

**ECONOMIC OPPORTUNITIES FOR MAKING AND CONSUMPTION OF
ORGANIC SOLID WASTE PRODUCTS:
CASE OF BUSIA TOWN**

BY

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DECLARATION

I WANYAMA EDDY solemnly declare that this research report is my original work and has never been submitted to any other higher institution of learning for any academic award. I therefore, take full responsibility for any errors that may arise in this work arising from omission or otherwise

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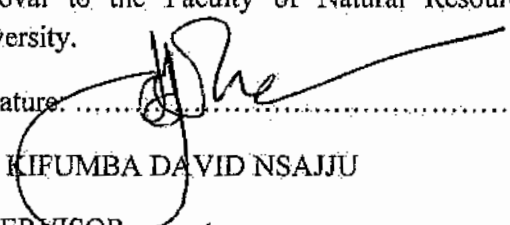
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APPROVAL

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DEDICATION

I would like to dedicate this field report to my family members, that is, Dad, Mr. Wafula Charles, Mum, Mrs. Akello Josephine, Sisters Nyawere Mary Caroline, and Nandera Cynthia, brother Wanjala Wenslus, Grandmother Rosa, my dear friends Oliver Kifuko, Okello Samuel, Kedi Sharon, Kyomugasho Sharon, Esingu Patrick, Segawa frank, Jingo Herman, Obukui Puis and the entire department of natural resources at Namasagali campus, the Staffs and Students of Busitema University, Namasagali Campus.

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LIST OF ACRONYMS AND ABBREVIATIONS

NEMA	National Environmental Management Authority
KCCA	Kampala City Capital Authority
NGOs	Non-Governmental Organizations
YES	Youth Environmental Service
UNDP	United Nations Development Programme
UNEP	United Nations Environment Protection Programme
WTP	Willingness to Pay
ORG	Organization
KCC	Kampala City Council
PPPs	Public Private Partnerships
CPHEEO	Central Public Health and Environmental Engineering Organization
EPA	Environmental Protection Agency
MSW	Municipal solid waste management
SSA	Sub Saharan Africa
EPA	Environmental Protection Agency

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ABSTRACT

Market solid waste management is increasingly becoming a big problem in many municipalities in Uganda. This is largely attributed to limited budget by municipalities to manage the wastes, lack of capacity and use of poor technology by waste management authorities. The study was carried out at Sofia market in Busia municipality with the major aim of generating information on the on cost effective strategies for promoting organic waste products use in the district.

The objectives were to determine the source and amounts of the most generated organic solid wastes stored by the market vendors. The willingness to pay for organic wastes products and components as measures for improving solid waste management. Identify the cost effective activities that will use organic solid waste products and components.

Questionnaires were used to collect the data. About fifty questionnaires were distributed to the selected respondents since these were representative enough of the entire population in the selected in the market of Sofia market in the municipality. The respondents also near garbage skips, heaps and wastes in the selected markets within the municipality were randomly interviewed. Questionnaires issued to the respondents were both open ended and closed questions. Direct observations were used to assess the ways how the wastes were stored by the markets. Data collected was entered in excel where it was cleaned, coded and then exported to Stata software because Stata being user friendly as compared to other soft wares.

Majority of the members of business community stored their solid waste in an open area designated by municipal waste management authorities because of the free space within the market. However, some shops and inns still dumped their wastes in anywhere they found. The solid waste management through solid waste collection services by the municipal council were considered not to be effective by most members of business community whose solid wastes were not always collected in time hence there is still room for the private sector to engage in the solid waste management practice especially storage and collection. The community looked at collection of wastes as entirely a responsibility of the municipal council but the municipal council attributed the delayed collection of wastes in Busia municipality to insufficient funds allocated to waste management. It is the responsibility of the local authority to ensure the waste management service of storage and collection is provided to its communities in Sofia market.

CHAPTER ONE

1.0. INTRODUCTION

1.1. Background

1.1.1. Amounts of solid waste generated at global level

In most developing countries, typically one to two thirds of the solid waste generated is not collected (Zerbock, 2003). Most rapid population growth overwhelms the capacity of most municipal authorities to provide even the most basic services (Zurbrugg, 2000). Thousands of tons of solid waste are generated daily in Africa. Most of it ends up in open dumps and wetlands, contaminating surface and ground water and posing major health hazards (Ali, 2004). The United States Aid Agency report (2009) observed that Generation rates available only for select cities and regions, are approximately 0.5 kilograms per person per day; in some cases reaching as high as 0.8 kilograms per person per day. While this may seem modest compared to the 1–2 kg per person per day generated in developed countries, most waste in Africa is not collected by municipal collection systems because of poor management, fiscal irresponsibility or malfeasance, equipment failure, or inadequate waste management budgets (USAID, 2009). Waste separation is the key mechanism for the reduction in waste quantity. Further, it also helps to promote beneficial reuse of the wastes. However in many developing countries, it is not practiced widely and effectively except for certain urban areas, where public pressure and general awareness promotes this environmentally sound practice (ARRPET, 2004). Collection of solid waste generated is a major challenge in most developing countries including Uganda in particular and Africa in general.

1.1.2. Amount of solid wastes generated at national level

The monthly generation of solid waste in Kampala is estimated at 42,000 tonnes of which only 15,000 tonnes are deposited at the Kiteezi landfill (KCC, 2006). The rest either remains uncollected or is disposed of using other means (KCC, 2006). According to Kampala Capital City Authority (KCCA, 2012) the amount of Solid waste generated overwhelms its capacity to collect and dispose given its enormous collection costs⁴. Out of 1,200–1,500 tones of garbage generated per day, only 400-500 tones are collected giving a collection efficiency of only 40% (Achankeng, 2003). This implies that 60% of Solid waste generated daily is not properly collected and disposed which has resulted into indiscriminate disposal by the public

1.1.3. Classification of solid wastes

According to Prakash et al (2012) any waste other than human excreta, urine and waste water is called solid waste and it can be classified into two types; biodegradable wastes and non-biodegradable wastes. Biodegradable waste is waste which can be decomposed by biological processes for example, vegetable peels, food, farm waste, and others while non-biodegradable waste is waste that cannot be broken down by biological processes for example, paper, glass,

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