



# Waste Management

Hand Book For **Housing Society**



## ROLE OF HOUSING SOCIETY

- People of different backgrounds and cultures stay together in a society. Depending upon the traditions and nature of people, different types of solid waste is generated in the society.
- Every society generally has a system of solid waste collection and transportation by Municipal / Panchayat vehicles but most of the waste is thrown along the roadside, in river streams or gutters. Such unorganised & mishandled garbage creates nuisance in the city during the rains and is also a health hazardous for the residents.
- If the society decides to manage their own waste scientifically, they can contribute to the environmental conservation and sustainability.
- A society can be listed as Green Society and every member of the society shall be proud to have contributed to the cause of Swachha Bharat Mission...

### 'MY GARBAGE MY RESPONSIBILITY'



## Segregation **Waste** Chart

Garbage is an issue which pollutes our air, water, and land altogether.  
As a result of unhygienic environment Malaria, chikungunya, Dengue Transmission rates are high.  
One humble request don't throw garbage anywhere, **please segregate and safely dispose it.**

### Wet Waste

The waste which decomposes is wet/ organic:



Vegetables

Fruit peels

Cooked Foods & Leftovers



Egg shells



Chicken bone



Puja Flowers



Tea Bag



Coconut shell



Leaves



Rotten Fruits

### Dry Waste

The waste which does not decompose is dry waste



Boxes

Plastic Bag

Milk/ Curd packet



Plastic Bottle



Paper & Magazines



Chocolate wrappers



Tetra Pak



Glass  
(Handle With Care)



Clothes



Shoes Chappal

### Domestic Hazardous Waste

Waste that includes harmful products should be given separately.



Bio-Medical waste



Diapers and Sanitary napkins



CFL Bulb



Razor Blades



Batteries



Pesticides

## EDUCATION AND AWARENESS:

Education and Awareness in the area of waste treatment and management are increasingly important from a global perspective of resource management. It is important to educate and create awareness for residents, garbage collectors and garbage contractors on proper waste management.

Waste Management in an apartment and the society on a broader level is 'Segregation of Waste at Source', but this method often fails because the garbage collectors mix up the waste upon collection. For proper and effective Waste Management in apartments, we need to reduce the generation of waste. Segregate at source and treat it suitably. There are several alternatives available for disposal of waste in a suitable manner.

**1st Best Practice**  
Waste Reduction

**2nd Best Practice**  
Segregation at Source

**3rd Best Practice**  
Treatment and Recycling





## Common Notice Board Posters & Stickers



## Signages



# WET WASTE TREATMENT AT SOURCE

## What is Composting?

Composting is the biological decomposition of organic wastes.  
In other words: Composting is nature's way of recycling organic material.

## Benefits of Compost:

- Supplies organic matter to the soil
- Attracts earthworms
- Stimulates beneficial soil microorganisms
- Increases soil water holding capacity
- Increases soil nutrient retention



HOME COMPOSTING



# TYPES OF ON - SITE WET BIODEGRADABLE WASTE TREATMENT

## 1. PIT COMPOSTING (upto 20kg/day)

To understand the design and the size of pit to be constructed it is essential to calculate the quantity of waste generated. A society may contact YIMBY to understand the design space required and options available in constructing Pit Composting.

### PROCESS

- Spread a layer of cow dung slurry or decomposed waste or cocopeat at the bottom of the pit before filling the waste for composting (2-3 inches thick).
- Spread the waste over the decomposed waste or cocopeat layer.
- As far as possible, cut large pieces of vegetables into smaller ones for better processing.
- A thin layer of the earth may be sprinkled over the waste daily to avoid bad smell.
- Repeat the procedure daily while depositing more waste.
- Once the pit is filled, close the pit by spreading a layer of 10-15cm of earth.
- Once the first pit is closed, use the other pits in the same way.
- Once the compost is ready, empty the pit and make it ready for use.







**YIMBY** 

## 2. DRUM COMPOSTING

(10-150kg/day)

- Ideal Community Size: 4-500 households
- Add-on Supplies: Cocopeat or ready compost and culture or EM
- Processing Time: 4 weeks



### PROCESS

- Shredded kitchen waste and compost culture is mixed and put in the drum for processing (70:30)  
Once a week, soak a handful of Neem Powder in water and sprinkle this water into the digester. This will help reduce flies, insects, and odour.
- 3-4 weeks is the processing time and the first batch of manure will be ready.
- Some part of ready compost is used as a culture for the next batches.



### **3. AUTOMATED COMPOSTING**

(ORGANIC WASTE CONVERTER & SHREDDER)

- An effective & effortless mechanized way of composting wet waste
- It takes 10-12 days for compost generation
- It is without heater, hence less consumption of electricity and preserves all the nutrients in the compost
- Automated OWC comes with 1- 5HP (range) heavy duty Shredder
- Best suited for waste generation capacity from 50 kg/day to 1000 kg/day



## 4. BIO METHANATION

(BIOGAS To ELECTRICITY / CLEAN FUEL)

- Bio Gas produced out of wet waste could be used for cooking gas / electricity generation
- Innovative compact plant design ensures less foot print
- Plants are designed to be portable, prefabricated in MS with FRP coating
- Provided with an in-built waste shredder
- Runs efficiently for waste generation capacity from 100 kg/day to 5000 kg/day



# INCINERATORS

## DOMESTIC INCINERATOR

- Household hazardous waste like sanitary pads, diapers, nails etc. need delicate handling and it could be disposed via portable incinerators.
- Negligible smoke at outlet, ash disposal is convenient through removable trays available in automatic & semi-automatic models.
- Approved by NABL certified laboratory.
- Power efficient model.





# DRY WASTE RECYCLING

## TRASH TRADE



- Each apartment can donate / sell all kinds of recyclable waste classified into more than 12 categories.
- Earn reward points against the exchange of this recyclable waste.
- Reward points could be encashed against any product or service from YIMBY.



For Trash Trade Contact YIMBY :7666033928

# LIQUID WASTE MANAGEMENT

It is imminent to treat the sewage and effluents generated in our households and the societies in order to protect our water bodies and ground water from being contaminated thereby affecting the local flora & fauna.

The treated water would be used for flushing as well as for gardening thereby conserving the amount of fresh water usage. And more so the treated water needs to be in compliance with State Pollution Control Board & Norms.



# SEWAGE & EFFLUENT TREATMENT

## PLUG & PLAY STP

- Based on Japanese technology called as Johakasu
- Great compact design in FRP built up
- Negligible civil works
- Fit & forget system with minimum operational costs
- Available in capacities from 2 KLD to 500 MLD.
- AMC & monthly O & M available .



## CONVENTIONAL STP

- Based on technologies like MBBR, SBR, ASP & MBR
- Space saving process layout.
- Economical in capital expenditure.
- Connects to tertiary treatment systems like UF and RO.
- RCC design based available in capacities from 2 KLD to 5 MLD.
- Prefabricated, design based available in capacities from 2 KLD to 500 KLD
- AMC & monthly O & M available





“The greatest threat to our planet  
is the belief that  
someone else will save it.”



JMB's Capitol Building 2nd floor, Canca Bypass Rd, Khorlim, Mapusa, Goa 403507  
7666033928 | [info@yimby.in](mailto:info@yimby.in) | [www.yimby.in](http://www.yimby.in)

This handbook has been curated by the GCCI - BIC committee