



Waste Disposal And Management

51. Tambaza



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Introduction:

Waste management is a serious problem in Tanzania due to improper storage, collection, transportation, treatment and disposal. The waste management problem is common to urban populated areas with no necessary in restructure and social services.

The main pollution sources include municipal waste water, industrial effluent, gaseous emissions from industries and transportation activities and noise. Over 70% of diseases are caused by poor waste management and disposal.

Domestic waste water is the most serious source of water pollution since over 90% of the population use pit latrines and septic tanks for sanitation with walls which are not tight and such ground water can flow freely in and out of pill. About 10-15% of urban population has on access to sewage system which father contributes to the incidence of water borne diseases.

It is estimated also that the quantity of municipal solid waste generated country wide amount to more than 10,000 tones per day. As much as 80-90% of solid wastes generated in urban areas is not collected and most of the domestic wastes which account for about 60% of the total solid waste in disposed by burning or burying .



House hold level.

In house hold level there are two types of wastes i.e. Organic wastes and inorganic wastes. Organic wastes can be rotten and use as compost. Example food vegetables, fruits and leaves.

Inorganic waters are recyclable. Example apparel carton, plastic, glass, can and metal.

Non- separation of waste. Containing single contain Maintenance regularly washed at least once per day to prevent smell options for single containers. Bamboo basket Bucket /paint can Ordinary waste bin Plastic bags.

Pros
Uncomplicated
All waste combined in one
Not spilled
Easy implementation maintenance
Low investment cost

Cons
All types of waste are mixed.
Lesser economic value
More complicated and expensive in further treatment system due to the length duration involved in the separation of waste.

OPTION III: TAKAKURA METHOD

Composting container can be mode of Plastic basket / others which has good air circulation

Usage:

Organic waste (vegetables, fruits, leaves) with the exception of: food waste, tree /wood, durian skin.

List of steps:

Sealed basket side with used carton.

Put one chaff pad in the bottom of paslet.

Put compost / soil ½ basket volume.

Put chopped organic waste into basket, mixed thoroughly.

Put another chaff pad, black curtain and basket cover.

Compost will be ready in one month.

Capacity: 10 – 15 kg or 0.04 – 0.06 m³ waste /until .

Pros:

Appropriate for small or big areas
Simple
Has economic and ecology value
Appropriate for kitchen waste.

I: BAMBOO AERATOR METHOD

Explanation: Compo sting should be conducted in covered area.

Usage

Chapped organic waste.

Half compost as a result of composting in the sauna of waste

Instructions:

Make hole for air circulation, triangle shaped with same length (size 30 cm and length 1.5 – 2 meters).

Put waste / compost materials above the hole with cross wire (wide 2m x 1.5 m height 1.5 m – 2m).

One pile should be finished in 3 day s.

Poor adequate amount of water.

Turn waste around in the 2nd – 5th week.

Compost will be ready in the 6th – 8th week.

Capacity: 2- 3 tons waste /aerator unit.

Pros

Easy implementation
Medium investment
Economic value of compost
Supports treatment in source of waste
Volume reduction for utilized waste

Cons

Requires space and discipline of the composting personnel.
Attracts flies.
Inorganic waste and residues can slowdown the process and quality of the compost.

Conclusions:

It is recommended that

- The government and non governmental organizations and community based organizations to be involved in solid waste management (SWM) services so as to try reduce the amount of solid waste in urban areas.
- Private sector and investors should be encouraged to establish solid waste recycling systems in order to minimize the amount of the non degradable waste materials. This should also be the source of jobs and income.
- Industry owners should be encouraged to promote more production of alternative bags in place of plastic bags such as paper manufactured bags.
- Industries should also start to make use of the waste generated for economic purposes including biogas plants for energy needs. Like how it has been done in Tanga region where there is the world's first plant to produce electricity from sisal waste.
- There should be specific disposing areas in populated areas such market to avoid the risks of throwing wastes randomly.
- Wastes collecting tools should be improved so as to be more effective also protect the health of the on es doing the job.

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Further information:

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