

**EFFECTS OF LIVELIHOOD ACTIVITIES ON CONSERVATION OF FOREST
PLANTATION**

**A CASE STUDY OF BARIFA EUCALYPTUS PLANTATION IN
ARUA MUNICIPALITY**

BY:

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**A RESEARCH REPORT SUBMITTED TO THE FACULTY OF NATURAL
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THE REQUIREMENT FOR THE AWARD OF A DEGREE OF BACHELOR OF
SCIENCE IN NATURAL RESOURCE ECONOMICS OF BUSITEMA UNIVERSITY**


JULY, 2017

DECLARATION

I, **Acidri Denis** do hereby declare that unless otherwise references quoted. The research work embodied in this report has entirely been through my own efforts and is original and has never been submitted to Busitema University or any other Institution of higher learning for the award of a degree or any other qualification.

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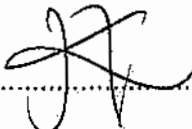


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APPROVAL

This is to certify that *Acidri Denis* did research and this report is a true representation of the findings and has never been submitted for to any Institution of Higher Learning or University for the award of a degree. I therefore recommend that this report be submitted to the Faculty of Natural Resource and Environmental Sciences of Busitema University.

Supervisor:  Date: 27/6/2017

MR. KISU- KISIRA HENRY



DEDICATION

I dedicate this special project or research report to Almighty God who has enabled me to undertake the course in these three years of study.

Secondly to my Late father *Mr. Peter Yitre*, Late Uncle Emeritus Bishop *Rt. Rev Frederick Drandua* of Arua Diocese, my beloved mother *Driciru Eliza betty*, my son *Allen Abel Leonard Denilson*, my bro *Asiandu Lawrence* and sissy *Asibazuyo peter Christine* and my great friends like *Otuma Patrick, Obiti Hitler, Ejoyi Sunday Robert*, all course mates and my supervisor for this research work not forgetting other relatives who played part in supporting me but are not mentioned by name during the period of study and of study

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LIST OF ACRONYMS

| | |
|--------|---|
| CFM | Collaborative Forest Management |
| CFR | Central Forest Reserve |
| CRM | Collaborative Resource Management |
| DFO | District Forestry Officer |
| DFS | District Forestry Service |
| DNRM | Directorate of Natural Resources at Municipality. |
| FAO | Food and Agricultural Organization |
| FD | Forestry Department |
| FIEFOC | Farm Income Enhancement and Forest Conservation project |
| FMP | Forest Management Plan |
| FP | Forestry Policy |
| FRA | Forestry Resources Assessment |
| Km | Kilo Meter |
| LC | Local Councils |
| LFR | Local Forest Reserves |
| NDP | National Development Priorities or framework |
| NEMA | National Environment Management Authority |
| NFA | National Forestry Authority |
| NFTPA | National Forest and Tree Planting Act |
| NGO | Non-Governmental Organization |
| PFE | Permanent Forest Estates |
| UNEP | United Nations Environment Program |
| UNFCCC | United Nations Focal conference on climate Change |
| WCA | Wildlife Conservation Areas |

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ABSTRACT

The study was carried out from December 2016 to February 2017 in Barifa Eucalyptus plantation in Arua Municipality. The main objective of the study was to assess the effects of livelihood activities on the conservation of Barifa Eucalyptus plantation. The specific objectives were: to identify livelihood activities being practiced in Barifa Eucalyptus plantation; and to identify the impacts of livelihood activities on the conservation status of Barifa Eucalyptus plantation.

The study used a descriptive survey design. It used both qualitative and quantitative approaches. In total 80 respondents were interviewed. These also included the District Forest Officer; Municipal Environment Officer; West Nile Range Manager, Sector Manager, and Supervisor of National Forest Authority. The other respondents were the local people living around Barifa Eucalyptus Plantation. The data was collected from Ayivu county, Oluko subcounty, Arua Hill Division of Arua Municipality, Mvara, ward, and Awindiri ward. The data was collected using questionnaires, direct observation and photographs, interview of key persons, and group interview for those who could not express themselves individually. The data was entered into Microsoft Excel and exported to Statistical Package for Social Scientists (SPSS) version 16 for descriptive analysis.

The findings showed that much of the Barifa Eucalyptus plantation borders were massively encroached. The people around the plantation were undertaking livelihood activities like cultivation, sand mining, and felling trees for poles, timber and charcoal. The impacts of these livelihood activities were reduction in tree cover and land degradation.

It is concluded that Barifa Eucalyptus plantation has reduced in size and its conservation is uncertain. It is recommended that the surrounding communities be sensitized on the benefits from plantations, involved in its collaborative management and replanting of the trees cut. Also, the borders should be demarcated together with the local communities. The authorities be provided with resources for raising planting materials to distribute to communities for replanting and recruitment of more staff.

CHAPTER ONE: INTRODUCTION

1.1 Background

Barifa plantation is located in Arua Municipality. It was gazetted as a forest reserve in 1948 by the British protectorate government. It covers 650 hectares. It was originally a natural forest but during the war of 1979, it was destroyed. It was later replanted with Eucalyptus in the 1990s under the Peri-Urban project of Forest Department. The Reafforestation was facilitated by the Non-Governmental Organizations (NGOs) that provided tree seedlings to licensed individuals to plant trees. In 2004, the forest was taken over from Forest Department to the National Forest Association (NFA).

The forest reserve has some part a natural forest, and another part a Eucalyptus plantation. The trees on the plantation part are owned by individuals who were given concessions by the National Forest Authority. Most of the local communities are concentrated on the plantation side. It is these people through their various activities that have greatly affected the conservation status of the forest reserve. Therefore the interest of this study focused on the Eucalyptus plantation side.

With the coming in of the National Forest Authority, most of the staff that looked after the forest reserve was laid off. Considering its size, there is a challenge of protecting the forest. The forest reserve is unique in that it is located inside a municipality. Such forest reserve suffers from pressure of their conversion into residential or industrial places. There have been a lot of debates in the newspapers on its conservation status. Private individuals have been pushing for its conversion into urban land. However, the tribal elders of Ayivu county have been advocating for its maintenance as a forest reserve.

Urban forest reserves play a key role in absorbing pollution from the surrounding industrial areas and vehicles on the various roads. Arua Municipality has greatly grown in size and so the forest reserve is important in controlling the various climatic effects in the area. It acts as a catchment area for River Asa and seasonal streams of Adumini and Lokwa. From these water bodies, many local people get water for their use. Also, the municipality's residential areas have many protected springs. The survival of these springs greatly lies on the conservation of Barifa forest

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