ASSESSING THE POTENTIAL ENVIRONMENTAL IMPACTS OF A SUGAR FACTORY: A CASE STUDY OF KAMULI SUGAR FACTORY, KITAYUNJWA SUB COUNTY, KAMULI, DISTRICT.

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A PROJECT DISSERTATION SUBMITTED TO THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCE ECONOMICS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR AWARD OF A DEGREE IN BACHELOR OF SCIENCE IN NATURAL RESOURCE ECONOMICS OF BUSITEMA UNIVERSITY

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DECLARATION

I **SEMPALA JOSEPH** hereby declare to the best of my knowledge that this research report is solely a result of my own research, effort and findings. I therefore, affirm that it has never been submitted for an award of a degree or any other academic qualification in any university.

DATE:

27/06/2014.....

SIGNATURE:

SEMPALA JOSEPH

BU/UG/2011/166

APPROVAL

I hereby certify that this research report Titled "**Assessing the Potential Environmental Impacts of a Sugar Factory: A Case Study of Kamuli Sugar Factory, Kitayunjwa sub county, Kamuli district**" is the original and individual work of Sempala Joseph. It has been done under my supervision and is ready for submission to the board of examiners Faculty of Natural Resources and Environmental Sciences, Busitema University, Namasagali campus with my due knowledge.

DATE:

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SIGNATURE:

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PROFESSOR ISABIRYE MOSES

SUPERVISIOR

DEDICATION

Crossing my academic finishing line has not been a one man's effort. This race has been accomplished by the efforts and support of a number of generous hearts or philanthropists. I therefore wholeheartedly dedicate this publication to such hearts.

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LIST OF ACRONYMS

CDM – Clean Development Mechanism

EIA – Environmental Impact Assessment

FAO – Food and Agriculture Organization

GDP – Gross Domestic Product

GIS – Geographical Information System

GOU – Government of Uganda

IAIA – International Association for Impact Assessment

ILWIS – Integrated Land and Water Information System

ISO – International Sugar Organization

Km – Kilometer

KSL – Kakira Sugar Limited

KSL – Kinyara Sugar Limited

MDG – Millennium Development Goal

MTIC – Ministry of Trade, Industry and Co-operatives

MW – Mega watts

NDP – National Development Plan

NEMA – National Environmental Management Authority

NEPA – National Environment Policy Act

SCOUL – Sugar Corporation of Uganda Limited

UBOS – Uganda Bureau of Statistics

UN – United Nations

UNCED – United Nations Conference on Environment and Development

USCTA – Uganda Sugar Cane Technologists' Association

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ABSTRACT

Any project for instance a factory is bound to produce impacts to the community within which it operates. These can be positive or negative. Positive impacts are always appreciated and embraced by members of a given community. On other hand, negative impacts are always escorts of the positive one and it's these that require shire vigilance as their spill over effects are far reaching and traumatizing than the benefits which can be enjoyed due to the establishment of a particular project.

Therefore, the study was conducted to investigate any potential environmental impact of Kamuli Sugar Factory with confinement on; wetlands, indigenous land use covers as well as the sugar cane market.

In-depth review of prior literature of various scholars, environmental agencies' reports and publication as well as browsing through the internet was done with the aim of achieving the objectives of the study. Such literature was in line with the set objectives. This information acted as the baseline or reference podium upon which judgment was made to affirm that for real Kamuli Sugar factory can potentially produce impacts to the surrounding communities.

The study basically dwelled on qualitative data though quantitative parameter of studying impacts with in the radius of 30km from the sugar mill was centered on. In pursuit of the set aims, both primary and secondary data was gathered. Primary data was collected through; on spot surveys, key informant interviews and so forth yet secondary data was collected through; the use of university library, review of environmental agencies' reports, too much to mention.

Captured data was then processed and analyzed in both ILWIS (GIS software) and Spreadsheets – Microsoft Excel package to attain meaningful and appeasing results.

Attained results were both a confirmation and affirmation of the explored land reviewed literature. Results showed that features basically found in zone ONE were substantially threatened to degradation impacts of the factory. Conversely, results showed that farmers in this zone are bound to reap big from the yet to be established sugar cane market – suppliers of cane to the factory.

Findings further professed that the magnitude of vulnerability dwindles as the distance from the factory widens or elongates. The results or findings of the study compelled the researcher to forward a couple of recommendations that would be employed to specifically deal with the negative impacts.

Keywords: Vulnerability, Threat, Impacts.

CHAPTER ONE
INTRODUCTION

1.0: Overview

This chapter is a visualization of the entire study report. It gives the reader the basics contained in the whole report and guides him/her on matters like the background of the study, objectives of the study, the scope, rationale of the study, structure of the report, statement of the problem of the study, its conceptual framework, research questions and much more.

1.1: Back ground

Industrialization in Uganda is a gradually developing sector in Uganda that is different industrial developments are slowly being established across the country with areas like Kampala, Jinja, Mukono, Mbarara, Mbale, Wakiso, Lira taking the lead. The sugar production sub sector is no exception of the ongoing trend. According to;

http://en.wikipedia.org/wiki/List_of_sugar_manufacturers_in_Uganda#Large_sugar_manufacturers the sub sector currently has about six players in this arena;

- Kakira Sugar Works – Jinja district.
- Kinyara Sugar Works Limited – Masindi district.
- Sugar Corporation of Uganda Limited – Lugazi district.
- Sango Bay Estates Limited – Rakai district.
- Mayuge Sugar Industries Limited – Mayuge district.
- Sugar & Allied Industries Limited – Kaliro district.

Their total output by the year 2011 stood at 350,000 metric tonnes. Furthermore, the sub sector is yet to receive new players, these are already licensed but are not yet fully operational. Among these is the focal point of the study – Kamuli Sugar Factory that is soon starting production in the Centre of Kamuli district. On the list, other players are;

- Mukwano Sugar Factory - Masindi District
- Tirupati Sugar Factory - Nakasongola District
- Uganda Crop Industries - Buikwe District
- Kafu Sugar Factory - Masindi District

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