

BUSITEMA UNIVERSITY
FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCE

**ECONOMIC IMPLICATIONS OF WETLAND CONVERSION TO
AGRICULTURE: A CASE STUDY OF LAKE BISINA, KUMI DISTRICT**

BY

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DECLARATION

I Acanit Edisa Mary declare that, this research report is my own and it has never been submitted to any university or institution for any award.

Name of the student: Acanit Edisa Mary

Signature.....

Date.....

APPROVAL

This is to certify that this research report by Acanit Edisa Mary has been submitted with my approval.

Name of the supervisor: MR MASABA SOWEDI,

SIGNATURE



DATE.....

07/07/2014

DEDICATION

I dedicate my research report to my beloved friend Okello Simon for his support and prayers.

May the Almighty God bless you and reward you abundantly?

ACKNOWLEDGEMENT

My special thanks go to Almighty God for the knowledge and wisdom granted unto me which has made this research successful.

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LIST OF ABBREVIATIONS/ACRONYMES

CWMP	Community Wetland Management Programme
MEAF	Millennium Ecosystem Assessment Framework
NEAP	National Environment Management Programme
NEMA	National Environmental Management Authority
NES	National Environment Statute
NHPC	National Housing and Population Census
NWCMP	National Wetland Conservation Management Programme
PA	Protected Areas
SOER	State of Environmental Report
SPSS	Statistical Packages for Social Sciences
UBOs	Uganda Bureau of Statistics
UNEP	United Nations Environmental Programme
UNWI	Uganda National Wetland Inventory
WSR	Wetland statute Report

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ABSTRACT

The study examined the economic implications of wetland conversion to agriculture using Lake Bisina wetland as a case study. This was done by looking at the drivers of wetland conversion to agriculture, the benefits derived from Lake Bisina wetland and the costs of wetland conversion to agriculture. The study was cross sectional and it used both quantitative and qualitative approaches. Methods of the data collection used were oral interviews, and questionnaires. The data collected from a sample of 100 respondents was analyzed using SPSS (version 20). Shortage of land, fertility of wetland, availability of water and cool climate conditions which is favorable for rice growing are the major drivers of wetland conversion to agriculture. The major benefits derived from Lake Bisina wetland, include fish, water, birds, and roots for medicine, grass for thatching, grazing land and rainfall attraction. On costs of wetland conversion to agriculture, benefits lost due to wetland conversion to agriculture include; grazing land has reduced, trees have been destroyed, rainfall patterns have changed, birds have reduced, roots for medicine are lost, fish has reduced. The study concludes that wetlands conversion to agriculture has serious negative economic implications due to loss of ecosystem services by the local community.

CHAPTER ONE

1.1 BACKGROUND OF THE STUDY

Wetlands inhabit a transitional zone between terrestrial and aquatic habitats, and are influenced to varying degrees by both. They differ widely in character due to regional and local differences in climate, soils, topography, hydrology, water chemistry, vegetation, and other factors. Depth and duration of inundation, a key defining force, can differ greatly between types of wetlands and also can vary from year to year within a single wetland type. According to the Ramsar Conventions (1971), wetlands are defined as areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing; fresh, brackish, or salty, including areas of marine water the depth of which at low tide does not exceed six meters. In Uganda, wetlands are usually referred to as swamps. The National wetland conservation and management programme (NWCMP) defines a wetland as a vegetated area of land that is flooded permanently or seasonally and stays wet long enough for certain plants and animals to grow even when there has been no rain. Wetlands are also defined as transitional lands between terrestrial and aquatic systems covered by shallow water.

According to NEMA (2008), Uganda's wetlands are widespread and complex about 13 percent of the country approximately 29000km² is covered by wetlands (swamps) of which about one-third is permanently flooded. In south and west of the country, they form an extensive low gradient drainage system in steep V-shaped valley bottoms with a permanent wetland core and relatives.

According to NEMA (2010), the world's wetlands are under threat from agricultural, residential, and industrial development, and from pollution. Wetlands comprise areas of marsh, fens, mangroves, and other wet areas usually, but not always at the interface between aquatic and terrestrial environments. They account for six percent of the global land area. They are especially fragile ecosystems because they are open and fed by river systems which are themselves subject to pollution and man-made changes in flow. Because their economic functions have been so poorly understood, they also tend to be regarded as being relatively unimportant. But there is now a wider appreciation that wetlands are multifunctional and that many of the unpriced functions are now economically important.

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