

SOCIO-ECONOMIC DYNAMICS OF HAZARDOUS WASTE MANAGEMENT: CASE OF  
KYENJOJO TOWN COUNCIL, KYENJOJO DISTRICT.

BY

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2014

**DECLARATION**

I **Tusiime Catherine** declare that the work presented in this research dissertation is of my investigation and it has never been submitted by any student in any institution of higher learning. I am, therefore, responsible for any errors that may arise in this work as a result of omissions or otherwise.

Date 25<sup>th</sup> / 07 / 2014

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## APPROVAL

This is to certify that this research report compiled by Tusiime Catherine has been submitted with my approval as University supervisor of Busitema University.

KIFUMBA DAVID NSAJJU

Signature.....

Date.....

## DEDICATION

With great honor, I would love to dedicate this piece of work to my aunt Miss. Kabasindi Margret Amooti, my uncle Bro. Joseph Kaganda Amooti, my mother Miss. Night Joyce Abwooli, my dearest friend Mugume Julius Comrade Apuuli, my great friend Mr. Katamba Godfrey Apuuli (D/CAO Kamuli) and my grand mother Omukaikuru Nsungwa Florence Akiiki who have been there for me through hardships.

“May the Lord bless the works of your hands”

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## ACRONYMS

NEMA; National Environment Management Authority

D/CAO; Deputy Chief Administrative Officer

UNDP; United Nations Development Program

UNEPA; United Nations Environmental Program Agency USAID; United States Agency for International Development

EPA ; Environmental Protection Agency

RCRA ; Resource Conservation and Recovery Act

UNIDO; United Nations Industrial Development Organization

USEPA; United States Environmental Protection Agency

## DEFINITION OF TERMS

**Hazardous Waste:** Products which due to their nature and quantity, are potentially hazardous to human health and/or the environment and which require special disposal techniques to eliminate or reduce the hazard (Meakin, 1992).

**Recycling:** The process by which materials otherwise destined for disposal are collected, reprocessed, or remanufactured, and are reused (USEPA,1995).

**Biological oxygen demand (BOD) ;**The amount of oxygen required to degrade the organic material and oxidize reduced substances in a water sample; used as a measure of the oxygen requirement of bacterial populations and serving as an index of water pollution; biochemical oxygen demand (Lincoln 1982).

**Contaminated site;** A site at which hazardous substances occur at concentrations above background levels and where assessment indicates it poses or is likely to pose an immediate or long term hazard to human health or the environment.

**Landfill;** A waste disposal site used for the controlled deposit of solid waste onto or into land.

**Waste;** Materials and energy, which have no further use and are released to the environment as a means of disposal, ie, solid waste is generated in a solid form for disposal and liquid waste is generated or converted into a liquid form for disposal.

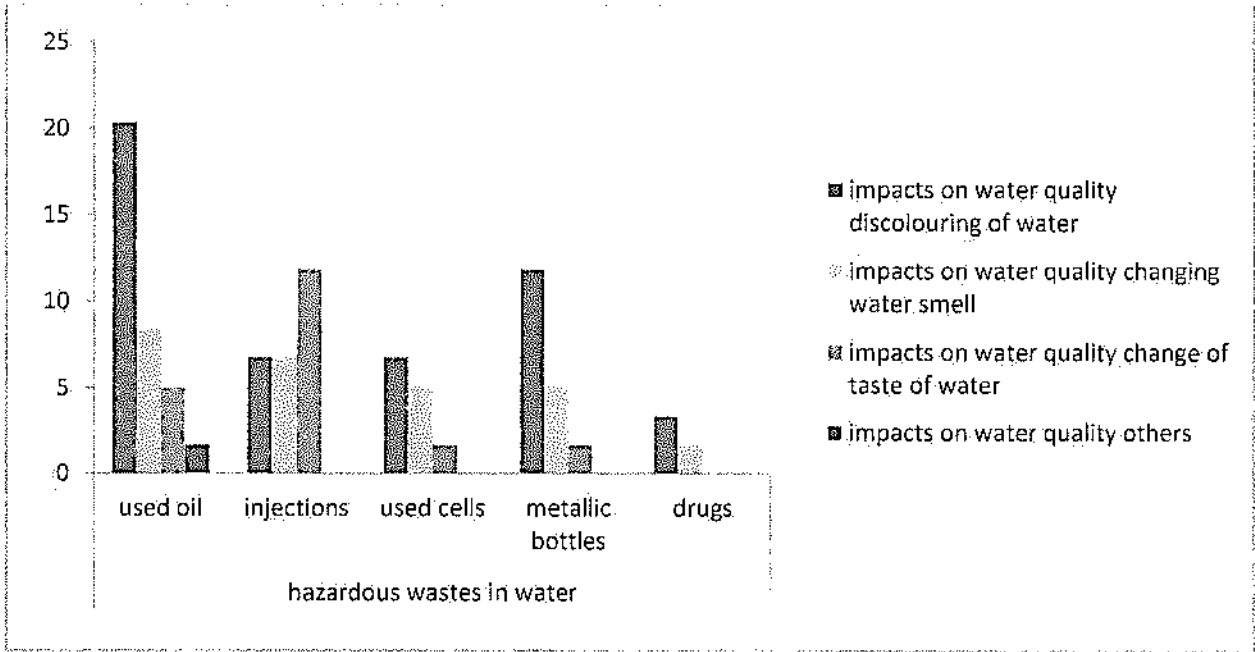
## ABSTRACT

Hazardous waste management is increasingly becoming a big problem in many cities in sub-Saharan Africa of which Uganda is no exception. This is largely attributed to the poor institutional arrangement, lack of capacity and use of poor technology by waste management Authorities in addition to the poor hazardous waste storage and disposal methods by the communities which subject them to health and environmental problems.

The study was carried out in Nyantungo, Katoosa, Bucuni and Mpunda in Kyenjojo. The aim was to obtain information on the methods of storage and disposal of hazardous wastes and also to determine the effects of hazardous wastes on the physical properties of water. This was carried out to help improve on the health of both the residents and environment at large and it also helps in guiding sustainable development in the community.

The objectives were establishing the major generators and different types of hazardous wastes they generated. Reasons for disposing and storing of hazardous wastes in the manner they did were also established and the different types of hazardous wastes affecting water quality were documented to determine potential health risks.

Self administered questionnaires, personal interviews, observation and focused group discussions were used to obtain information on the different hazardous waste management practices. The gathered information was coded and edited in SPSS and analyzed using histograms and pie charts. Findings indicated that the major generators of hazardous wastes were hospital attendants, car mechanics and shopkeepers. Hospital attendants and car mechanics preferred to store it in metallic and plastic containers because they were durable, while shopkeepers used polythene bags as they were cheap. Residents disposed off hazardous wastes by pouring it in landfills and open air burning.



## CHAPTER ONE

### 1.0 INTRODUCTION

#### 1.1 Background of the Study

##### 1.1.1 Global perspective of hazardous waste management

Hazardous wastes are produced by all countries irrespective of their state of development (Jasmine, 1991). Examples of such wastes include oil from transportation, redundant pesticides, hospital wastes, chemical wastes etc. As industrial development proceeds, the quantity of hazardous wastes increases from such industries as metals, mining and processing, pharmaceuticals (Jasmine, 1991). These hazardous wastes pose a danger to human health and to the environment in general. At present bulk of these wastes are produced in developed countries. Some developed countries export these wastes to other developed countries as well as to developing countries for the purpose of re-use and recycling or disposal (Jasmine, 1991). The international conference at Basel and several others have more than adequately highlighted the urgent need to effectively manage hazardous wastes all over the world (Basel Convention, 1989)). The economic dimension and environmental implications of the international management and movement of hazardous wastes have become the focus of concern for both the industrialised and developing countries (Basel Convention, 1989). That is the reason why the (Basel Convention, 1989) seeks to limit and control such export. The Convention has identified certain hazardous wastes in an annexure (Basel Convention, 1989). Wastes that are not covered under these annexures but are considered to be hazardous by the domestic legislation of a party which exports, imports, or which is a transit country, are also considered hazardous wastes (United Nations Environment Programme, 1989). The radio active wastes and wastes from ships are excluded from the scope of this convention. The implementation of this convention will require that the developing countries which are the main victims of indiscriminate export of hazardous wastes develop strategies to manage the situation arising out of such exports (Basel Convention, 1989). It is a fact that many developing countries do not have the facilities to deal with generation of hazardous wastes in their countries. They have no facilities even to identify and analyse the impacts of the wastes that are or

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## **APPENDIX 1: INTERVIEW GUIDE**

I am Tusiime Catherine, a student of Busitema University carrying out a study on hazardous waste management in your community. The study will help in improving the environment and