

KOLPING SOCIETY OF TANZANIA(KST)



**PRESENTS: THE IMPACT OF COMPOSTING
IN EMANCIPATING SMALLHOLDER
FARMERS FROM DEPENDENCE ON
ARTIFICIAL FERTILIZERS**

1.0 INTRODUCTION TO COMPOST

- Compost is a natural fertilizer that is made from recyclable organic materials.
- Compost is a key component of organic farming which aims to maintain soil fertility, promote biodiversity and minimize the use of synthetic chemicals.
- The raw materials used to produce this compost are readily locally available in the farmers' environment

2.0. Compost Production

❖ Ingredients /raw materials

- Green organic materials (Kitchen leftovers, weeds, Grass, Banana stems)
- Dry organic materials (Grass, Crop residues i.e. Bean haulms, Maize stovers, Coffee husks)
- Animal manure (From cows, goats, pigs, chicken, rabbits etc.)
- Urine from livestock or human
- Ash
- Rich top soil / forest soil
- Water – optional



3.0. COMPOST MANUFACTURING

❖ Compost manufacturing process and working tools

1. Gathering all the materials at the processing site and if possible, closer to application area.
2. Each ingredient is positioned separately awaiting procedural piling
3. Have in place all the working tools (matchet, hoe, fork, basins, bucket, pegs, rope, thermometer)
4. Select the place that has shade



4.0. Compost pile building

- Shredding all organic waste into small pieces
- Pegging the piling area (1.5m x 2.0m x 1.5m)
- Loosening the soil and watering
- Piling up layers in steps (moist soil, dry materials, green materials, ash, animal manure urine and top soil). Replicate until the height reaches the optimum manageable level.
- N.B. Layer for dry materials, green materials and animal manure have each a thickness of 30cm, 2 Litters of urine per layer, three handfuls of ash per layer and 5cm of soil.



5.0. Compost pile building Cont.....

- Covering the pile with dry grass that is not chopped
- Inserting the thermometer (Fresh stick) for temperature regulation
- Turning the pile after two weeks
- The compost pile is ready for use in two to three months time



6.0. Benefits of compost

- Improving soil health (Availing a range of essential nutrients, improving the soil structure, water holding capacity and fertility.
- Promoting plants tolerance to diseases and pests
- Promoting crops productivity
- Reduction to dependency on synthetic fertilizers
- Minimizing soil degradation and environmental pollution
- Cost effective



8.0. IMPORTANCE OF COMPOST MANURE

1. Promotion of small holder farmers (0.5 – 3.0 acres of farming land) resilience to climate changes
2. Assurance to food security
3. Open up to gardening and intercropping projects that enhance regular incomes



9.0. CHALLENGES HINDERING ADOPTION OF THE COMPOSTING TECHNOLOGY

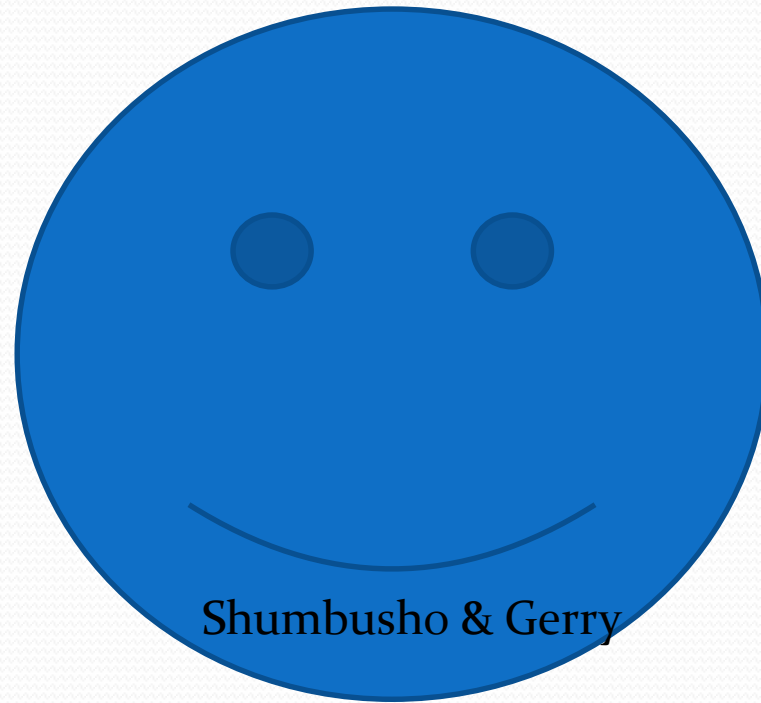
- Limited funds to transfer the technology to smallholder farmers
- Inadequate funds to implement the small stock livestock pay back scheme.

10. Appreciation.

In a special way, we extend our gratitude to the International Kolping Society, who have enabled us to travel all the way to Germany, but also share this valuable undertaking for the benefit of our resource deficit small holder members.

We pray that the fruits from this good work may contribute to Glorifying the Almighty Jesus Christ.

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Shumbusho & Gerry