

**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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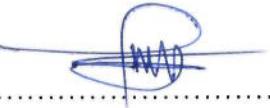
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**A RESEARCH REPORT SUBMITTED IN PARTIAL FULLFILMENT OF
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DECLARATION

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..... **10th/6/2016**.....

OTOO RONAN ALIRO

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.

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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 Kwania as the case study. Lake Kwania 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 Kwania 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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