BUSITEMA UNIVERSITY

FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF NATURAL RESOURCE ECONOMICS

ECONOMIC VALUE AND ENVIRONMENTAL IMPACTS OF MULTIPURPOSE SMALL SCALE ENTERPRISES OF PLANT NURSERY BEDS MAINLY ESTABLISHED NEARBY WATER BODIES FLOWING WITHIN OR IN THE VICINITY OF MBARARA MUNICIPALITY, MBARARA DISTRICT, WESTERN REGION OF UGANDA

BY

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NAMASAGALI CAMPUS

I. <u>TUSIME</u> <u>ABIAS</u> hereby declare that the dissertation above titled is my original work and has never been submitted to any award in any university. This submission is wholly and to the best of my knowledge the outcome of my research and I am its sole author. This dissertation does not contain any material previously published or accepted for any award. Where other sources of information have been used, they have been properly acknowledged.

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DEDICATION

I dedicate this piece of work to my Uncle Nabaasa Nicholas Kataamba and my father Mr. Mushabe Eldard, my beloved mother Mrs. Rose Mushabe, my brother and all my sisters and friends.

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LIST OF ACRONYMS/ABBREVIATIONS.

- BU Busitema university
- NEMA National Environmental Management Authority
- Shs Shillings
- MDLG Mbarara District Local Government
- CBA Cost Benefit Analysis
- NFA National Forestry Authority
- WTP Willingness To Pay
- WTA Willingness To Accept
- BIC Schwarz's Bayesian Criterion
- AIC Akaike's Information Criterion
- GML Generalized Linear Model
- MUST Mbarara University of Science and Technology

ABSTRACT

It was important to conduct this study because it was meant to avail information about the cost benefit analysis of small scale multipurpose nursery beds. This was to help nursery beds to assess the sustainability of the activity and to consider nursery operation as an economic activity. This study also was meant to avail stake holders with relevant information in order formulate an implement policies effectively. The study aimed at identifying the economic importance of urban rivers. This was achieved using nursery beds to identify inputs extracted whose value is attached to the river by establishing the Willingness to Pay for such inputs. The case study of the study was Mbarara municipality. The overall objective was to contribute to the knowledge of the economic importance of river Rwizi to the production of tree nursery beds in Western Uganda. The study was cross sectional and 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 and the statistical analyses were to find out levels of significance and correlation of different variables. The data was collected from a sample of 80 respondents. These were from Nyamitanga nursery site, Rwebikoona, NFA, and Itendero sites where nursery beds are mostly operated. Data was collected by means of a questionnaire and by field observations. The study used Cost Benefit Analysis to analyse the feasibility of decisions made by nursery operators in Uganda basing on the findings of the study, it was established that nursery activities are of a significant economic importance. It was found out that due to the more benefits than costs, the nursery activity has continued as an economic activity. The policy makers should therefore use this research to evaluate the major threats along river Rwizi to put up measures to conserve the river. Also, due to the presence of River Rwizi that provides more inputs, the costs are reduced and hence more willingness to pay for the conservation of River Rwizi. More so, further research should be done to enhance the findings of this study.

Key words: River Rwizi, Nursery beds, livelihoods, Environmental impacts, Cost Benefit Analysis, Mbarara, Western Uganda.

CHAPTER ONE: INTRODUCTION

This chapter presents the background of the study, problem statement, justification of the study, research objectives, conceptual frame work, Limitations of the study research questions and significance of the study.

1.2. Background of the study.

Globally, urban rivers are affected by river flooding and in 2010 were more evenly distributed across the regions, with less than half of flood prone urban areas in Asia and 17% in Europe. The results for coastal flooding were similar, with the urban area method again suggesting that Europe was exposed to higher levels of flooding than the population method. The total potential loss from river flooding in 2010 was estimated at either US \$35 trillion (€26.88 trillion) based on the population method, or \$21 trillion (€16.13 trillion) based on the urban area method. This is an increase by a factor of around 4 or 18, respectively, since 1970. The potential economic impact of coastal flooding was lower in 2010, but still \$13 trillion (€9.97 trillion) or \$8 trillion (€6.14 trillion), with similar increases to river flooding since 1970.

In Uganda, the water sector is one of the priority sectors since it directly impacts on the quality of life of the people and overall productivity of the population. Water supply and sanitation are among the key issues emphasized under the national Poverty Eradication Action Plan (PEAP), which is the key government framework for ensuring poverty eradication through creation of an enabling environment for rapid economic development and social transformation.

In Mbarara Municipality, River Rwizi being the major source of water makes it a sufficient and reliable water supply by the national water and sewerage corporation that is serving the majority of the population. Vending water is also a common practice within

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