TREND IN OCCURRENCE AND DISTRIBUTION OF MVULE TREE (*MILICIA EXCELSA*) SPECIES, IN NAMUTUMBA SUBCOUNTY

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

JUNE, 2014

DECLARATION

I Ndimugulumiza Samuel hereby declare that this report is my original work. It has never been submitted to any university or any higher institution of learning for any academic award. Thus, I accept to be responsible for everything contained in it.

Sign

.....

NDIMUGULUMIZA SAMUEL

Date. 30/06/2014.....

APPROVAL

This is to acknowledge that the work entitled "Trend in occurrence and distribution of Mvule tree (*milicia excelsa*) species, in Namutumba Sub County" has been done under my supervision and is now ready for submission to the faculty of Natural resource and environmental science.

Signature,

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Assoc.

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Supervisor

Date..... 30/06/2014

DEDICATION

I dedicate this work to my family and friends especially my parents, Mr. and Mrs. Kisoma, who have sacrificed everything to ensure my academic success,. Thank you for giving me such a moral foundation on which I have managed to come this far. May the good lord reward you abundantly

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LIST OFABBREVIATIONS/ACRYONMS

CBO	:	Community based organizations
CFM	:	Community Forest Management
DBH	:	Diameter at Breast Height
DFO	:	District Forest Officer
EIA	:	Environmental Impact Assessment
FAO	:	Food and Agriculture Organization
GIS	:	Geographical Information System
GPS	:	Geographical Positioning System
ILWIS	:	Integrated Land and Water Information System
IUCN	:	The International Union for Conservation of Nature
MONRs	:	Ministry of Natural Resources
NEMA	:	National Environment Authority
NFA	:	National Forest Authority

ABSTRACT

The overall objective of this study was to analyze the trend in occurrence and distribution of Mvule tree (*milicia* excelsa) species in Namutumba Sub County

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, field observations and mapping using GPS. The data was collected and analyzed using excel, stat spss, arc map, Ilwis and Arc view , which facilitated the formation of frequency tables, pie charts, shape files and point maps. The study was based on primary data collected through GPS tracking, field observations, the use of questioners, interview guides that were randomly distributed to the respondents in the different cluster areas.

From the findings, it was recognized that abundance of Mvule tree species is decreasing at a higher rate. Over exploitation of this tree species for wood, charcoal wild fires and clearance of agricultural land has aggravated a loss, Further more natural occurrence of pests and diseases especially *gall fly* has retarded the growth cycle of the young species. In addition presence of *early* and *late bright* has hindered the rise of this tree species in nurseries. Besides, the results indicated that most of the trees are young from the seedlings widely distributed on individuals own land and few mature trees located at health centers, trading centers, administration grounds and cultural sites. This implies that the source for seeds is still minimal.

Prospects

Mvule belongs to the most valuable timbers of uganda, due to its attractive appearance, durability, stability and good working properties. At present its exploitation is not sustainable in most parts of Uganda. Therefore it requires protection and exploitation has to be limited if it is

to become sustainable. Plantation is difficult due to a pest problem. The identification of sources of resistance to the Mvule gall fly deserves high priority and can possibly be complemented by the development of effective control methods, especially the use of natural parasites or predators of the Mvule gall fly.

CHAPTER ONE

INTRODUCTION

1.1 Back ground statement:

Legend has it that the first Europeans interested in felling timber in Uganda visited Busoga in the 1880s they saw the enormous Mvule tree that was so plentiful in Busoga and immediately recognized its potential for providing superb hardwood for construction and carpentry. However the current state in Uganda shows that Over 90% of the national energy demand is met from wood fuels. About 18 million tones of firewood are consumed annually and nearly 500,000 tones of charcoal. Large volumes of timber are also used for construction, furniture-making and other manufacture, estimated at 800,000 m3 per year. A further 875,000 m3 of poles are produced each year. The value of non-timber products derived from forests such as medicines, craft materials and food are also known to be significant.

According to*2006 IUCN Red list of threatened species*, Mvule tree was identified as one of the species under threat. The main threats being habitat loss and degradation due to expanding agriculture, overexploitation of the wood and *Phytolyma* attacks. *Milicia excelsa* is considered a priority for in-situ conservation. As genetic diversity within populations is low, but diversity between populations large, it is recommended that different populations are included in in-situ conservation efforts. This may be facilitated by the fact that in some areas *Milicia excelsa* is conserved on farm, in sacred groves, in public places and in cemeteries.

There is little that has been done to replace the slow-growing Mvule because the trees do not grow in forests, but rather haphazardly across Busoga. Efforts to grow them in nurseries are not successful because of gall flies, early and late blight. The Mvule is a resilient tree once it reaches a certain age, but before that age it is easily threatened. Every systematic effort to replant Mvule has failed over the last 30 years.

On the limit of Victory We're as green as the next generation so, as we contribute to the long-term health of a valuable Ugandan resource through the Mvule Project, we're also contributing to the long term health of Uganda's most valuable resource:

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