

Nothing is non-Reusable

Problem Statement:

Urban Development technique for solid waste management Garbage landfills.

What is Solid Waste Management?

Garbage arising from human or animal activities, that is abandoned as unwanted and useless is referred as solid waste. Generally, it is generated from industrial, residential and commercial activities in a given area, and may be handled in a variety of ways. However, waste can be categorized based on materials such as paper, plastic, glass, metal and organic waste. Solid waste disposal must be managed systematically to ensure environmental best practices. Solid waste disposal and management is a critical aspect of environmental hygiene and it needs to be incorporated into environmental planning.

Methods of Solid Waste Disposal and Management:

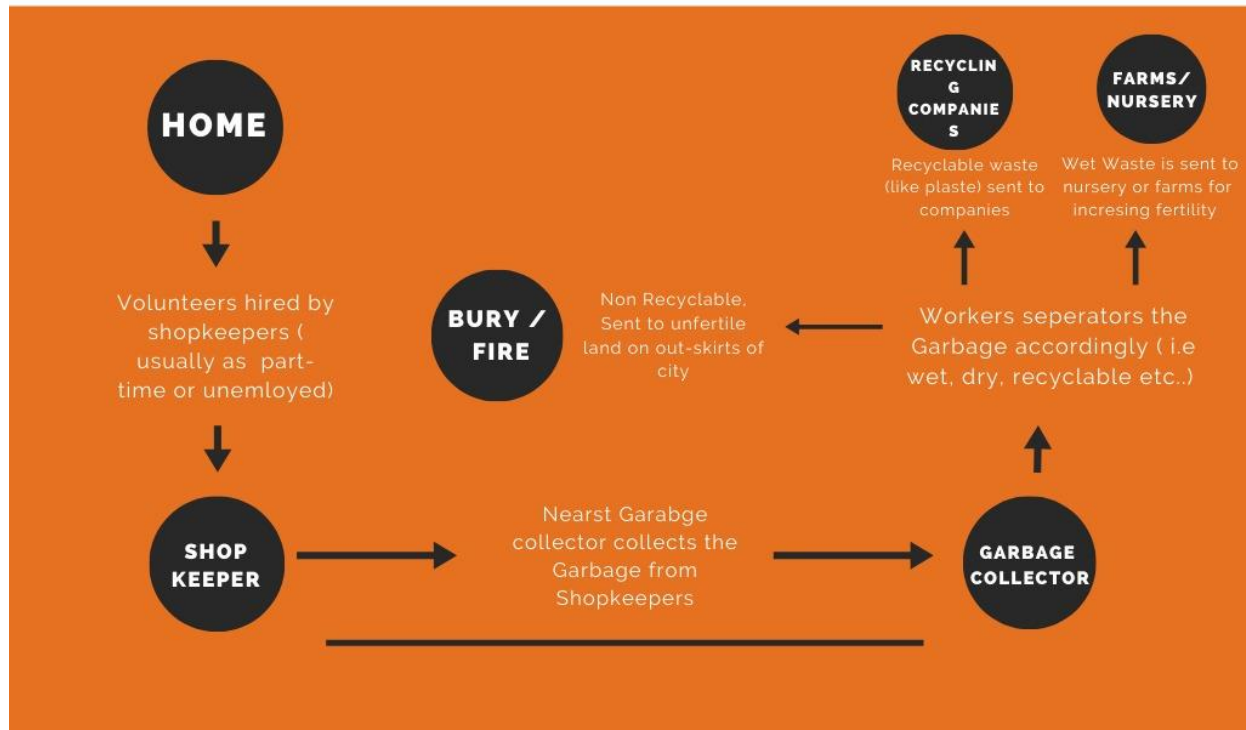
Here are the methods of solid waste disposal and management:

- 1) Solid Waste Open Burning (burning in out-skirts of town/city)
- 2) Sea dumping process (not preferrable – but can we can dump into sea in coastal area.)
- 3) Salvaging procedure (recycling the waste like paper, rags, metals etc.)
- 4) Composting process (Decomposable organic matter is separated and composted in this procedure. Which can be used as fertilizer.)
- 5) Fermentation/biological digestion (Biodegradable wastes are converted to compost and recycling can be done.)

Brief Description of our Garbage management technique:

HOW DOES OUR SYSTEM WORKS ?

A Helpful Guide



Home to Shopkeeper: The daily garbage produced at houses and streets by the people are collected by volunteers, allocated to a particular area and approaches the shopkeeper to store them for further pickups.

- The role of website for home(user) – each user can login in the website, check the nearest shopkeeper of their area and contact them. From the next day the shopkeeper sends a volunteer daily to that home. In case the home has extra garbage, which is recyclable then they can inform the shopkeeper/volunteer and sell them, in return they can have extra money for that recyclable waste.
- The role of website for volunteer – Usually volunteers are applying for part-time job, and get hired and they are allocated to their convenient area to collect wastes from all the houses. There will be different types of interfaces or UI depending upon the job they do. As a volunteer, when they login to the website they will be redirected to the page where they can see the place

details to which they have been allocated and which shopkeeper to approach. If possible, they will also have access to information about every house in their area. They just need to update the information on their page after every collection and volunteer will get paid by the shopkeeper for the number of wastes, he collected.

Shopkeeper to Garbage Collector: The shopkeeper collects all the garbage from the volunteer and stores it until a Garbage collector approaches that particular shop and collects it. Garbage collector's workers approach and collect wastes from all the shopkeepers in a particular area to which he has been allocated and then pays for the garbage (like 500 rupees for 10kg).

- The role of website for shopkeeper – Our website provides a separate interface for Shopkeepers, where they can know all details of houses and volunteers registered at their shop. Garbage collectors' s workers collect all the garbage from the shops and update all the information of what they do and how much waste they have been collected that day and shopkeeper will be paid by the Garbage Collector for the amount of wastes they have from that area.

Garbage Collector to Companies: Garbage collectors separate the wastes collected from different areas into wet wastes, dry wastes, etc. And decide which wastes to sell and which wastes to burn or bury. The wastes which can be recycled are sent to the recycling companies and wet wastes which are capable of increasing land fertility are sent to nurseries/farms and bury or burn the rest. Companies will have direct contact with the Garbage Collector. Collecting the waste from shopkeepers and sending them to the respective companies is the responsibility of the Garbage collector and lastly Garbage collector will get paid by the Companies/nursery/farms for the amount of wastes they have collected from every shopkeeper of different areas and the financial update must be done in their portals.

- The role of website for garbage collector: In the Garbage collectors' portal of our website, there will be a separate block allocated to display information on all the companies/farms. The garbage collector can select companies according to the wastes he collected and update the portal. When company/farm owners log in to the website they will be redirected to the portal where they will be getting access to all the available dry wastes, wet wastes, and information of

the Garbage collectors to deal with. Companies approach the Garbage collectors to collect the waste for recycling and pay them according to the weight of the waste.

- The role of website for Companies/Nursery/Farm: There is a portal for companies, nursery, farms or laboratory to register so that they can get the recyclable garbage or decomposable waste for fertilizer etc. Contact the garbage collectors and buy the garbage from them.

Rest of the garbage are buried or burned at the outskirts of the town/city.

Brownie Points

- ✓ The aim of this website development is to connect and manage the solid waste properly. So that there will be no segregated wastes on the streets and ultimately getting a clean environment out of it.
- ✓ At each and every step of the Garbage Collecting process every person will be benefited by selling garbage / buying / recycling or may be making their homes clean.
- ✓ The main purpose of including volunteers in this process is to reduce the unemployment by creating part-time or full-time opportunities.