



BIODEGRADABLE WASTE MANAGEMENT

AT VILLAGE-LEVEL



WHAT IS BIODEGRADABLE WASTE MANAGEMENT (BWM)?

Biodegradable waste is a category of solid waste. It comprises of any organic waste such as kitchen waste, animal waste, crop residues and market waste. The process of managing this waste through proper collection and treatment, and converting it into useful products is called Biodegradable Waste Management (BWM).

Why BWM is necessary

BWM is necessary because it prevents hazards such as diseases, contamination of water bodies, etc. related to the incorrect disposal of biodegradable waste and helps to convert waste into usable products.



Ways to use Bio-waste

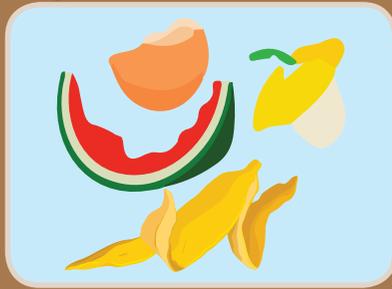
Bio-waste can be treated and converted into:

- Bio-fertilizer for promoting organic farming
- Biogas for cooking, lighting, running biogas-based engines and generating compressed biogas (CBG)

WHAT IS BIODEGRADABLE WASTE MANAGEMENT?



Crop residues



Fruit peels



Leftover food



Market waste



Animal waste



Segregation



Collection & transportation



Disposal & treatment



Biogas

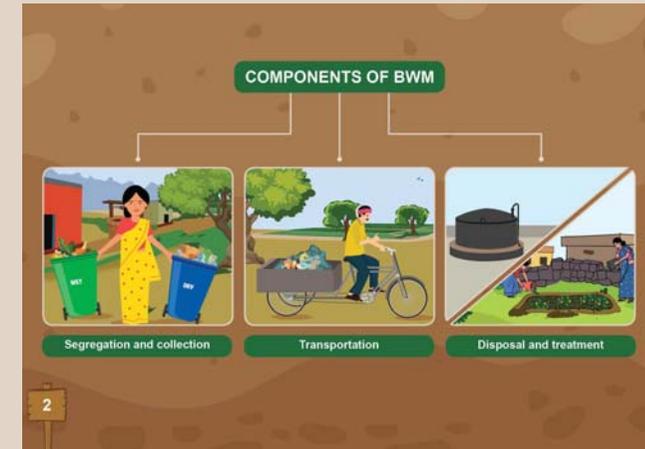


Organic manure



Kitchen garden

COMPONENTS OF BWM



Segregation and collection – separation and collection of biodegradable waste (such as plastic, glass, metal, etc.) in separate bins/containers for further processing



Transportation – this is necessary to safely transport the waste to the point of treatment if the waste is not being managed on-site (e.g., household/market place, etc.)



Treatment and disposal – using simple technologies such as composting or biomethanation to convert the waste into usable products



COMPONENTS OF BWM



Segregation and collection



Transportation



Disposal and treatment

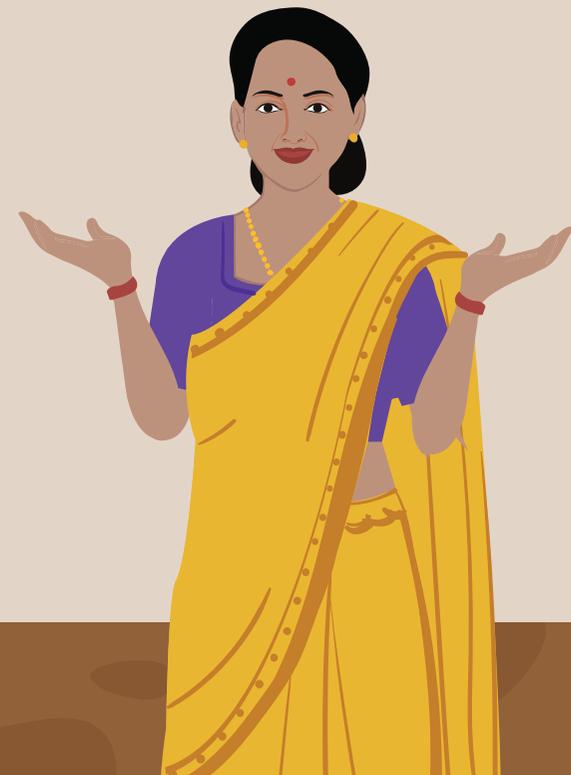
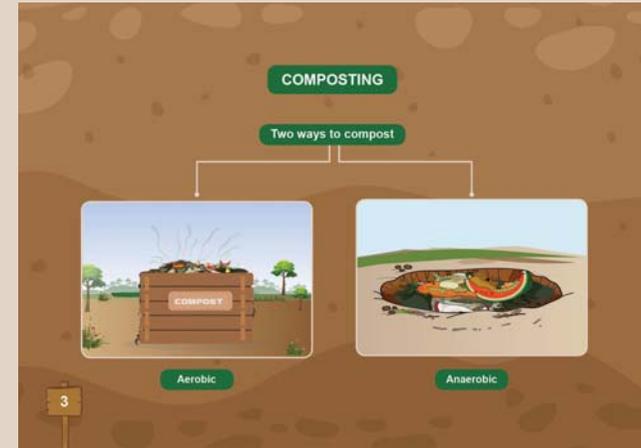
COMPOSTING

Composting is a controlled breakdown of organic waste under bacterial action, resulting in the formation of a humus-like material called compost.

Composting can be carried out in two ways:

Aerobic: This takes place when you use above-ground containers, a freestanding pile or a simple basket with perforations

Anaerobic: In this type of composting, you just need to dig a hole and prepare an organic mix to fill it. Seal the hole with a layer of soil and the process begins



COMPOSTING

Two ways to compost



Aerobic



Anaerobic

COMPOSTING TECHNOLOGIES



Household level: This includes pit composting, single pot composting, tripot composting, kitchen bin composting, portable bin/ bucket composting, ring composting and pipe composting

Community/Institutional level: This includes pit composting, pile composting, Nadepkaka (NADEP) composting, windrow composting, drum composting and vermicomposting



COMPOSTING TECHNOLOGIES

Household level

Community/
Institutional level



Pit



Single pot



Tripot



Kitchen bin



Pit



Pile



NADEP



Portable bin



Ring



Pipe



WINDROW



Drum



Vermicomposting

WHAT YOU CAN ASK YOUR PANCHAYAT TO DO?

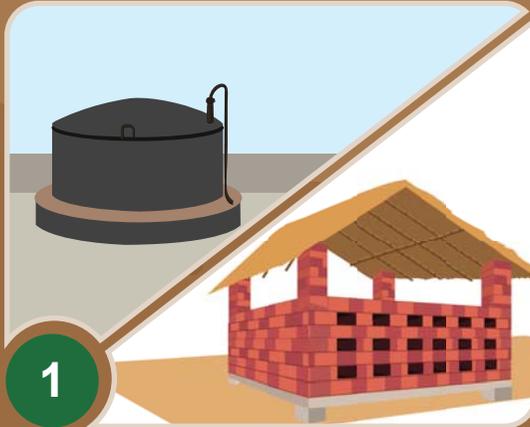


To ensure proper BWM in your village, you can ask your panchayat to:

- 1 Establish community-level infrastructure
- 2 Procure equipment for the collection, transportation and processing of waste
- 3 Engage local manpower/SHGs for everyday operations
- 4 Make the segregation of waste at source mandatory and prevent the burning of waste
- 5 Train service providers in the construction, repair and maintenance of assets
- 6 Engage with local NGOs if possible



WHAT YOU CAN ASK YOUR PANCHAYAT TO DO?





पेयजल एवं स्वच्छता विभाग
जल शक्ति मंत्रालय
भारत सरकार
DEPARTMENT OF DRINKING WATER AND SANITATION
MINISTRY OF JAL SHAKTI
GOVERNMENT OF INDIA

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