

Chapter 16

Garbage In, Garbage Out

Dealing With Garbage

The waste materials especially household wastes are called garbage.

◆ Components of Garbage:

(a) Useful Components :

Those things present in the garbage which can be converted into useful products, recycled or reused are called useful components. For example, Fruits and vegetable peels, left-over cooked food, fallen leaves, used paper, some plastics, metals, glass, etc.

(b) Non-Useful Components :

Those things present in the garbage which cannot be converted into useful products, recycled, or reused are called non-useful components.

◆ Landfill:



Garbage which is collected from our house in trunks is dumped in a low-lying open area called a landfill. Some part of garbage that can be reused is separated out from the one that cannot be used as such. The garbage which is not useful is then spread over the landfill and then covered with a layer of soil. Once the landfill is completely filled, it is converted into a playground or a park. No building can be constructed on the landfill site for at least 20 years.

Vermicomposting

The process of converting plant and animal waste materials into manure (fertilizer) by rotting is called composting. The biodegradable domestic garbage such as fruits and vegetable peels, left-over cooked foods, and fallen leaves can be disposed of by converting it into compost.

Compost is a natural fertilizer. Compost is used as manure for growing plants.

◆ Vermicomposting:



The method of making compost from kitchen waste by using redworms (earthworms) is called vermicomposting. Vermicompost is very high-quality manure.

Steps for vermicomposting are as follows:

- (a) Dig a pit in your garden.
- (b) Spread a 1 or 2 cm thick layer of sand on the floor of the pit.

(c) Now, spread some vegetable wastes including fruits peels over the layer of sand.

(d) Sprinkle some water to make the layer moist.

(e) Put some redworms in the pit.

(f) Cover this pit with a gunny bag or a layer of grass.

(g) Leave it for 3-4 weeks.

(h) The excretions of redworms keep on collecting in the pit. These excretions of redworms make up vermicompost.

Compost is natural manure which does not harm the soil. It is cheap.

Fertilizers are man-made and harm the soil in the long run. It is expensive.

★ **Note:** Redworms do not have teeth. They have a structure in their body called gizzard which helps them in grinding their food. While preparing vermicompost some powdered egg shells or sea shells are mixed with the wastes. The hard particles of egg shells or sea shells help the redworms in grinding their food in the gizzard.

Tip: We should not use wastes that may contain salt, pickle, oil, vinegar, meat, and milk products. Because this may cause the growth of small disease-causing organisms called microorganisms in the pit.

Think And Throw

◆ Biodegradable Waste:

The part of garbage that can rot (decompose) in nature to form a harmless substance is called biodegradable. Garbage such as fruits and vegetable peels, left-over cooked food, fallen leaves, etc. rot (decay) when buried in soil for some time. For example, Fruits and vegetable peels, left-over cooked food, fallen leaves, paper, cotton, jute, wool, silk, cow dung, leather.

◆ Non-Biodegradable Waste:

The part of garbage that cannot rot (decompose) in nature is called non-biodegradable. The garbage such as plastics, glass, and metal objects do not rot (decay) when buried in the soil. For example, plastic, shoes, fibers, metals, etc.

*Green Dustbin - Biodegradable wastes are collected in the green dustbin.

Blue Dustbin – Non-biodegradable wastes are collected in the blue dustbin.

Recycling Of Paper

Recycling means collecting and separating the used and discarded waste items such as paper, plastic, glass, metal, etc., and sending them to the respective industries for making fresh paper, plastic, glass, and metal objects.

Example: Old newspapers, magazines, etc. are sent to paper mills and reprocessed to make new paper or cardboard. Broken metal objects, old and discarded plastic items are sent to plastic processing factories where they are melted and remolded to make new objects.

Papier mache:

A paste made of clay, paper, and rice husk is called papier mache. These pastes are applied to the basket to make it stronger. Photo frames, greeting cards can also be made with this paste.

Reuse and Reduce:

Reuse means using the same thing again. Ex: Reuse old chart paper to make greeting cards, old clothes can be used to make mats, etc.

Plastics – Boon Or A Curse?

**Boon:**

- Plastic is cheap and economical.
- Plastic is long lasting.

Curse:

- Plastic cannot be decomposed.
- All types of plastic cannot be recycled.
- Burning of plastic releases harmful gases which can cause health problems.
- Plastic bags thrown on roads get into the drain and can block the drains and sewer system.