

**TITLE: COMPOST FOR FOOD SECURITY AND MITIGATION
MEASURE TO ENVIRONMENTAL SANITATION DEGRADATION**

PRESENTATION OUTLINE

1.ORIGIN AND CONTEXT OF THE PROJECT

2.THE COMPOSTING PROCESS

3. THE STRATEGIES USED

4.IMPACTS

5.CHALLENGES

ORIGIN AND CONTEXT OF PROJECT

- A project by Katosi Women Development Trust, a women's NGO operating on the shores of Lake Victoria to increase food security and improve environmental sanitation.
- We work in a fishing community through women community based groups ,currently networking 11 women groups
- we were initiated into the area to promote women into fishing which was considered men's activity and through these fishing projects women owned boats and could engage in fish trade favorably

ORIGIN AND CONTEXT- CONT'D

- Introduction of the Nile perch into lake Victoria ,a predator on other fish reduced specie diversity from over 300 to 3 fish species.
- Introduction of the Nile perch to the international market made fisheries sector became more export oriented to the disadvantage of the local fishing communities.
- Food insecurity set in as less and less fish was available for consumption among local communities who lacked farming culture ; families had one meal a day due to acute lack of food

ORIGIN AND CONTEXT- CONT'D



Export orientation of the fisheries sector leaves fishing communities and local consumers with no fish for consumption except the by products; the head and skeleton bones.

ORIGIN AND CONTEXT- CONT'D

- Unemployment became rife; communities couldn't access fresh fish for local processing through smoking; over fishing set in because of too many fishermen yet low fish stocks.
- Fishing communities intensified land based activities through farming, timber felling, sand mining and wetland cultivation among others.
- Booming economic activities thriving on international fish trade attracted many people so increase in population.

ORIGIN AND CONTEXT- CONT'D



**Women who trade juvenile fish keep juvenile
Fishing a flourishing business for fishermen**



**Women no longer earn incomes from fish
smoking due to lack of access to fish locally.**

ORIGIN AND CONTEXT- CONT'D

- There were increased effluents from poor farming methods, use of chemicals ,poor hygiene and sanitation so risks to soil degradation were high.
- Land /soil management issues became critical issues to address to replenish over tilled soils to increase food yields; to reduce the devastating effects of increased land activities degenerating ecosystem of the lake.
- Composting was introduced and integrated as a critical component of our sustainable Agriculture projects; to reduce effluents from inorganic farming, poor hygiene and sanitation waste into the Lake ecosystem .

THE COMPOSTING PROCESS

- Compost is made out of non soapy kitchen waste, with animal manure obtained from zero grazed cows, chopped grass cuttings mixed together in hand dug pit.
- Piles are protected from the rain with a roof shed over it and a plastic sheets are further covered over the piles.
- Involves periodic turning of heap inside out every 2 weeks.
- Heap is shoveled out to another pit for better balance of microbial activity to enhance faster decomposition

COMPOSTING PROCESS –CONT'D

- The temperature is monitored periodically by feeling it down through the pit using locally tailored sticks.
- Process is finished in 8-12 weeks with fine compost produced.
- It became obligatory for each household to make compost have a back yard garden or farm garden where the compost is applied .
- Women supported with wheel barrows and bicycles to carry compost manure to the far farm lands; extension support at household level to monitor process between households.

COMPOSTING PROCESS –CONT'D



A compost pile for Kisakye Women group. Exposure visits between women groups to group compost making sites eases peer learning for adoption of compost skills and knowledge.

COMPOSTING PROCESS –CONT'D

- Compost is ready to use with observable characteristics
 - Dark brown or black color
 - The temperature inside pit about same as that outside
 - soft and easy to spread
 - Volume of the pile will be low than before.
- The fine compost produced has improved soil texture, increased the soil's water-holding capacity
- Was first added to household backyard vegetable and fruit gardens ; later to bigger farmland and has increased individual household food production.

COMPOSTING PROCESS –CONT'D



Women groups are encouraged to work together to apply compost to individual household kitchen gardens obligatory for each member's household.

COMPOSTING PROCESS –CONT'D



Backyard gardens in individual women households are flourishing due to compost application.

COMPOSTING PROCESS –CONT'D



Compost is applied to sack gardens for especially leafy vegetable growing.

COMPOSTING PROCESS –CONT'D



1. ECOSAN Latrines for the households are complemented by composting for better management of household kitchen and human waste to improve environmental sanitation
2. Manure mainly from the zero grazing component of the Sustainable agricultural project in which KWDT supports member households to make compost manure.

STRATEGIES USED

- **A household centered strategy;** is effective because of high labor intensity of process and complement our household centered approach to improve food security.
- **Hands on managed:** no expensive machinery is needed , utilizes family labor so it is cheap-the households dig their pits, manually pile, turn and transfer the heaps.
- **Onsite sanitation system;** ensures that the means of collection, storage and treatment are contained with in the household plot to enhance a point of use technology
- **Peer training:** Members of a group are trained and they later pass on this knowledge and skill through training other members of their groups and other people in the community.

IMPACTS

- Utilization of kitchen waste and point of use composting has enhanced onsite sanitation that has reduced the risk of contamination of the lake and protecting vital ecosystems.
- Environmental sanitation has been enhanced due to improved management of sullage, drainage and household solid waste. Compost has enabled better management of household 瓦斯特 and reduced fisher effluents into the lake and swamps to enhance fish breeding and favor fish growth and rejuvenation of fish stocks.

IMPACTS

- Composting has served as a viable way to increase household food security amidst falling fish stocks yet still replenishing soils and enhancing rejuvenation of water resources for sustainable use.
- Majority women households have flourishing kitchen gardens, a good supply of nutritious fruits, vegetables, food crops from bigger farm gardens through the year.
- Composting has complemented Water and Sanitation promotion interventions into the fishing community to improve excreta management through the ECOSAN -

IMPACTS

- ECOSAN needed at the landing site where the water table is high in some areas, hard rocky grounds in others deterring the construction of 30ft. deep Ventilated Improved Pit latrines
 - Composting coupled with ecological sanitation have resulted into sustainable solutions to the food and nutritional crisis, pollution, poor soil management practices and poor environmental sanitation.
 - Has increased food production for women a majority of whom cultivate less than an acre of land for their households.

CHALLENGES

- ❖ Compost making requires skill and knowledge which have been difficult to transfer to women; extension support is being offered to women to guide and monitor their composting activities.
- ❖ The major challenge of this process is to translate this activity for large scale farm application to increase yields and supplement family incomes through sale of produce .
- ❖ It is time consuming and labor intensive; but women have been trained to work in groups to make compost for each of their member's household to reduce on workload and increase volume of manure produced per household.