## ASSESSING THE POSSIBILITIES BY AGRICULTURAL AND FORESTRY FARMERS' ACCESS TO CARBON FINANCING UNDER PAYMENT SCHEME:

# A CASE OF NAMASAGALI SUB COUNTY, KAMULI DISTRICT.

BY

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2016

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### **DECLARATION**

I NALUNGA VERONICAH, declare that this research is a result of my personal commitment and has never been submitted either in the same or different kind to this or other institution for any academic qualification. I, therefore take full responsibility for any errors or omissions in this work that may arise and hence resulting to misinterpretation.

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Signed	×

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### APPROVAL

This is to certify that this research report compiled by Nalunga Veronicah has been submitted with my approval as her supervisor.

Signature? ) . . . KIFUMBA DAVID NSAJJU Date: ..... ••••

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## DEDICATION

I dedicate this piece of work to the Kanyike family, Kasozi family, my sons Rakhshan and Rameez, my Hanie, Mummy, etc for the prayers and support rendered towards the accomplishment of this report (course). May God bless you all.

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# ACRONYMS

A/R:	Afforestation /Reforestation
AFOLU:	Agriculture, Forestry and Other Land Uses
CH4:	Methane
CO2:	Carbon dioxide
GHGs:	Green House Gases
H <sub>0</sub> :	Null hypothesis
H <sub>1</sub> :	Alternative hypothesis
N2O:	Nitrous oxide
NAHI:	Nature Harness Initiatives.
PRESA:	Pro-Poor Rewards for environmental Services in Africa.
REDD:	Reducing Emissions from Deforestation and Forest Degradation
SALM:	Sustainable Agricultural Land Management
tCO2/ha/yr:	tones of Carbon dioxide per hectare per year.
PES	Payment for Ecosystem Services

## **DEFINITION OF KEY CONCEPTS**

Carbon credits: Is the currency used on carbon markets.

Carbon finance: Is the way through which one can make money using carbon credits on carbon markets.

Carbon market: Is the virtual financial place where persons buy and sell carbon credits,

Carbon offsetting: Is the way to compensate emissions which cannot be avoided by paying someone else to save – sequester – GHGs.

### ABSTRACT

Different economic activities lead to climate change in order for farmers to generate income. On the other hand among the activities farmers can mitigate it as well as obtaining the different benefits amongst carbon financing from agriculture and forestry activities.

Farmers have continuously carried out economic activities on their land through which they generate direct income from agriculture and forestry. However, they do not consider the indirect income from the sale of carbon offsets from their activities yet they play a big role in climate change mitigation as payment for ecosystem services.

This study was carried out in Kisaikye, Bwiiza, Namasagali and Kasozi parishes in Namasagali sub-county of Kamuli District. The aim was to generate information on the possibilities of agricultural and forestry farmers to access carbon financing under payment scheme. This is important in harnessing adaptive measures towards climate change and was done by finding out the different activities carried out by farmers on their land as sources of income, major activities that are readily available for adoption in regard to carbon financing, their knowledge on the importance of their activities towards climate change and their willingness to establish carbon projects. The assessment was based on the willingness of famers to accept sparing part of their land from other land uses for carbon financing project establishment.

Self-administered questionnaires and field observations were used to obtain information on the existence of carbon related projects and the incomes farmers generate from the activities they carry out on their land. The gathered information was coded and analyzed in Excel, SPSS and STATA using pie charts, bar charts, frequency tables and chi-squares. These were readily available packages and simple to use and interpret.

Findings indicated that Agricultural and Forestry activities are easily adopted by farmers depending on the different benefits they obtain such as social, economic and environmental. Farmers were able to specify the size of land they are willing to establish carbon project(s) on in hectares and the ways through which they are able to establish the carbon project by type. It is concluded that there is a possibility for the farmers to access carbon financing under payment scheme.

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#### CHAPTER ONE

#### 1.0 INTRODUCTION

#### 1.1 Background of the study

#### 1.1.1 Global perspective of carbon financing

Traditionally society has consumed environmental services such as, control of soil erosion, carbon sequestration, water shed protection, and nutrient cycling by trees and other green plants without payment (Scherr, 2004). Such free riding often leads to under investment in management and protection of environmental and natural resources, resulting in degradation (Rohit, 2006). However increasing awareness of environmental issues and innovations in market- based instruments has led to the emergence of markets for many environmental services such as carbon sequestration (Rohit, 2006), through carbon financing.

Carbon sequestration in the form of afforestation and reforestation, agro-forestry and agricultural activities can afford often generate co-benefits for locally valued ecosystem goods and services (Scherr, 2004). Private firms and individuals can now buy and sell carbon sequestered by trees and other plants just like other goods and services, thereby providing an incentive for the tree/plant owners to regulate their use (Pigiola, 2004).

Carbon finance explores the financial implications of living in a carbon constrained world, a world in which emissions of carbon dioxide and other greenhouse gases (GHGs) carry a price. Financial risks and opportunities impact co-operate balance sheets and market based instruments are capable of transferring environmental risks and achieving environmental objectives. Issues regarding climate change and GHG emissions must be addressed as part of strategic management decision. The biggest threats we face owing to increased carbon emissions from everyday activities (FAO, 2010) like driving of cars or motorbikes, using air conditioning, burning of fossil fuels, deforestation, bush burning, mining, industrialization and many more is Climate change due to accumulating greenhouse emissions

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