

BUSITEMA UNIVERSITY

FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

THE CONTRIBUTION OF RIVER NILE TO THE LIVELIHOODS OF THE PEOPLE OF
UGANDA

CASE STUDY: NAMASAGALI SUB COUNTY.

BY

TUSIIME JUDITH

BU/UG/2010/458



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

MAY, 2013

DECLARATION

I TUSIIME JUDITH, declare that the work presented and submitted is original and has never been done for any other degree award in any university or higher institution of learning.

Signature *Judith* Date. *21/06/2013*

TUSIIME JUDITH

APPROVAL

This is to acknowledge that the work entitled Contributions of River Nile to the livelihoods of the people of Uganda has been under my supervision and is now ready for submission to the Faculty of Natural Resources and Environmental Sciences.

Signature


.....

Mr. Kakungulu Moses

Date 21/06/2013
.....

DEDICATION

This research is dedicated to the family of Mr. and Mrs. ÓLUKA, who struggled to raise and educate me and to all my siblings.

ACKNOWLEDGEMENT

Though I did this research report single handedly, I was socially and financially offered support by a number of individuals and parties that I feel indebted to mention.

I hereby acknowledge my supervisor, Mr. Kakungulu Moses who critically guided me throughout the entire research project. Also to all friends who assisted and encouraged me in any way are highly acknowledged.

I would like to acknowledge the support of all the staff members of Faculty of Natural Resources and Environmental Sciences of Busitema University

I would also like to thank the residents of Namasagali Sub County for availing me the information that has enabled me to obtain research findings and complete my dissertation. May the good Lord bless you.

TABLE OF CONTENTS

DECLARATION.....	i
APPROVAL.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	ix
LIST OF ACRONYMS.....	x
ABSTRACT.....	xi
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Introduction.....	1
1.2 Background of the study.....	1
1.3 Problem statement.....	5
1.4 Objectives of the study.....	5
1.4.1 Major objective of the study.....	5
1.4.2 Specific objectives.....	5
1.5 Research questions.....	6
1.6 Significance of the study.....	6
1.8 Scope of the study.....	7
1.8.1 Geographical scope.....	7
1.8.2 Content scope.....	7
1.8.3 Time scope.....	8
1.9 Operational Definitions of key Terms.....	8
1.10 Organization of the Study.....	8
CHAPTER TWO.....	9
LITERATURE REVIEW.....	9
2.1 Introduction.....	9
2.2 Theoretical literature review of the study.....	9

2.3 Empirical literature.....	10
2.3.1 Tourism and people's livelihood.....	10
2.3.2 Fishing and people's livelihoods.....	12
2.3.3 Water use and people's livelihoods.....	13
2.3.4 Water transport and people's livelihood.....	15
CHAPTER THREE	17
RESEARCH METHODOLOGY	17
3.1 Introduction	17
3.2 Research Design.....	17
3.3 Study Population.....	17
3.4 Sampling procedure and sample size	17
3.4.1 Sampling procedure.....	17
3.4.2 Sample Size determination	18
3.5 Data types, sources and collection methods	18
3.5.1 Data types and sources	18
3.5.2 Data collection methods	18
3.5.2.1 Questionnaires.....	18
3.5.2.2 Interviews	18
3.6 Validity and reliability of data collection instruments;	19
3.6.1 Validity of data collection instruments.....	19
3.6.2 Reliability of data collection instruments.....	19
3.7. Ethical considerations.....	19
3.8 Data management and analysis.....	20
3.8.1 Data processing.....	20
3.8.2 Data analysis.....	20
3.9 Limitations and delimitations of the study	20
CHAPTER FOUR.....	21
PRESENTATION AND DISCUSSION OF FINDINGS	21
4.1 Introduction	21
4.2 Background information of the respondents.....	21
4.3 Tourism and peoples livelihoods	25
4.4 Fishing and people's livelihoods.....	30

4.5 Water use and peoples livelihoods	34
4.6: Water transport and peoples livelihoods	37
CHAPTER FIVE	40
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	40
5.1 Introduction	40
5.2 Summary of findings.....	40
5.3 Conclusions of the study	41
5.4 Recommendations of the study	41
5.5 Areas for further research	42
REFERENCES	43
APPENDICES.....	47
Appendix I: Questionnaire	47
Appendix II: Study photo.....	53

LIST OF FIGURES

Figure 1.7: Conceptual framework	7
Figure 4.3.1: Rank of site viewing by the respondents.....	26
Figure 4.4.4: Responses to fishing improving livelihoods	33
Figure 4.5.4: Responses to water use improving livelihoods	36

LIST OF TABLES

Table 4.2.1: Gender of the respondents	21
Table 4.2.2: Age of respondents	22
Table 4.2.3: Marital status of respondents	22
Table 4.2.4: Education level of the respondents	23
Table 4.2.5: Status of employment of respondents	24
Table 4.2.6: Duration spent in the area by the respondents	24
Table 4.3.2: Rank of site viewing by respondents	27
Table 4.3.3: Rank of sun bathing by the respondents	28
Table 4.3.4: Existing property rights on the water resource	28
Table 4.3.5: Payment per tourist to access the water resource	29
Table 4.3.6: Willingness to pay of the respondents	29
Table 4.3.7: Responses on tourism and livelihood improvement	30
Table 4.4.1: Dominant type of fish caught in the area	31
Table 4.4.1: Common fishing method in the area	31
Table 4.4.2: Uses of fish by the respondents	32
Table 4.5.1: Purpose of water use	34
Table 4.5.2: Amount of water used by the respondents	35
Table 4.5.3: Distance travelled to fetch water from river Nile by the respondents	35
Table 4.6.1: Whether respondents had ever used water transport	37
Table 4.6.2: How often the respondents used water transport	38
Table 4.6.3: Expenses on water transport by the respondents	38
Table 4.6.4: Responses on water transport improving livelihoods	39

LIST OF ACRONYMS

CBO: Community Based Organization

FAO: Food Agricultural Organization

IWRM: Integrated Water Resource Management.

NEMA: National Environment Management Authority

NGO: Non Governmental Organization

UBOS: Uganda Bureau of statistics

UN: United Nations

WTA: Willingness to accept

WTP: Willingness to pay

ABSTRACT

The topic of study was the contribution of River Nile to the people of Uganda using Namasagali Sub County as its case study. The major objective of the study was to examine the contributions of river Nile to the livelihoods of the people of Namasagali.

The study was cross sectional where by both qualitative and quantitative approaches were used to collect data. To efficiently conduct the study, the researcher targeted 50 households located in Namasagali Sub County to make a more scientifically justifiable sampling frame. A stratified random sampling method was used.

The data collected through conducting interviews and using self administered questionnaires by respondents. The data was analyzed using EXCEL and SPSS version 16 which facilitated the formation of frequency tables, graphs and cross tabulations.

The research the found out that fishing on river Nile had greatly improved the livelihoods of the people through creation of employment, earning income through selling fish and provision of cheap animal proteins as a source of food, the tourism activities in the area had created employment opportunities for boat riders, relaxation and body refreshment through activities like swimming and site viewing, water transport had improved livelihoods through saving the income passengers since it was cheap and the saved income would be used to meet other social needs, water use had improved livelihoods through

The conclusions were that the water was used for purposes like cooking, selling, drinking, irrigation; building bathing among others, the tilapia was the major type of fish caught in the area which was used for eating selling or both. The tourism activities included swimming sunbathing, and site viewing. Water transport in the area was very cheap as compared to other transport means.

Recommendations of the study were raised and these included; attracting more private investors in recreational activities so as to improve tourism in the area, subsidization of the fishermen so as to increase on the level of fishing activities, co management of the water resource, public sensitization to create awareness about the water resource.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The researcher looked at the contributions of river Nile to the livelihoods of the people of Uganda using Namasagali Sub County as the case study. This chapter shows the back ground of the study, the problem statement, the purpose of the study, research objectives, research questions used, the conceptual framework, the scope of the study, the significance of the study operational definitions and the organization of the study.

1.2 Background of the study

Water can be deemed an essential environmental resource. From an anthropogenic perspective, its most important role lies in human sustenance. Humans utilize water directly for many purposes; municipal water supply, sanitation, irrigation, transportation, industrial water supply, energy generation (hydro-electric), and recreation, for example. In recent years, with the rise of environmental ethics, the value of water has been given a broader definition with a more systematic and integrated approach. The idea that the value of water is determined solely through the interest of humans is increasingly questioned. Water plays an absolutely necessary and irreplaceable role in many ecosystem services, such as habitat creation, nutrient cycling, the hydrological cycle, and climactic regulation, to name a few.

Water plays a key role in the development of people and economies since it has multiple uses. Investment in water management directly contributes to livelihood security, improved health, poverty alleviation and reduced societal vulnerability.

Water is a marvelous substance flowing, swirling seeping, constantly moving from sea to land and back again. It shapes the earth's surface and moderates our climate. Water is essential for life. It is a medium in which all living processes occur. Water dissolves nutrients and distributes them into cells. Regulates body temperature, supports structures, and removes waste products. About 60% of the human body is made up of water. Water is also needed for agriculture, industry, transportation and a host of other human uses. (William et.al, nd)

REFERENCES

- Ashton, et al. 2006. "Water and security in Sub-Saharan Africa"
- Bailey, et al. 1986. Domestic Water Use Patterns. Marlow, Buckinghamshire: Water Research Council.
- Brown, 2002. Innovations for Conservation and Development
- Edwards, et al. 1995. Methodology for Surveying Domestic Water Consumption. A Journal of the Chartered Institution of Water and Environmental Management.
- Emerging concepts and their implications for effective water resource management in Environmental Law and Policy, 1997 Yearbook.
- FAO, 2003. Review of global agricultural water use per country, crop water requirements.
- FAO, 2005. Food and Agriculture Organization of the United Nations, Rome, Italy.
- Frederiksen, et al. 2003. "The world water crisis: Ramifications of politics trumping
- Giordano et al, 2003. "Sharing waters: Post-Rio international water
- Gleick, et al. 2000. The World's Water, 2000-2001: The Biennial Report on Freshwater
- Gleick, et al. 1993b. Water in Crisis: A Guide to the World's Water Resources.
- Gleick, et al. 1993a. Water and conflict: Fresh water resources and international
- Haftendorn H, 2000. Water and international conflict.
- Hamner, et al. 1998. Patterns in international water resource treaties.
- Hayton, et al 1989. Trans boundary ground waters: The Bellagio Draft Treaty. Natural Resources Journal, 29.

Helsinki in August 1966. Report of the Committee on the Uses of the Waters of International Rivers, International Law Association, London.

Herbert, et al. 1995. Water Debt and Disconnection. London: Policy Studies Institute.

Hettne, et al. 2005. "Regional co-operation – A tool for addressing regional and global challenges." Background paper prepared for the International Task Force on Global Public Goods.

Heyns, P. 2003. Water resources management in Southern Africa. In International Waters in Southern Africa.

Hosking, et al. 2004. The Valuation of Water for Conservation Projects in South Africa.

International Law Association, 1966. The Helsinki Rules on the Uses of the Waters of International Rivers.

International Law Association, 1986. The Seoul Rules on International Ground waters. Adopted by the 62nd Conference of the International Law Association, 1986.

International Law Association, 2004. Berlin Rules 2004. Water Resources Law. Fourth Report, 2004. International Law Association, London.

Institution of Civil Engineers and Scientists and the Institution of Civil Engineers, 1977. Proceedings of the One-Day Seminar on the Operational Aspects of the Drought of 1975-76. 29 March 1977. London: The Chameleon Press Limited.

Institution of Civil Engineers. 1980. Water Resources: A Changing Strategy? Proceedings of the Conference held in London. 2-5 October 1979. London: Institution of Civil Engineers.

Jägerskog, A. 2003. Why States Cooperate over Shared Water: The Water Negotiations in the Jordan River Basin.

Jägerskog, A. 2003. The power of the sanctioned discourse: a crucial factor in determining water policy.

Munro G. 2000. 'How do individuals relate to their local communities through work and family life?

National Consumer Council, 1993. *Paying the Price: a consumer view of water, gas, electricity and telephone regulation*. London.

National Consumer Council. 1997. *Consumers and the Environment: Can Consumers Save the Planet?* September 1997. London: The National Consumer Council. New York: Oxford University Press.

Uganda's National Environmental Management Authority .1998. *State of environmental report*.

Nicole, A. (2003). *The Nile: Moving Beyond Cooperation*. With additional material from

Office of Water Services, 1994. *Future Levels of Demand and Supply for Water*.

Office of Water Services, 1996. *Report on Recent Patterns of Demand for Water in England and Wales*. May 1996. Birmingham: OFWAT.

Rees, Judith Anne, 1969. *Industrial Demand for Water: A Study of South East England*. London: London School of Economics and Political Science.

Seraj, 2008. *Willingness to Pay for Improved Sanitation Services and Its Implication on Demand Responsive Approach of BRAC Water, Sanitation and Hygiene*

Solley, et al. 1998. *Estimated Use of Water in the United States in 1995*.

Stern, Paul C., et al. 1997. *Environmentally Significant Consumption Research Directions*. Washington, D.C.: National Academy Press.

Straughan et al, 1999. *Environmental segmentation alternatives: a look at green consumer behavior in the new millennium*. *The Journal of Consumer Marketing*, 16(6): 558-575.

The republic of Uganda's ministry of water and environment (2006) *National water development report*.

Water Services Association (WSA). 1993. *Water Metering Trials – Final Report*. Hartshead, Sheffield: WSA.

Electronic sources

Blake D. Ratner, 2011. Common Pool Resources Livelihoods and Resilience, Critical Challenges for Governance in Cambodia. IFPRI Discussion paper 01149. Available at: <www.ifpri.org/sites/default/files/publications/ifpridpo>. Accessed on 02/03/2013.

DFID Fisheries and livelihood Fmsp policy brief 4. Available at: <www.mrag.co.uk/document/policybrief4-livelihood> Accessed on 02/03/2013.

Frederick S, 2004. The project on human development. Available at <<http://humandevlopment.bu.edu>> Accessed on 02/03/2013.