

# COMPOST MAKING

A guide for small-scale farmers

## What is compost?

Compost is material made from the aerobic decomposition of different organic wastes

## What do you need to make compost?

- ▶ Brown materials as source of carbon e.g. dry grass, maize stover, rice husks, etc.
- ▶ Green materials (optional) - to kick start the activity of microorganisms, and at times as source of nitrogen e.g. leaves of tithonia, gliricidia, comfrey, etc.
- ▶ Animal manure as source of nitrogen and microorganisms e.g. manure from cattle, goat, chicken, pig, sheep, etc.
- ▶ Other requirements include water, coarse organic materials like twigs, and at times native or anthill soil.

## Step-by-step procedure for making compost



**Step 1.** Mark the area where the compost is to be made using pegs. The width and height of the compost should not exceed 1.5 m. Lightly loosen the soil on the marked area.



**Step 2.** Place a layer of coarse materials such as maize cobs, twigs, maize stalks, etc. to a height of 25–30 cm.



**Step 3.** Add a layer of about 20 cm dry materials and moisten with enough water.



**Step 4.** Add a layer of about 10 cm green materials (Please note that this step is optional especially if compost is made in the dry season when green materials are hard to find).



**Step 5.** Add a layer of about 5 cm animal manure.



**Step 6.** Add a layer of 2–3 cm native soil or anthill soil. (Please note that this step is optional).



**Step 7.** Repeat step 3 to 6 until the heap is about 1 to 1.5m high. Remember to apply water every time the dry material is added.



**Step 8.** Insert a long stick along the full height of the heap to monitor the compost temperature.



**Step 9.** Turning of the compost heap - The temperature of the compost is the key determinant of the composting process and a guide on when the heap should be turned. Under normal conditions, turning should be done 2 to 3 weeks after making the heap.

**Please note:** Turning can however be done if a week after making the compost, the inserted stick still feels cold. This means the composting process has not begun or it is very slow. This could be due to:  
 (i) too little or too much moisture;  
 (ii) insufficient manure. In either case, the heap should be

turned to correct the situation. If properly done and timely turned, the compost should be ready after the 4th turning or approximately after 8 weeks. There are also instances where the compost is heating up too fast with high chances of the material turning into charcoal. This could be due to too much manure. In such a case, turning should be done and more dry material added.

**Water application:** Note that the best time to apply water to the compost is during the initial making process, and when turning. Applying water at the end of the compost making process is not encouraged as water might not go through the different layers to moisten evenly.