



पेयजल एवं स्वच्छता विभाग
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भारत सरकार
DEPARTMENT OF DRINKING WATER AND SANITATION
MINISTRY OF JAL SHAKTI
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सत्यमेव जयते



PLASTIC WASTE MANAGEMENT AT VILLAGE-LEVEL



NEED FOR PLASTIC WASTE MANAGEMENT (PWM)

Today, even in rural areas, we use and throw plastic products without thinking about the effect of our actions on human health and the environment. Although all plastics are a concern, the plastics that we use only once before discarding (single-use plastics [SUPs]) are even more harmful than the plastics we use multiple times.



Plastic waste poses serious concerns because:

-  It's non-biodegradable
-  It can contaminate the groundwater and choke the drainage channels
-  It can cause illness and death in grazing animals and marine life
-  Open burning of plastic waste releases toxic gases
-  Improper disposal/dumping of plastic waste on land leads to leaching of toxic substances into ground water and making the land infertile
-  It can also spread weeds and pests, therefore, affecting agriculture and wildlife
-  Low-quality carry bags, thin packaging films, etc. pose problems in collection, recycling and reuse

PWM is needed to reduce the problems created by improper disposal of plastic waste.

NEED FOR PWM

Non-biodegradable



Low-quality carry bags are harmful



Contaminates groundwater and chokes the drainage channels



Harmful to grazing animals and marine life



Releases toxic gases



Improper disposal/dumping makes land infertile



Harmful to agriculture and wildlife

PRINCIPLES OF PWM: REFUSE, REDUCE, REUSE AND RECYCLE (4Rs)



Plastic waste management is based on four principles:



Refuse: Refuse disposable and single-use plastics such as plastic straws, plastic cutlery and plastic bags; and avoid buying over-packaged items. If you refuse to use plastic products, less plastic waste will be generated.



Reduce: Reduce plastic waste by making greener purchasing decisions; use cloth bags, metal cutlery, etc.



Reuse: Reuse old plastics instead of buying new ones, e.g., use plastic bags repeatedly, refill plastic bottles, reuse plastic containers in the household, etc.



Recycle: Dispose of plastic responsibly using recycle bins/selling plastic waste to the recycler *kabadiwallah* and encouraging others to do the same.

It is the responsibility of each individual and household to follow the 4 Rs.



Refuse



Reuse



Reduce



Recycle

PRINCIPLES OF PWM

STEPS IN PWM VALUE CHAIN



Segregation at source: Do not mix plastic waste with other wastes. Keep a separate bin for plastic waste

Collection: When household waste is collected, plastic waste must be collected/kept separate from other waste. Individual households can also sell plastic waste to the *kabadiwallah*

Secondary segregation and storage of plastic waste: Plastic waste is taken to a village segregation shed where different types of plastic are segregated for further processing

Transportation to plastic waste management unit (PWMU): From the village shed, the segregated plastic types are transported to a plastic waste processing unit

Processing at the PWMU: Here, different types of plastics are shredded and baled for further use

Establishing forward linkages for recovery: Different types of plastic waste are used for different purposes (e.g., making plastic sheets for footwear, in road construction, etc.). Processed plastic is sent to different units for further processing and reuse/repurposing

STEPS IN PWM VALUE CHAIN

Segregation at source



Establishing forward linkages for recovery



Collection



Setting up a village-level shed



Secondary segregation and storage of plastic waste



Transportation to PWMU



Set up PWMU

DOS AND DON'TS OF PWM FOR THE COMMUNITY



Dos

- 1 Use jute/paper/cloth bags
- 2 Segregate plastic waste from biodegradable waste
- 3 Make sure that plastic cans, bottles and food containers are all free of any residue before disposing of them
- 4 Stuff multiple bags into one to prevent them from flying away and littering

Don'ts

- 1 Use single-use plastic
- 2 Dump plastic waste in public spaces
- 3 Burn plastic waste
- 4 Send non-recyclable plastic for recycling
- 5 Recycle toxic plastic material such as paint cans, pesticide containers, etc.
- 6 Mix e-waste, glass, metal, etc. with plastic waste

DOS AND DON'TS OF PWM FOR THE COMMUNITY

Dos

1



2



3

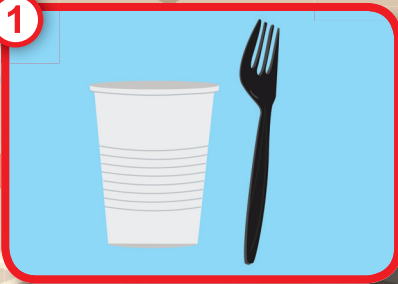


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Don'ts

1



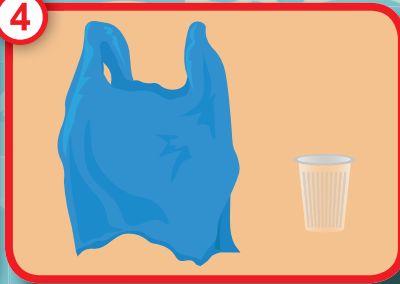
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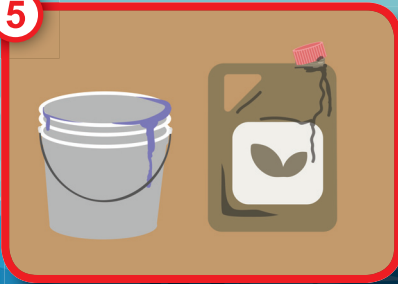
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WHAT YOUR GRAM PANCHAYAT (GP) SHOULD DO TO IMPROVE PWM

Ask your GP to:

Ensure village-level facilities for segregation and collection of plastic waste, such as :

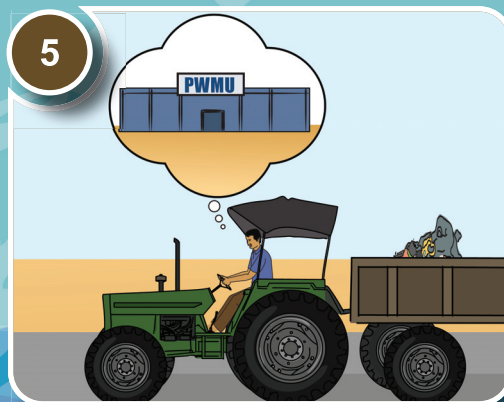
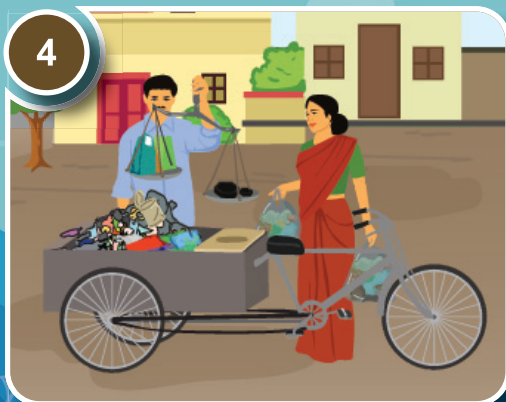
- Placing and managing bins in public places
- Ensuring segregation during waste collection
- Setting up a village-level segregation shed

- 1 Create awareness on PWM, including curbing the use of single-use plastic
- 2 Ensure door-to-door collection of plastic waste along with other waste
- 3 Ensure that the plastic collected is segregated and stored at the common village shed constructed/ available in the village



- 4 Encourage individual households to aggregate their plastic waste and sell it directly to the *kabadiwallahs*
- 5 Collaborate with district/block officials in shifting the plastic waste from the village segregation sheds to the PWMUs
- 6 Support the block in processing the plastic waste (shredding and baling) at the PWMU and in establishing forward linkages

WHAT YOU AND YOUR GP SHOULD DO TO IMPROVE PWM





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