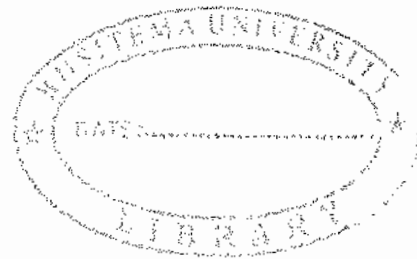


**ASSESSING THE EFFECTS OF WETLAND RECLAMATION  
ON THE PROVISIONAL VALUE OF NALWEKOMBA WETLAND; KAMULI DISTRICT, UGANDA.**

**BY**

**NVIIRI GODFREY**



**BU/UG/2013/65**

**A RESEARCH REPORT SUBMITTED TO THE FACULTY OF NATURAL RESOURCE ECONOMICS AND ENVIRONMENTAL SCIENCES AS A PARTIAL FULFILMENT OF THE REQUIREMENT OF THE AWARD OF THE DEGREE IN NATURAL RESOURCE ECONOMICS AND ENVIRONMENTAL SCIENCE OF BUSITEMA UNIVERSITY.**

**JUNE 2016**

### DECLARATION

I hereby declare that, to the best of my knowledge and belief, am the sole author of this dissertation. The work presented in this dissertation has never been submitted to Busitema University for the award of a degree of Bachelor of Science in Natural Resource Economics or any other Higher Institution of learning for any academic award. Thus, the work is original, a result of my own research, and where other people's research was used, the authors have been dully acknowledged.

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**APPROVAL**

This serves to exhibit that this work has been truly through the efforts of Nviiri Godfrey towards partial fulfillment of the requirements for the award of a Bachelor of Science in Natural Resource Economics of Busitema University under my guidance and supervision.

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**Date** .....

**Associate Professor: ISABIRYE MOSES**

### **DEDICATION**

I would like to dedicate this work to my beloved family members, my beloved mother Ms. Nankumbi Caroline, Brother Kayiwa Fred, sisters Nababi Maureen and Nakayiwa Tracy. May the Almighty God bless the work of their hands.

I would like also to dedicate this report to my late father Ssekabira Michael Lule and my aunt Nalule Justine for the tremendous contribution she made in my academic life. May their souls rest in eternal peace.

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Lastly, I extend my heartfelt gratitude to my dear family which has provided me with spiritual, moral, financial and friendly support that has inspired me to be the person that I am today especially my mum Ms. Nankumbi Caroline. Wish you the best in life.

## LIST OF ACRONYMS AND ABBREVIATIONS

AC	Avoided Cost
CBD	Convention on Biological Diversity
CSOs	Civil Society Organizations
CVM	Contingent Valuation Method
EIA	Environmental Impact Assessment
HPM	Hedonic Pricing Method
IUCN	International Union for Conservation of Nature
MEA	Millennium Ecosystem Assessment
NEMA	National Environmental Management Authority
PEAP	Poverty Eradication Action Plan
RC	Replacement Cost
SPSS	Statistical Package for Social Science
TCM	Travel Cost Method
TEEB	The Economics of Ecosystems and Biodiversity
WMD	Wetland Management Department
WTA	Willingness To Accept
WTP	Willingness To Pay.

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## ABSTRACT

Nalwekomba Wetland is under considerable pressure from the public through wetland reclamation. Wetlands in general are among the world's most productive ecosystems and support millions of people through the essential services they provide. Nalwekomba Wetland supports livelihoods of its local communities. Nalwekomba is currently threatened by the expansion of rice cultivation.

This study aims to assess the potential effects of wetland reclamation on the provisional value provided by Nalwekomba Wetland to help decision makers make informed decisions. The research will provide recommendations to allow policy makers and interest groups to better manage the Wetland resource.

Observations, key informant interviews, and secondary information were used to assess the ecological and socio-economic importance of the wetland. Direct market pricing and benefit transfer techniques were used to estimate the economic value of the wetland.

The study found out that Nalwekomba Wetland provides basically provisioning, habitat and regulating services to local communities. The main benefits to local communities are water, fish, agricultural produce, medicines and construction materials. Wetland reclamation has negative effects on for example water quality, agriculture and also on the wetland's habitat services.

The aim of this study was to estimate the potential effects of wetland reclamation on Nalwekomba Wetland to its provisional value. Based on the findings, it is recommended that appropriate steps be taken to ameliorate the negative impacts. Such steps include awarding of property rights to make sure encroachers are held accountable for liabilities, involving stakeholders in planning and managing the use of the wetland, improving monitoring of discharge and encroachment, and restoring the degraded buffer zones around the wetland. Another important step to protecting this and other wetlands will be to use the information provided by this study as a guideline in making informed management.

## CHAPTER ONE: GENERAL INTRODUCTION

### 1.0 Introduction

This chapter contains the background of the study, problem statement, objectives of the study, research questions, conceptual framework, justification of the study, scope of the study, limitation of the study, operational definition of the key terms and organization of the study.

### 1.1 Background of the study

A wetland is a vegetated area of land that is flooded either permanently or seasonally. In Uganda, wetlands are normally referred to as swamps. Wetland ecosystems in the world account for about 6% of the global land area and consist of a wide variety of vegetation types and are found in all climate of the world (Turner, 1990; cited in Ngaku, 2002).

The most common vegetation in Uganda's wetlands is papyrus but other wetlands include bogs, flood plains and swamp forests. In Uganda, wetlands occupy about 11% -13% of total land surface area (NEMA, 2011). They are mostly located in the central region of the country. Some are found in the West, Eastern and Southern areas. Wetlands are mostly found bounding rivers and lakes.

Wetlands in Uganda as well as other parts of the world are a natural resource of considerable importance. They are recognized for their functions, services and attributes that constitute a considerable ecological, social and economic value that may be lost when wetlands are converted or altered (IUCN, 2002).

Wetland goods include : Fish, wild foods, medicines, fuel wood, building poles, sand graves, clay, thatched materials, pasture and water, among others .Wetland functions and services include; micro-climate regulation, water purification, water recharge, nutrient retention, biodiversity and habitat provision (MoWLE, 2001). Wetlands provide food through cultivation of crops on swamp edges and harvesting of wetland vegetation. For centuries, extensive rice fields

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