

FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

**ASSESSING ECONOMIC IMPACTS OF CLIMATE VARIABILITY ON AGRO-
PASTORALISTS:**

A CASE STUDY OF RUPA SUB COUNTY, MOROTO DISTRICT

BY

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BU/UG/2016/1822



**A Research report submitted in partial fulfillment for the Award of the Bachelor of Science
Degree in Natural Resource Economics of Busitema University**

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DECLARATION

I **LOKWARA JOVAN KELVIN** herein declare that this work has been of my own endeavors and efforts and has never been submitted to Busitema University or any other institution for any award of any program.

Candidate:



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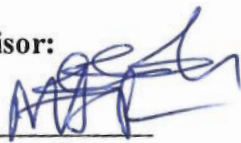
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APPROVAL

This is to confirm that the research works done and submitted to Busitema University is original and has been entirely out of the efforts of **LOKAWAR JOVAN KELVIN** under my supervision in partial fulfillment for the award of a Bachelors Degree of science in **Natural Resource Economics** of Busitema University.

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DEDICATION

I dedicate this work to God the Almighty for his unending love and continuous support throughout my research and connecting me to resourceful people who made my work possible. Glory to him

To the greatest man and most kind of all I ever met on Earth **Lt. Gen Andrew Gutti egsc (USA) psc⁺** for all the support in all aspects of my life as he has been more than a parent to me and upbringing from childhood to a responsible and respectful citizen, the leadership skills, ethics and the art of getting along with people you instilled in me will bare your mark to eternity, may you live to see your reflection in me. I am forever humbled for the finances, mentorship and everything.

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LIST OF ACRONYMS

UNDP	United Nations Development Programme
FAO	Food and Agriculture Organization
MWE	Ministry of Water and Environment
USAID	United States Agency for International Development
OPM	Office of the Prime Minister
ASALs	Arid and Semi-Arid Lands
UGX	Uganda shillings
GDP	Gross Domestic Product
IIED	International Institute of Economic Development
R&D	Research and Development
SPSS	Statistical Package for Social Scientists
GoU	Government of Uganda
Km ²	Square Kilometres
Mm	Milimetres
Sq.mi	Square metres
°C	Degrees Celsius

ABSTRACT

In this paper, I discuss the effects of climate variability on the agro pastoralists of Rupa Sub County, Moroto district and the discussion basically looks at the trends in the economic activities due to the effects of the ever changing climate conditions as this has significantly influenced the livelihoods of the people in the region.

The methods of data collection used were: questionnaires and field observations. The data was then entered into excel and exported to SPSS where analysis was done. The data was obtained from a sample of 60 residents of Rupa sub county who were involved in several economic activities which include mining of gold, limestone, marble, etc, animal raring, charcoal burning, crop cultivation among other activities. I found out that most people living in Ratta Village derive their livelihood from majorly firewood collection and charcoal burning. However, these have led to environmental degradation as most of the forested areas have been encroached to sustain livelihoods.

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter introduces the background, problem statement, objectives, and research questions of the study, significance of the study and scope of the study.

Extensive pastoralism exists on all continents except Antarctica, mostly in the drylands or highlands, where intensive crop cultivation is physically not possible (FAO 2001). Currently, pastoralism occurs in more than 100 countries on about 25 % of Earth's land area and supports about 200 million households and herds of nearly a billion animals, including camels, cattle, and smaller livestock that account for about 10 % of the world's meat production (FAO 2001). Pastoralism provides very important ecological services, such as primary production, biodiversity conservation, and erosion control. However, the social, economic, and environmental importance of worldwide pastoralism has been overlooked in the modern era. It is necessary to review the history, distribution, and importance of global pastoralism, especially in the developing world. Here, we provide an overview of global pastoralism and its human-natural systems (Dong, 2018)

1.2 Background of study

Pastoralism is a complex livelihood system seeking to maintain an optimal balance between pastures, livestock and people in uncertain and variable environments. Despite the important role pastoralism plays in supporting local livelihoods, in contributing to national and regional economies in some of the world's poorest countries, and in providing diverse ecological services, its capacity to adapt to change is facing many challenges, including those posed by climate change (Nori et al., 2008). The quality, quantity and spatial distribution of natural pastures are mainly shaped by rainfall. Predicted changes in rainfall patterns are bound to result in increasingly scarce, scattered and unpredictable pastures (Bai and Bent 2006). There are also significant negative consequences including loss of livestock through heat stress or colder seasons; increase in animal pests and diseases; loss of land to agricultural encroachment as the rise in rainfall raises the productive potential of the dryland areas; an increase in frequency of

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