

**BUSITEMA UNIVERSITY**  
**FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES**

**EFFECTIVENESS OF SOLID WASTE MANAGEMENT STRATEGIES TO THE  
PROMOTION OF A CLEAN ENVIRONMENT: AN ANALYSIS OF  
COLLECTION SYSTEMS IN KIWATULE PARISH NAKAWA DIVISION**

**BY**

**KYOMUGASHO SHARON**

**BU/UG/2012/121**

**A RESEARCH REPORT SUBMITTED TO THE FACULTY OF NATURAL  
RESOURCES AND ENVIRONMENTAL SCIENCES IN PARTIAL  
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## DECLARATION

I hereby declare that this research report is entirely mine and has not been submitted to any other institution for any reward but it has been compiled of my own knowledge. Thus, the work is original, a result of my own research, and where other people's research was used, the authors have been dully acknowledged.

Signed: ..... Kyomugasho .....

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## APPROVAL

This is to certify that this report by Ms. KYOMUGASHO Sharon has been submitted with my approval as a University Supervisor of Busitema University.

Supervisor

.....

KIFUMBA DAVID NSAJJU

Date ..... 28/7/2015

## **DEDICATION**

I dedicate this Dissertation to my father Mr. Portase K. Amiable, my mother Mrs. Kobusinge Gladys, my brothers and sisters.

## ACKNOWLEDGEMENT

To the Almighty God, glory be unto you for the amazing love and grace that has taken me this far. For the battles that seemed fierce and impossible for me to overcome you gave me the courage, zeal and determination to face them head on, I thank you.

To my father, mother, brothers and sisters for morally, materially and financially facilitating my pursuit of wealth of knowledge that has finally formed me the source and bedrock of my career and indeed brightened my future, I thank you.

My sincere thanks to all my friends Segawa Frank, Naturinda Zerubabeel, Rubagumya Oshea, Twongyeirwe Hellen just to mention but a few for the shoulder you offered me to lean on during times as I was working on this report. The humor, care and the spirit of oneness we shared during lighter moments I shall forever cherish. May He who gives grace and wisdom reward you abundantly.

Finally, to my supervisor Mr. Kifumba David Nsajju for sacrificing and taking time off your busy schedule in order to offer me the much needed technical support, direction and guidance. I appreciate your professionalism and exhibition of true workman ship and acumen, I thank you.

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## **LIST OF ACRONYMS**

KCCA	Kampala Capital City Authority
LC	Local Council
MMC	Municipal Management Council
MSW	Municipal Solid Waste
NEMA	National Environmental Management Authority
SWM	Solid Waste Management
Shs	Shillings
UN	United Nations
WTP	Willingness to Pay

## ABSTRACT

Modern cities consume a great deal of resources including energy, water, food and raw materials, and they also generate large quantities of waste products. The success with which a city can manage these wastes is one indicator of the ability of the organizations within the city to work together to solve major urban environmental problems like bad odor, and blockage of the drainage systems. However solid waste collection has not been so effective and this has been attributed to inadequate resource allocation towards waste collection, low solid waste management service coverage, mismanagement of equipments and the entire collection process.

The study was carried in Kiwatule where a sample of 60 respondents was taken. The general objective was to provide information to Kampala Capital City Authority (KCCA) and non-governmental organizations (NGO's) on those cost - effective interventions to the accumulating solid waste found in Kiwatule parish through finding out the reasons for the amount and composition of solid waste generated, reasons for the community's preference of different solid waste management services available to residents, households' willingness to pay for improved solid waste collection, and compare causes for the effectiveness of different existing solid waste collection, transfer and disposal services available to the residents. Questionnaires and interviews were used to gather data from residents, and key informants.

The private sector is more effective than the public sector which was attributed to the private sector provision of services like storage containers, timely and fixed collection time tables. Given the situation of open competition for clients involving both public and private sector in Kiwatule, it is possible the public sector can operate effectively if they start commercial services officially like their private sector counterparts. This calls for a formal public-private partnership where the public and private sector can work together.

# CHAPTER ONE:

## 1.0. INTRODUCTION

### 1.1 Background

#### 1.1.1 Global perspective of urban solid waste management (SWM)

Modern cities consume a great deal of resources including energy, water, food and raw materials, and they also generate large quantities of waste products. The success with which a city can manage these wastes is one indicator of the ability of the organizations within the city to work together to solve major urban environmental problems (Middleton, 1995). There is no single best solution to waste disposal, but a wide range of possibilities exists. Solid waste is at the core of urban environmental problems. Management of solid waste reduces or eliminates adverse impacts on the environment and human health and supports economic development and improved quality of life. A number of processes are involved in effectively managing waste for a municipality. These include monitoring, collection, transport, processing, recycling and disposal.

Global urban Municipal Solid Waste (MSW) production, which has nearly doubled in the last 10 years, is projected to double again in the next 15 years, increasing from 1.3 billion tons a year in 2010 to 2.2 billion tons a year in 2025 (Hoorweg, Bhada-Tata, 2012). The increase is mostly attributed to developing countries, where it is driven by the combination of high urbanization rates and economic development. When people's revenues increase, consumption, and consequently, waste production, do too. In developing countries, the per capita waste generation rate ranges from 0.4 to 1.1 kg per day, reaching in some urban areas 2.4 kg per day and more in tourist areas, but in poorer settlements, the values can be much lower (Chalmin, Gaillochet, 2009).

According to Smargon (1999) Global Perspectives on SWM, year after year, decade after decade, more and more solid waste is generated, and, as time progresses, space for this solid waste decreases. Nonetheless, some urban communities around the world clearly identify this problem, and they are saving space and money, in order to tackle it and therefore saving the environment from degradation as well. SWM is a vital component of environmental management, and everyone on the planet contributes to the problem,

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