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IMPACTS OF AGRO FORESTRY PRACTICES ON THE LIVELIHOOD OF FARMERS IN NAMASAGALI SUB COUNTY KAMULI DISTRICT-UGANDA

BY

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(BU/UG/2019/0069)

This final year project report is submitted to the Department of Natural Resource Economics in partial fulfillment of the requirement for the Award of the Degree of Bachelor of Science in Natural Resource Economics of Busitema University.

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Declaration

I **Turyamusiima Emily** declare to the best of my knowledge that this research report submitted to the faculty of Natural Resource and Environmental Sciences is my original work and has never been submitted by any other person to any institution or university for any academic qualification.

Signature: …………………………   Date……………………………………….

(BU/UG/2019/0069)

APPROVAL

This is to certify that this research report titled "Impacts of Agroforestry on the Livelihood of farmers: a case study of Namasagali Sub- County, Kamuli district" is the original work of Turyamusiima Emily and has been submitted with our approval as supervisors for the partial fulfillment of the Award of Bachelors of Science in Natural Resource Economics of Busitema University, Uganda.

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Dedication

This research is dedicated to all those who offered help and assistance in the progress of finishing this research especially my sister Nuwahereza Roziana, my Dad, Mr. Kamugisha Robert, my Mum, Mrs. Kamugisha Robina, my best friend, Amos Okilong, and my siblings Vierah, Violah and Vanessa for their tireless efforts to ensure my research is done in time.

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LIST OF ABBREVIATIONS.

AFS   Agroforestry System

AFOLU   Agriculture Forestry and Land Use

DEAP   District Environment Action Plan.

FAO   Food and Agriculture Organization.

GHG   Greenhouse Gases

ICRAF   International Council for Research in Agroforestry.

LC   Local Council.

NAP   National Agroforestry Program

NRE   Natural Resource Economics.

NGOs   Non-Governmental Organizations.

PES   Payment for Ecosystem Services.

UBOS   Uganda Bureau of Standards.

ABSTRACT

The study assessed the impacts of agroforestry practices on livelihood of farmers in Namasagali Sub- County in Kamuli district. The study was carried out in five zones of the two villages of Kisaikye and Kavuule. Descriptive survey design was used where semi-structured questionnaires were used to obtain data from selected households. Sampling methods were used to select respondents from the two villages where simple random, purposive and snowball sampling

techniques were employed to collect data from a sample size of 70. Kobo collect was used to develop

electronic questionnaires which were used to collect data on household socio economic status, the impacts of agroforestry practices on farmers, challenges faced by agroforestry farmers and the different strategies that were put in place to increase the adoption of agroforestry practices. SPSS version 20 was used to analyze data and the results show that most agroforestry farmers had experienced an impact of climate modification (22.5%) and nutritional security (22%). It was discovered that most farmers practiced silvo pasture (33.3%) and majority had grown maize (26.9%) as the dominant crop and had majorly integrated jack fruit and mango trees (22.2%). Most farmers were faced with a challenge of limited land (33.3%) which limited them from practicing agroforestry on a large scale. Results show that most farmers had joined farmer groups (35.7%) as the main strategy to increase adoption of agroforestry. Results also show that farmers who had adopted agroforestry had attained an improvement in their overall financial situation from tree products like timber, fruits, firewood for charcoal burning. It is concluded that farmers with larger household size are more likely to practice agroforestry practices than farmers with smaller household size and also shows that most of the farmers who were more likely to adopt agroforestry had a bigger land acreage for planting more trees. It is recommended that the government should intervene to support agroforestry farmers through provision of extension services, subsides or incentives.

CHAPTER ONE: INTRODUCTION

1.1 Background

Agroforestry is one of the most noticeable land-use systems across agro-ecological zones and landscapes in the world. With increased threats of climate change and food shortages and, concern in Agroforestry gathers its ability to meet different adaptation needs on-farm in other to achieve many roles in AFOLU (Agriculture Forestry and Land Use) associated mitigation pathways. Income from carbon, wood energy, assets, improved soil fertility; ecosystem services and enhancement of local climate conditions are all provided by agroforestry; in order to reduce human effects on natural forests (Liliane, 2018). Agroforestry systems include both traditional and modern land-use systems where trees are managed together with crops and/or animal production systems in agricultural settings (FAO, 2022).

Agroforestry has been defined as a dynamic, ecologically based, natural resource management system that, through the integration of trees on farms and in the agricultural landscape, diversifies and sustains production for increased social, economic and environmental benefits for land users at all levels (Sirajo, 2023). Agroforestry is continued to be developed, promoted, and used by smallholder farmers as one of the sustainable agricultural practices to address the aforementioned problems (FAO, 2018 and Santoro et al., 2020). According to (Walter et al., 2015) and (FAO, 2018) the implementation of agroforestry practices will improve household food security and income, while reducing the consequences of climate change (Chavula et al., 2023) as well as meeting local needs. It also protects the environment and this method could possibly compete with regional food production (Akter et al., 2022).

The adoption of agroforestry in East Africa gained momentum in the early 1980s as a response to the region's environmental challenges, such as deforestation, soil degradation, and declining agricultural productivity. Governments, non-governmental organizations (NGOs), and research institutions in countries like Kenya, Tanzania, Uganda, Rwanda, and Ethiopia started promoting agroforestry as a viable solution to address these issues (ICRAF, 2018).

Agroforestry was introduced in Uganda in the early 1980s. The practice was introduced as a means of promoting sustainable land management and improving the livelihoods of smallholder farmers

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