## ECONOMICS OF WASTE UTILIZATION IN THE URBAN AND PERI-URBAN ZONES OF LAKE VICTORIA CRESCENT REGION, UGANDA

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REG NO 2003/HD02/096U

## SEPTEMBER 2009

## **ABSTRACT PH.D THESIS**

Wastes which are the by-products of consumption are a growing problem in the urban and peri-urban areas of the Lake Victoria region. Wastes generated comprise 80 % of biodegradable portion which could be reutilized, but a few households have tapped this economic potential. This study was done to explore the potential alternatives, benefits and determinants of waste utilization among urban and peri-urban households in the Lake Victoria crescent.

A random sample of 577 households in five urban and peri-urban areas of the crescent were surveyed. An economic assessment of using compost as a soil amendment and using various wastes as supplements for feeding dairy animals was done using partial budget analysis. Using contingent valuation methodology and logit models the determinants of willingness to pay for sound waste management and factors affecting waste separation and utilization in urban and peri-urban areas of the lake crescent were established.

Results indicate that waste reuse as compost and livestock feed is on the increase and is

profitable. Income of the household head, location of household and household size influenced waste generation. The gender of the household head, peer influence, land size, location of household and membership of environmental organization, were statistically significant and explained household waste utilization behaviour. The regression analysis further revealed that income of household head, location of the household, gender of household head, level of environmental concern, age of household head, and total crop waste generated by the households were significant and explained the households' willingness to pay for sound waste management.

It can be concluded that waste generation levels in urban and peri-urban areas of the crescent are high, waste reuse is profitable and would help reduce the quantity of wastes disposed of in landfills, extend their lives and save the urban authorities considerable amounts of revenues used in waste disposal. Waste reuse among peri-urban households needs to be promoted. Both urban and peri-urban households are willing to pay for sound waste management provided the fees are reasonable. This would result in significant welfare benefits for the urban and peri-urban areas. The results could act as a basis for setting waste disposal fees by the urban authorities and contractors in particular while taking in to account the location of the households.