to sponsor / adopt these projects. We will also try to convince them to sponsor a Mobile composting unit, conceptualised by me. We have many such out of the box plans for success which we hope to discuss, fine-tune and implement.
- All this and more cannot be achieved without the active support and cooperation of the concerned officials. We have discussed these points with the higher officers of the BMC and have been assured full support.
- We have also got permission to use the Conference Hall of M-Ward for meetings of stakeholders like ALMs, Dattak Vasties, Bulk generators etc.
- We will need the active support of the respective Asst. Commissioners, the Conservancy staff, the Garden Dept., AO Schools, Health Dept. We need to have a meeting with the Heads of these departments to brainstorm, discuss, and decide the way forward because only then can we achieve Community & Municipal Co-

Additional Points to be Focused

Collection of segregated market waste & keeping the market area clean.

Organise a meeting with builders – Runval, Raheja, Kalpataru, Kukreja, Tridhatu etc. and telling them to introduce segregation & composting in all their projects as part of housekeeping.

Training of conservancy staff about various methods of composting/vermin-composting.



Kochi - Solutions



R.Vasudevan Plastic for Roads Head Thiagarajar Collage Of Eng. Madurai



Bio-Mining – To Create Space for Landfill & Processing Plants



Sand & building material from Debris and C & D Waste



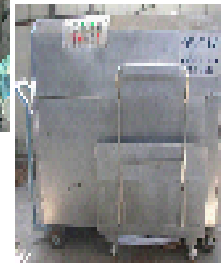
Mobile Composting Van



OWC System - Various models



Waste load is 200 kg
Power: 4HP 200kw
Capacity: 200 kg/day



Waste load is 500 kg
Power: 8HP 200kw
Capacity: 500 kg/day



Waste load is 1000 kg
Power: 12HP 200kw
Capacity: 1000 kg/day

Waste load is 1000 kg
Power: 12HP 200kw
Capacity: 1000 kg/day

Points to Ponder

- The MCGM claims that Mumbai city generates 6700 to 2000 Tons of waste per day. But what about the waste that is not collected and thrown in the drains, nullas, roads wetlands, mangrooves etc.
- What about the garden waste, silt, C&D and debris etc that is not sent to the dumping grounds?
- Does the MCGM have the TOTAL quantity of waste generated? Does the MCGM know the exact quantity of the components of the waste? (Like plastic, metal, paper, market waste etc.
- If you do not have correct figures, you cannot plan properly. Without proper planning there cannot be sustainable solutions.



Points to Ponder (Contd.)

- The MCGM has made it mandatory for all bulk generators (Those who generate 100 Kg. or more of waste per day. to take care of their own waste, or they will be penalised. This without reducing the TRC (Trade Refuge Charges) for the hotels & reataurents.
- This has given rise to many “Service Providers” who charge heavily from the bulk generators and are allegedly promoted by the conservancy staff.
- Why is there no monitoring as to what happens to the waste collected. Is it really processed. What happens to the compost and the dry waste that is collected?

Points to Ponder (Contd.)

- The MCGM has now come up with a incentive scheme to give rebate in property tax to societies that take care of their waste and not send it to the dumping ground.
- But societies which are segregating and giving their waste to the “Service Providers” who charge exorbitantly (Rs. 150 or Rs. 200 per flat), that come to Rupees 60,000 to 70,000 per month, are not eligible for the incentive of the MCGM.
- The highlight is that the MCGM has not/does not want to officially approve any of the service providers.



What can and should be done

- Laws must be made and strictly implemented for disposal of all kinds of waste.
- The policy of reduce, reuse, recycle must be encouraged.
- The informal sector to be inducted into the formal sector.
- All Stakeholders to be equally responsible for the proper disposal of waste.
- Extended producer responsibility (EPR) must be firmly implemented.



There is no Harmless waste
But there are ways
to harmlessly dispose Waste

Thank You