

BUSITEMA  UNIVERSITY

**FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL
SCIENCES**

**ASSESSMENT OF EFFECTIVENESS OF RURAL LIVELIHOODS WITHIN
CURRENT CLIMATE VARIABILITY: CASE OF ARAPAI SUBCOUNTY,
SOROTI DISTRICT**

BY

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REQUIREMENT FOR THE AWARD OF A DEGREE IN BACHELORS OF SCIENCE
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2022

DECLARATION

I ALUNGO OLIVER JUDITH hereby declare that this research report is my original work and has never been submitted to this university or any other for the award of a degree or its equivalent. Therefore, unless otherwise stated, the work contained here is my own.

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APPROVAL

I have supervised and do approve that this research report is ready for submission.

Signature: Date.....

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DEDICATION

I dedicate my work to the almighty God, my lovely parents: Dad Mr. Epedu Patrick and my Mrs. Agaro Esther Epedu for the love and Care for me, my siblings. .

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LIST OF TERMS

GDP	gross domestic product
UBOS	Uganda bureau of statistics
FAO	Food and agriculture organizations
CAADP	Comprehensive Africa Agriculture Development Program
NGOs	Non-government Organizations
UNFCCC	United Nations Framework Convention on Climate Change
NEMA	National Environment Management Authority
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WHO	World Health Organization
LC1	Local Chairperson One

ABSTRACT

Climate variability is a global reality and influencing sources of livelihoods among rural farmers where their capacity to cope cannot be guaranteed as sure solutions. The main aim of this study was to find out the ways by which peasant farmers in Arapai Sub County are able to sustain their livelihoods and health under the current climatic variability in Soroti district. The objectives were to find out the ways by which peasant farmers in Arapai Sub County are able to sustain their livelihoods and health under the current climatic variability, To find out the major cropping types practiced under existing local habitat environments, find out reasons for successful cultivation of the different types of cash crops and food crops grown, To determine local methods of farming communities use to secure adequate food supplies during harsh weather conditions, To determine the contributing factors that have led to reduced crop yields in Arapai sub county

Quantitative and qualitative approaches were used to collect data, and this involved use of secondary data. Observation, interview, and use of questionnaires. The data collected from 60 respondents was analysed using SPSS 6.0 and Excel starter packages and presented by use of pie charts, bar graphs, histograms.

The study revealed that the major crop type grown in Arapai Sub County is majorly food crops which is for home consumption and it's the major source of livelihoods. Major ways in which farmers are able to sustain their livelihoods under the current climate variability and changes of climate is by mixing crops shown by the much percentages of the respondents who mixed their crops. Also, by planting crops early when the rains set, a bigger percentage of the respondents grow crops for the two seasons so as to get more yields.

It was revealed that the major contributing factor for reduced crop yields was, climate this is in form of high temperatures, drought, floods, pests and diseases, small land size holdings, low level of education of the farmers which influences the use and adoption of the modern technologies for the farming.

It is recommended from this study that the farmers adapt new farming methods, mix crops, plant more improved seeds to improve the yields, form farmers association to help them lobby for help from the organizations.

CHAPTER ONE

1.0. GENERAL INTRODUCTION

1.1. Definition of terms

1.1.1. Climate variability

Climate variability is a global reality and influencing sources of livelihoods among rural farmers where their capacity to cope cannot be guaranteed as sure solutions.

1.1.2. Agriculture.

Agriculture as a noun is the science or practice of farming, including cultivation of the soil for the growing of crops and rearing of animals to provide food, wool, and other products.

According to agricultural science by Gerhardt Preuschen, agriculture is science dealing with food and fiber production and processing, they include the technology of soil cultivation, crop cultivation and harvesting, animal production and the processing of plant and animal products for human consumption and use.

An agricultural holding refers to an economic unit of agricultural production under single management comprising of livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form or size.

1.1.3. Agricultural production.

This is the use of cultivated plants or animals to produce products for sustaining or enhancing human life. Agricultural crops turned into products in are inform of foods, fuels, fibers or raw materials. Roughly 11% of the planets land is dedicated to crop production and close to 26% is being used for animal pastures.

1.2. Agriculture and economic development.

1.2.1. The global perspective.

Agriculture is crucial to economic growth in 2018 it accounted to 4% of the global gross domestic product (GDP) and some developing countries it accounts for more than 25% of the GDP according to World Bank research on agriculture and food.

Agriculture is one of the largest and most important economic activities in the world, particularly in low- and middle-income countries, where agriculture has significant impact on domestic product growth. Some of the largest agricultural sector throughout the world includes the production of the grains (rice wheat maize millet sorghum) coffee beans potatoes cassava.

APPENDIX

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