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FACULTY OF AGRICULTURE AND ANIMAL SCIENCES

DEPARTMENT OF AGRIBUSINESS AND EXTENSION

PROFITABILITY ASSESSMENT OF PLANTATION FORESTRY IN PAIDHA TOWN COUNCIL, ZOMBO DISTRICT

BY

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A SPECIAL PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS AND EXTENSION IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF A BACHELOR'S DEGREE OF AGRIBUSINESS OF BUSITEMA UNIVERSITY

DECLARATION

I ONENCHAN ROBERT hereby declare that this research report is my own work and has never been presented by anyone to any institution for any award.

The sources used to compile additional information are cited in the document.

Signature.....

Date.....21/03/2024.....

APPROVAL

This is to certify that this research report is ready for submission for the award of a Bachelor Degree of Agribusiness.

Signature ..... Date 22/3/2024 .....

DR RONALD KABBIRI

Research supervisor

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DEDICATION

I dedicate this research report to the almighty God for continuous grace throughout my life especially through this academic journey. Dedication also goes to my parents Mr. Oneka Patrick Kerodong and Mrs. Oneka Evelyn, my Uncle MR Kerodong Paskwale Acayerach and his family for their continuous support, as well as all my family members who have greatly contributed to my progress both materially and emotionally.

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LIST OF ABBREVIATIONS

NFA	National forestry authority
FAO	Food and Agriculture organization
MAAIF	Ministry of Agriculture and animal industry and fisheries
UN	United Nations
UBOS	Uganda Bureau of statistics
Shs.	Shillings
Ha	hectares
FRA	Forest resources assessment
MWE	Ministry of water and environment
NTFP's	Non timber forest products
WWF	World wide fund for nature
ROI	Return on investment
GPM	Gross profit margin
PM	Profit margin
SPSS	Statistical package for social scientist

ABSTRACT

The major aim of this study was to assess the profitability of plantation forestry production in Paidha town council, Zombo district. The objectives of the study were to; characterize the farmers engaged in plantation forestry in Paidha town council, Zombo district, assess the costs and benefits involved in plantation forestry production and assess the factors that contribute to the profitability of plantation forestry production. The study adopted a crossectional approach with a sample size of 65 respondents. The results indicated that majority of the respondents (74%) were male with majority (63%) having a household size of 5-10 members , with 55% attaining primary education, most of them having a tree growing experience of above 15 years justified by the largest population (43%) falling in the age 45-60 years. Majority (74%) had a land holding size of 1-4 acres with 55% owning plantations of 1-5acres and 55% attaining primary education (majority). the dominant average monthly income of the respondents (43%) was shs.100,000-300,000 The predominant tree species grown (58%) was eucalyptus with timber identified as the major purpose for growing these trees (70.8%). Through a combination of return on investment and gross profit margin analysis this research study evaluated the profitability of plantation forestry operations in Paidha town council Zombo district, with four revenue streams identified; Timber production, the highest revenue earner (shs. 52,500,000) generated a 90.8% gross profit margin followed by wood and charcoal (shs.24,000,000) with 84.8% profit margin whereas recreational activities (shs. 18,000,000) and poles (shs.3,000,000) being the third and fourth revenue stream with gross profit margins of 73.1% and 45.6% respectively. Findings also indicate that profitability in plantation forestry is influenced by factors such as tree species selection, management practices, market dynamics, and policy frameworks. The implications of this research study therefore extends to various stakeholders including investors, policymakers, forest managers, and local communities. Insights from this study can also help inform decision-making processes related to land use planning, investment prioritization, and policy development aimed at promoting profitable and sustainable plantation forestry practices. Furthermore, the study points out the need for collaborative and innovative approaches to address the many challenges facing the forestry sector in achieving both economic and environmental objective

CHAPTER ONE

INTRODUCTION

1.1 Background

Plantation forestry is a forest management approach characterized by intentionally cultivating fast-growing tree species in organized stands, primarily to produce timber and wood products (Freer-Smith et al., 2019).

According to the Global Forest Resources Assessment (FRA) report published by the Food and Agriculture Organization of the United Nations (FAO) in 2020, the total forests area globally is 4.06 billion hectares (ha), covering 31% of the total land area.

Two broad categories of forests have been identified by FRA, namely, naturally regenerating forests and planted forests. Naturally regenerating forests cover around 3.75 billion hectares (ha) or 93% of the total forest area. Meanwhile, the total area of planted forests globally is estimated to be 294 million ha or 7% of the world forest area. Asia has the largest area of planted forests which amounts to 135.23 million ha, or 46% of the total planted forest area globally, followed by Europe, North and Central America, South America, Africa, and Oceania (Seng Hua et al., 2022).

Typically composed of fast-growing species, these forests cater to economic needs by providing a consistent supply of timber and wood products, with the global trade in forest products surpassing $270 billion in 2018 (FAO, 2018). This in turn stimulates economic growth by generating employment opportunities and income (Robertson, 2018). Beyond economic importance, planted forests also contribute significantly to environmental sustainability by sequestering carbon dioxide, aiding in climate change mitigation (Freer-Smith et al., 2019)

Planted forests also face challenges such as invasive species, disease outbreaks, and poor management practices (Payn et al., 2015).

The future however suggests continued expansion of planted forests to meet growing demand for timber and wood products while emphasizing sustainability and conservation (Silva et al., 2019)

In Uganda, natural State Owned Forest Estate & Conservation of Biodiversity make up only 30% of the forestland in Uganda or about 1.5 million hectares or 7% of the total land area. With deforestation estimated at 1% per annum, this area may be reduced to about 1.2 million hectares in 2020, 70% of the forestland in the country or about 3.5 million hectares or 17% of the total

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