

**ASSESSING THE IMPACTS OF AGRICULTURAL PRACTICES ON THE  
CONSERVATION OF WATER BODIES**

**A CASE STUDY OF LAKE KWANIA IN APAC DISTRICT**

**BY**

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## DECLARATION

I **OTOO RONAN ALIRO**, declare that this research report submitted to the Faculty of Natural Resource and Environmental Science is my original work and to the best of my knowledge, it has not been submitted by any other person to any institution for any academic qualification.

SIGNATURE.......... DATE.....10<sup>th</sup>/6/2016.....

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**APPROVAL**

This is to certify that this research report Titled **“Assessing the Impacts of Agricultural Practices on the Conservation of Water bodies, a case study of Lake Kwania in Apac District”** is the original work for **OTOO RONAN ALIRO**. It has been done under my supervision.

Signature.....

DATE...../...../.....

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**SUPERVISOR**

## **DEDICATION**

I dedicate this work to my beloved mother, Lilly Otto and Father Otto Joel, my brothers and sisters, uncles, for having been there for me in all situations of my academic struggle and enabling me to accomplish this mile of my academics.

I also dedicate this piece of work to my friend Nalumansi Mariam for the great contribution towards the accomplishment of my research.

It is also dedicated to all people who will read it.

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From the bottom of my heart, I give great thanks to the Almighty GOD who gave me the gift of life and made me strong during unbearable times at University, during my research and whole education life; I will always worship Him forever and ever.

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MAY THE ALMIGHTY GOD BLESS YOU ALL.

## TABLE OF CONTENTS

DECLARATION.....	ii
APPROVAL.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENT.....	v
LIST OF FIGURES.....	ix
LIST OF TABLES.....	x
ACRONYMS.....	xi
ABSTRACT.....	xii
<b>CHAPTER ONE: INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the study.....	1
1.2 Problem statement.....	3
1.3 Objectives of the study.....	4
1.3.1 General objective.....	4
1.3.2 Specific objectives.....	4
1.4 Research questions.....	4
1.5 Significance of the study.....	4
1.6 Conceptual framework.....	5
1.7 Definitions of Concepts.....	5
1.7.1 Agriculture.....	5
1.7.2 Lake.....	6
<b>2.0 CHAPTER TWO: LITERATURE REVIEW.....</b>	<b>7</b>
2.1 Introduction.....	7
2.2 The different agricultural practices carried out around water bodies.....	7
2.3 To identify the different stakeholders and their impacts in conserving the lake.....	9
2.3.1 Institutions.....	10
2.4 Impacts of agriculture on water bodies.....	14
2.4.1 How can livestock production affect water quality?.....	17
<b>3.0 CHAPTER THREE: METHODOLOGY.....</b>	<b>19</b>
3.1 Introduction.....	19
3.2 Research design.....	19
3.3 Study area.....	19
3.5 Sample size and Sampling procedure.....	19
3.5.1 Sample size.....	19

3.5.2 Sampling techniques and procedure.....	20
3.6 Data types and Data collection methods.....	20
3.6.1 Data types.....	20
3.6.2 Data collection methods.....	20
3.7 Data analysis.....	21
3.8 Ethical considerations.....	21
3.9 Limitations of the study.....	21
<b>CHAPTER FOUR: PRESENTATION OF THE FINDINGS, ANALYSIS AND DISCUSSIONS..</b>	<b>22</b>
4.1. Demographic information about respondents.....	22
4.1.1 Gender of respondents.....	22
4.1.2 Education level.....	24
4.1.3 Marital status of respondents.....	26
4.1.4. Age of respondents.....	28
4.1.5 Residents around the lake.....	29
4.1.6 Villages of the Respondents.....	30
4.2 The different agricultural practices carried out around Lake Kwanja.....	31
4.2.1 Respondents practicing Agriculture.....	31
4.2.2 Type of Agriculture practice by respondents.....	32
4.2.3 Crops grown by the respondents.....	34
4.2.4 Animals being reared by the respondents.....	35
4.2.5 Farming equipment used by the Respondents.....	35
4.2.6 Soil Conservation measures used by the Respondents.....	36
4.3 Stakeholders and their impacts.....	39
4.3.1 Are there stakeholders.....	39
4.3.2 Who are the stakeholders?.....	39
4.3.3 Activities of the stakeholders.....	40
4.3.4 Impacts of the stakeholders.....	41
4.4 Impacts of Agricultural practices on water bodies.....	42
4.4.1 Impacts of Agricultural practices on water bodies.....	42
4.5 Measures to conserve the lake.....	44
5.1. Conclusions of the study.....	48
5.2. Recommendations of the study.....	49
5.3 Areas of further studies.....	53

APPENDIX I: PHOTOS OF AGRICULTURAL FARMS NEAR LAKE KWANIA.....	54
APPENDIX II: QUESTIONNAIRE .....	55
REFERENCES .....	57



## LIST OF FIGURES

Figure 1: Conceptual frame work.....	5
Figure 2: Gender of respondents .....	23
Figure 3: Education level of respondents.....	25
Figure 4: Marital status of respondents.....	27
Figure 5: Age of respondents.....	28
Figure 6: showing Residents around the lake .....	29
Figure 7: showing sampled respondents' villages .....	31
Figure 8: Showing the respondents practicing agriculture .....	32
Figure 9: Showing the type of agriculture respondents practice .....	33
Figure 10: Showing the soil conservation practice.....	37

## LIST OF TABLES

Table 1: Gender of respondents .....	22
Table 2: <b>Relationship between gender and the type of agriculture practiced</b> .....	24
Table 3: Shows the education level of respondents.....	24
<b>Table 4:Relationship between Education level and the farm equipment used</b> .....	26
Table 5: Shows the marital status of respondents. ....	26
Table 6: shows the age of respondents .....	28
Table 7: Showing Residents around the lake .....	29
Table 8: showing sampled respondents' villages.....	30
<b>Table 9: Showing the respondents practicing agriculture</b> .....	31
Table 10: Showing the type of agriculture respondents practice .....	32
Table 11: Showing crops grown by the respondents.....	34
Table 12: Showing Animals (livestock) of the respondents .....	35
Table 13: showing the Farming equipment used by the Respondents.....	36
<b>Table 14: Soil Conservation measures used by the Respondents</b> .....	36
<b>Table 15: Relationship between Age of the Respondents and the soil conservation measures used</b> .....	37
Table 16: showing the proportion of stakeholders .....	39
<b>Table 17: shows the stakeholders</b> .....	39
Table 18: showing the activities of the stakeholders.....	40
Table 19: Shows the impacts of the activities of the stakeholders .....	41
Table 20: Showing impacts of agricultural activities on the lake .....	42
Table 21: Showing seasons when the impacts occur most. ....	44
Table 22: Showing measures to conserve the lake.....	45

## ACRONYMS

CBOs	Community Based Organizations
FAO	Food and Agricultural Organization
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MWE	Ministry of Water and Environment
NEMA	National Environmental Management Authority
NGOs	Non-Governmental Organizations
SOER	State Of Environment Report
UBOS	Uganda Bureau of Statistics
UNDP	United National Development Program

## ABSTRACT

The study examined the impacts of agricultural practices on the conservation of water bodies focusing on Lake Kwanja as the case study. Lake Kwanja is part of a large wetland along the White Nile (Victoria Nile) between Lake Victoria and Lake Albert, consists of about 3,420 square kilometers (1,320 sq. mi) of open water and about 2,180 square kilometers (840 sq. mi) of permanent swamps. Of this total, Lake Kwanja accounts for 540 square kilometers (210 sq. mi), about 16 percent, of the open water. The overall objective of the study was to assess the impacts of agricultural practices on the conservation of water bodies. The study used both qualitative and quantitative approaches to collect data, analyze and present it. The methods of data collection used were interviews, questionnaires and field observations. The data was collected from a sample of sixty respondents include males and females, the young ones, the youth and the old ones, the data was analyzed using excel and SPSS, which facilitated the formation of pie charts, bar charts and a Pearson chi square was used to analyze the relationships between different variables.

The study found that agricultural activities of growing crops (mostly cereals, tubers, vegetables and legumes) and rearing animals (cattle, goats, pigs and sheep) around the lake has serious polluting, bank breaking and other impacts on the lake. The use of tractors and ox-plough greatly contribute to cutting down of trees which disrupts the hydrological cycle consequently leading to varying water tables and quality. However the study found that most farmers in the area do not use inorganic chemicals like fertilizers, pesticides and insecticides, thus contributing insignificantly to the pollution. The study also found out that there are stakeholders like NGOs, District, Local Councils and others who are carrying out activities in the area to sensitize and monitor with enforcement of policies and laws about water resource management.

Therefore, there is need for government, NGOs, communities around the lake, and any other interest group to seat on around table and discuss measures to address and combat the increasing encroachment on the wetlands around the lakes of Uganda through policies, laws, institutional capacity strengthening, improve agricultural extension services to farmers including better

agricultural methods, crop varieties, and other measures to ensure agricultural impacts on water bodies are mitigated

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