### **BUSITEMA UNIVERSITY**

### FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

# COMMUNITY VALUATION OF FISHERY RESOURCES AND CONSERVATION CASE STUDY: VICTORIA NILE NAMASAGALI SUBCOUNTY, KAMULI DISTRICT

By

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BU/UG/2010/240



A RESEARCH REPORT SUBMITTED TO THE FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN NATURAL RESOURCE ECONOMICS OF BUSITEMA UNIVERSITY.

June 2013

### DECLARATION

I MPOMWENDA VERONICA do hereby declare that this is my original work and has not been submitted for any other degree award to any other university or institution of higher learning.

i

Signature.

MPOMWENDA VERONICA

Date 5" /JULY / 2013

### APPROVAL

This is to certify that this report by Mpomwenda Veronica has been successfully completed under my supervision and recommend it for submission to the Faculty of Natural Resources and Environmental Sciences of Busitema University with my approval.

Mr. TAAKO EDEMA GEORGE (SUPERVISOR)

Date 12/07/2013 Signature.....

# DEDICATION

I dedicate this report to my parents Mr. .Wairagala Nelson Peter and Ms. Ikima Rose Mary.

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### ACKNOWLEDGEMENT

I thank the Almighty God for the gift of life given to me during my period of study in Busitema University, Namasagali campus.

Ms. Byamukama Betty Mr. Isiko Paul Alexander and Mrs. Waiswa Juliet who supported me emotionally, morally and financially through my three year stay in Namasagali .Not forgetting also to thank my most loved aunties Mutesi Betty and Alyamo Alice for their great support whenever I needed them.

I extend my sincere gratitude to Professor Isabirye Moses Faculty dean FNRES and all the lecturers for creating a favorable academic environment for my studies in Namasagali. Great thanks to my supervisor Mr. Taako Edema George for his courage and support when writing this report.

My profound thanks to the administrative staff of Busitema University Namasagali campus for the immediate support given whenever consulted may God reward you abundantly.

Special thanks to all my classmates for encouragement and academic support in my stay in Namasagali for 3 years, especially Kagoya Esther, Mpande Mahad Kalyesubula., Kateme Martha Kibira Fredrick, Asasira Joseph and Namazzi Betty. May the almighty God bless them abundantly.

# TABLE OF CONTENTS

Contents	
DECLARATION	i
APPROVAL	ii
DEDICATION	
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	
LIST OF FIGURES	viii
LIST OF TABLES	
ACRONYMS	•••••• X
ABSTRACT	xi

## CHAPTER ONE

1.0 Introduction	•
1.1 Background to the study 1	
1.2 Statement of the Problem	
1.3 Objectives	;
1.4 Research questions	5
1.5 Significance of the study	ł
1.6 Scope of the study	Ĺ
1.6.1 Geographical scope 4	ł
1.6.2 Content scope	ŀ
1.6.3 Time scope	ł

# CHAPTER TWO

20.	iterature review	
2.0.	storature review	

2.1 Theoretical Literature Review
2.1.1 Dual Theory
2.1.2 The Economic Welfare Theory
2.1.3 The Theory of the Regulated Fishery
2.1.4 Game theory and fisheries
2.1.6 Fisheries Economic Theory
2.2 Empirical literature review
2.2.1 Socio economic contribution of fisheries resources
2.2.2 Methods of valuation of fisheries resources
2.2.3 Best practices for fish conservation
2.2.4 Community involvement in management of Natural resources

# **CHAPTER 3**

3.0. Research methodology
3.1. Research design
3.2. Study population
3.3. Sampling size and sample procedure
3.3.1 Sample size
3.3.2. Sampling technique
3.4 Data types, collection methods and tools
3.4.1 Data Types
3.4.2 Data Collection Methods and tools
3.5 Method of valuation
3.6 Validity and reliability
3.7. Data processing and analysis

3.7.1Data processing
3.7.2 Data Analysis
3.8 Limitations and delimitations of the study
CHAPTER FOUR
4.0 Analysis, presentation and discussion of findings
4.1 Demographic characteristics of respondent
4.1.1 Location of the respondents
4.1.2 Education levels
4.1.3 Sex of the respondents 17
4.1.4 Occupation of respondents 18
4.2 Socio economic contribution of the fishery resource
4.2.1 Occupation of respondent
4.2.2 Benefit to respondents
4.2.3 Quantity of fish obtained from the resource
4.3 Willingness to pay 21
4.3.1 Alternative activities
4.3.2 WTP rate of the fish resource
4.3.3 MWTP value of the respondents
4.4 Fish conservation efforts
4.4.1 Knowledge about conservation efforts
4.4.2 Fish conservation methods
4.4.2 Willingness to adopt conservation methods
4.4.3 Limitations to adoption of conservation methods
4.5 Involvement in management

### CHAPTER FIVE

5.0 Introduction	32
5.1 Summary of findings.	32
5.2 Conclusion	33
5.3 Reccomendations.	33
5.4 Areas of further study	34
REFERENCES	35
APPENDICES	37
Appendix 1; Questionnaire	37
Appendix 2.Fish at the landing site	42
Appendix 3 Namasagali Map showing Victoria Nile	43.

# LIST OF FIGURES

Figure 1 Bar graph showing findings on benefits from fishing	. 20
Figure 2 Main use of fish caught	. 20
Figure 3 Rate of willingness to pay for resource benefits	. 22
Figure 4 Findings of the known conservation methods	. 26
Figure 5Limitations of willingness to adopt conservation methods	. 28
Figure 6 Involvement in management	. 29

### LIST OF TABLES

Table 1; Demographic characteristics of the respondents	18
Table 2 Respondents with alternative economic activities	22
Table 3; Relationship between the alternative economic activities and the WTP rate	23
Table 4 Maximum willingness to pay value in Ugandan shillings	23
Table 5 Relationship between having alternative activities and MWTP value	25
Table 6 Source of knowledge	25
Table 7 Relationship between knowledge about conservation methods and willingness to adopt	•
	28
Table 8 Relationship between Occupation and involvement in management of respondent	30

#### ACRONYMS

a Method	
j	n Method

- FAO Fisheries and Agriculture Organization
- GDP Gross Domestic Product
- LVEMP Lake Victoria Environment Management Project.
- LVFO Lake Victoria fisheries organization
- MAAIF Ministry of agriculture, animal industry and fisheries
- MWTP Maximum Willingness to Pay
- NaFIRRI National Fisheries Resources Research Institute
- NARO National Agricultural research organization
- NDP National Development Plan
- NEMA National Environmental Management Authority
- NGO Non Governmental Organization
- NRE Natural Resource Economics
- SPSS Statistical Packages for Social Sciences
- UEPB Uganda Export Promotion Board
- UBOS Uganda National Bureau of Standards
- WTP Willingness to Pay

### ABSTRACT

The study was about community valuation of fisheries resources and conservation at Victoria Nile, Namasagali Sub County Kamuli district. There has been no attempt taken to find out the value community attaches to the fishery resource. Study objectives were to assess the socio economic contribution of the fishery to the community of Namasagali Sub County, to find out the willingness to pay for future benefits of the resource, to evaluate the level of conservation efforts on the resource by the community and to identify strategies for community involvement in fish conservation

A cross sectional study was used which involved use of questionnaires covering 50 respondents. Data collected was analyzed using SPSS 16; this facilitated the formation of frequency tables, graphs, pie charts and cross tabulations for univariate and bivariate analysis. Study findings indicated that; the socio economic contribution of the fishery is basically through provision of domestic income, the estimated average MWTP value was Ugandan shillings 25,250,019,this figure does not not reflect the true value of the resource this is because the study considered only tangible use benefits and majority of community members have alternative preferred economic activities to fishing. Study findings also indicated that majority of respondents have knowledge on conservation methods and are willing to adapt to them but they are only limited to gear ban and finally study indicated that there is a an gender and occupational imbalance in fisheries which mostly neglects women and fish traders respectively.

In conclusion community valuation of the fishery resource is low due to the exclusion of other non marketable benefits, low educational levels and preference alternative activities to fishing, this is also accelerated due to the reducing chances of resource conservation because community is knowledgeable to only gear ban which is not an effective conservation method as regards regulation of fish stocks and an imbalance in resource management. Thus the researcher recommends that community members be sensitized on both the tangible and non tangible benefits of the resource, other effective conservation methods should be adopted and finally boost women and fish trader participation in resource management. These help increase community members WTP value for future benefits and willingness to adopt sustainable conservation practices.

xi

#### CHAPTER ONE

#### 1.0 Introduction

This chapter includes the back ground to the study, problem statement, objectives and research questions of the study, significance and justification of the study, and finally the study scope.

#### 1.1 Background to the study

Uganda has a potentially high and substantial fisheries resource comprising of capture fisheries and aquaculture, it produces 4% of the global in land fish production (FAO 2010). About 17% of the country's surface is covered by Lakes, Victoria, George, Albert, Edward, and other small lakes. Fish is the country's second most important export accounting 6% of total export earnings(UEPB,2009) It contributes 2.5% to GDP at the current economic prices in 2009/2010 fiscal year(UBOS,2010), as such it plays an important role in contributing to achieving the overall economic growth of NDP planning period 2010/2011-2014/15. The importance of fish in the diet of local communities is said to be a source of easily digestible high quality proteins and the cheapest among its close substitutes of beef, mutton and others. Fishing sector is estimated to employ about 136,000 artisan fishermen and over 700,000 people indirectly employed through involvement in secondary and tertiary activities related to the sector. (Odongkara et al, 2008).

Fisheries in Uganda is mostly on the major lakes of Victoria ,Albert, Kyoga and others like Lake Edward and George plus rivers like River Nile. Riverine fisheries are also part of the fishery Sector Rivers include Nile and others. Victoria Nile borders Namasagali at the eastern bank of the sub county. Its among the last sites located downstream of Victoria Nile and reported to have the greatest number of fish species among the four transects (Bujagali report 2000). The most exploited fish species are Tilapia, Nile perch, mukene (*Rastrineobola argentea*, spp, *Haplochromines* catfish, *hydrocynus spp* among others. (Bujagali report 2000). Currently the main commercial fish species are *Lates niloticus* (Nile perch), *oreochromis niloticus* (Nile tilapia) and *Rastrineobola argentea* (mukene)

Uganda has some beautiful fishes in its water bodies with vast economic values for example. Some of the *Haplochromines* which are exploited as ornamental fish are; for export, making aquariums, cultural practices among others. According to FAO, 2010 mainly the fish species are valued through selling. Valuation of the fisheries resource provides a means of measuring and

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