

## PART 2

# Waste management

### Waste management

Waste is everybody's problem! You have just learned about waste and how it is affecting our planet and our life if not properly managed. Now it is time to show you what you can do greatly reduce your negative impact on the environment.

The extended 'Three R's' method:

1. **REFUSE** what you do not need
2. **RETHINK & REDUCE** what you do need
3. **REUSE & REPAIR** rather than throwing away
4. **RECYCLE** what you cannot refuse, reduce, or reuse
5. **ROT** (compost) bio-degradable waste

### 1 Refuse

If you are offered a product which is unlikely or unable to be disposed of safely, the best may be to refuse buying it. A good example here is to buy a soda in a returnable glass bottle instead of a soda in a plastic bottle.

### 2 Rethink & Reduce

Your first aim should always be to reduce waste at its source. Rethink what you really need and avoid using harmful products and unnecessary packaging.

*What are you going to do with all that packaging once you have bought the product? Try to reuse and recycle as much of the package as possible. Recycling breaks down the package and turns it into something else.*



### 3 Reuse & Repair - beat recycling any time!

Use items again and again!!! Zanzibar is full of people who are trained to repair broken tools, clothes and electronic waste. One person's trash is another's treasure (except for chewing gum).

### 4 Recycling – the possibilities are endless

Recycling is the process by which materials are collected and used to make new products. It uses less energy than producing goods from new material and is causing less pollution. Many materials can be recycled: plastic, metal, paper and soda bottles. Read on in Part III to get more information.



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## 4.1. The life of a battery

Batteries come in many different types, from the lead-acid batteries we use in our cars to the little button batteries in our watches. Whatever type of battery they all have chemicals inside them. Out of all lead, cadmium, and mercury are very toxic. Sending any type of battery to the landfill or burning means the contents of the battery will get into the soil, air, groundwater, and thus eventually into the food chain and drinking-water supply. Scientist found that one AAA battery pollutes 500 litres of water and one cubic meter of land for 50 years!

## 4.2. It's out there - recycled art

One great way of saving money and resources is using old packaging instead of new materials for arts and crafts projects. You will be surprised by what artists are making from the materials some people think of as just waste (e.g. visit Create Solutions in Mangapwani)!!

## 5 Composting

Compost is a dark brown, soil like mixture that is made out of biodegradable material that rots away quickly, like fruit and vegetable peels, egg shells, dead leaves (also called organic material!). If you mix soil with organic material and keep out other garbage like plastics and metal, you will get compost that can help plants grow faster, stronger and better.



**Why is composting important?** The earth creates compost all on its own. When organic material like leaves, branches and even dead animals fall to the ground, soil and creatures that live in soil such as worms, bacteria and fungi break down the material through a process called decomposition. The organic material turns into nutrients and food for other plants

**Benefits of composting.** Wow! Composting does seem to be an ideal solution to manage organic waste, isn't it? It (1) reduces the amount of kitchen waste, (2) attracts less flies, rats and crows, (3) improves the quality of the soil, and (4) is much less expensive than chemical fertilizer.

## How to make your own compost

### ① Choose a “pot” for baking your compost

There are several different “pots” you can make your compost in, such as:

- A plastic garbage bin with a 2 cm hole cut out all around the can
- A wire mesh or chicken wire “cage”
- A mound of biodegradable matter covered with soil, up to 1 meter in diameter
- A simple hole in the dirt, up to ½ meter in diameter, filled with biodegradable matter and covered with soil

### ② Place kitchen or yard wastes into your composting pot

Chop or shred the organic materials if you want them to compost quickly. You can put almost anything that will “rot” in your compost pile, such as:

- Vegetable and fruit peels, scraps and seeds
- Egg shells
- Tea leaves and coffee grounds
- Straw, grass, leaves, and wood
- Paper and paper products
- Ashes and sawdust
- Animal manure (from chickens, cows, goats, etc.)
- Fish wastes, including heads, tails or organs

Make sure to separate your waste and don't put the following in your compost:

- Meat scraps and bones
- Dairy, oil or fats
- Plastics, Glass, Metal

③ **Adjust the moisture in your pile.** Add dry straw or sawdust to soggy materials, or add water to a pile that is too dry. The materials should be damp to the touch, but not so wet that drops come out when you squeeze it.

④ **Allow the pile to “bake.”** It should heat up quickly and reach the desired temperature (32° to 60°C) in four to five days.

⑤ **Stir your compost** as it bakes if you want to speed up the baking time.

⑥ **The pile will settle down from its original height.** This is a good sign that the compost is baking properly. If you mix or turn your compost pile every week, it should be “done,” or ready to use, in one to two months. If you don't turn it, the compost should be ready in about six to twelve months

⑦ **“Best ever compost”** should look like dark crumbly soil mixed with small pieces of organic material. It should have a sweet, earthy smell and is now ready to use for your hungry plants in the garden.

