will clump together and be slow to break down.

- 4. Add manure. Green manure or any nitrogen source. This activates the compost pile and speeds the process along.
- 5. Keep compost moist. Water occasionally, or let rain do the job.
- 6. **Keep it covered**. Covering helps retain moisture and heat, two essentials for compost. Covering also prevents the compost from being over-watered by rain. The

compost should be moist, but not soaked and sodden.

- Turn. Every 3 weeks give the pile a quick turn with a pitchfork or shovel. This aerates the pile. Oxygen is required for the process to work, and turning "adds" oxygen.
- 8. The compost should be ready for use after 6 8 weeks. It should be a dark brown colour and the original materials should not be seen.





Compost Making Guide

This document has been produced with the financial contribution of the Swiss Agency for Development and Cooperation (SDC) and the Swedish Society for Nature Conservation, (SSNC). The views herein shall not necessarily be taken to reflect the official opinion of SSNC or SDC.

Production and Editing of the modules by EOA team Dr. David Amudavi , Hudson Wereh, Pauline Mundia and Venancia Wambua

Biovision Africa Trust P. O Box 30772 – 00100 Nairobi www.biovisionafricatrust.org

Module produced with support from:



Swiss Agency for Development and Cooperation SDC





2. Benefits of Compost

Making compost turns what would normally be considered as waste into something useful. By incorporating compost back into soil, we help maintain our soil for the future.

The benefits of compost are similar to those of organic waste produced by nature:

- Directly supplies macro- and micronutrients to plants.
- Improves soil structure and soil aggregate stability, resulting in better drainage, aeration, and erosion resistance. Microbes secrete glue-like compounds that help bind soil particles together.
- · Increases moisture retention (50 kg of humus can hold 95 kg of water).
- Slow release nutrients and increased Cation Exchange Capacity (CEC) thus increasing the availability of nutrients such as Calcium (Ca), Magnesium (Mg) and Potassium (K), reducing the need to buy fertilizers.
- · Increases the population of microbes in soil that continually make nutrients for plants.
- Helps buffer soil pH.
- Promotes disease suppression.
- Reduces the amount of waste that goes into landfills.
- · Can be sold to farmers and nurseries.
- Improves the quality of produce grown.

1. Description

Composting is a way of using organic waste and turning it into something useful: Compost. Compost benefits the environment and helps to improve the structure of soil as well as providing the nutrients and energy the living soil needs to stay healthy and support healthy plants. This manual explains the benefits of compost and how to prepare it.

3. Compost Preparation

Select a site that is close to a water source, raw materials and under shade (if possible) to set up your compost.

Other important considerations:

- Waterlogging The site to be used should not be prone to waterlogging. Water logging may lead to changes in pH and chemical reactions that affect the composing process.
- The site should be out of full sun this is necessary to prevent excessive heat build-up. Partial shade is best. Full shade will cool the compost too much.
- Placement on bare ground This is necessary for ease of drainage of a compost liquid by-product called leachate. This nutrient-rich "compost tea" is dearly loved by the living organisms in the soil, especially worms.
- Away from large trees or pesky vines the roots of trees and vines steal nutrients from compost (believe it or not!) as any leachate or moisture drains out the bottom. These same roots can also migrate up into the compost.
- Away from wooden structures any structure susceptible to rot should not be in contact with decomposing debris.



There are different ways of making compost but this guide will provide general principles of making compost.

- 1. Start your compost pile on bare earth. This allows worms and other beneficial organisms to aerate the compost and be transported to your garden beds.
- 2. Lay twigs or straw first, a few

inches deep. This aids drainage and helps aerate the pile.

3. Add compost materials in layers, alternating moist and dry. Moist ingredients are food scraps, tea bags, seaweed, etc. Dry materials are straw, leaves, sawdust pellets and wood ashes. If you have wood ashes, sprinkle in thin layers, or they