



**BUSITEMA
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Pursuing Excellence

FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF NATURAL REOURCES ECONOMICS

BACHELOR OF SCIENCE IN NATURAL RESOURCE ECONOMICS

**ASSESSING THE EFFECTS OF DROUGHT ON THE LIVELIHOODS OF CROP
FARMERS IN NAMASAGALI SUB-COUNTY, KAMULI DISTRICT.**

BY

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A research report submitted to the Faculty of Natural Resources and Environmental Sciences in the partial fulfillment of the requirements for the award of the Degree of Bachelor of Science in Natural Resource Economics of Busitema University.

DECLARATION

I NEUMBE HOPE KEMBA, declare that this research report submitted to the Faculty of Natural Resources and Environmental Sciences is my original work and to the best of my knowledge, it has not been submitted by any other person to any institution for any academic qualification.

SIGNATURE..... DATE..... /...../.....

NEUMBE HOPE KEMBA

APPROVAL

This is to certify that this research report titled “Assessing the effects of drought on the livelihoods of crop farmers in Namasagali Sub County, Kamuli district” is the original work for **NEUMBE HOPE KEMBA** and it has been done under my supervision.

SIDNATURE.....

MADAM ARIANGO ESTHER

DATE...../...../.....

DEDICATION

This work is dedicated to everyone who has supported me in my academic journey more especially my parents; Mr. Mwebya Robert Ganagwa and Miss Nafuna Agatha, my siblings Allen, Grace, Mercy as well as my friends and course mates who were always there when I needed help throughout this journey.

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LIST OF ACRONYMS AND ABBREVIATIONS

IPCC	Intergovernmental Panel on Climate Change
IWRM	Integrated Water Resource Management
WHO	World Health Organization
UNICEF	United Nations International Children's Education Fund
FAO	Food and Agricultural Organization
UBOS	Uganda Bureau of Statistics
UNHS	Uganda National Household Survey
UN	United Nations
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
GOI	Government of India
NAAS	National Academy of Agricultural Sciences

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EXECUTIVE SUMMARY

The major purpose of this study was to assess the effects of drought on the livelihoods of crop farmers in Namasagali Sub County, Kamuli district. This study was guided by mainly three objectives which included; to identify the impact of drought on the livelihoods of crop growers in Namasagali Sub County, to find out the causes of drought in Namasagali Sub County and to identify some of the existing and potential mitigation measures to drought in Namasagali Sub County, Kamuli district. The study was conducted in mainly three villages namely; Bususwa, Kabaganda, and Kabanyoro that were sampled to obtain accurate data. A descriptive survey research design was adopted and it relied mostly on primary data. Primary data was collected from the respondents by closed and open-ended questionnaires, interviews and direct observation from surveys conducted in the study areas above. The study used both qualitative and quantitative research approaches.

It was found that reduced plant growth was the major impact of drought on crop farmers' livelihoods. This resulted into an increased loss of income by the largest percentage of respondents thus affecting the affordability and availability of food for crop farmers. The study also revealed water stress as another impact of drought on the livelihoods of crop farmers as this resulted into the crops drying up thus low yields. Infestation of pests and diseases in Namasagali Sub County was another impact of drought. This is due to the prolonged drought conditions that favor pests like monkeys which destroy crops like maize, cassava, sweet potatoes and vegetables.

The findings indicate that there are coping mechanisms adopted by crop farmers to manage the impacts of drought on their livelihood. These include; changes in planting times that was being practiced by most of the farmers, followed by use of drought resistant crop varieties, alternative income sources, crop rotation and drip irrigation. Also, the government of Uganda has programs in place to assist crop farmers during the drought for example the Parish Development Model and Emyooga, climate smart agriculture and others.

1.0 CHAPTER ONE

1.1 Background of the study.

Drought is a form of environmental stress that originates from a deficiency in precipitation over an extended period of time long enough to cause moisture deficiency, biotic loss, crop failure, loss of lives both human and bovine and general hardships (Ngaira, 2010). Droughts have direct and indirect effects on livelihoods especially where they are weather dependent. The term livelihood is defined as a means of living, especially of earning enough money to feed oneself. In Africa, rural livelihoods are largely derived from rain-fed agriculture with about 70% of the continent's population depending on agriculture for their livelihood (Muthui, 2009)

Droughts are recognized as an environmental disaster and have attracted the attention of environmentalists, ecologists, hydrologists, meteorologists, geologists and agricultural scientists. Droughts occur in virtually all climatic zones, such as high as well as low rainfall areas and are mostly related to the reduction in the amount of precipitation received over an extended period of time, such as a season or a year. Temperatures; high winds; low relative humidity; timing and characteristics of rains, including distribution of rainy days during crop growing seasons, intensity and duration of rain, and onset and termination, play a significant role in the occurrence of droughts. (Mishra, 2010)

Most of the people in Uganda live in rural areas. It is evident that rural people and their community will experience significant climatic impact on food supply and security, water availability, infrastructure and agriculture income (IPCC, 2014). By understanding the dynamics of poor people's livelihoods, we can understand how they will be affected by drought, how they might respond with the resources they have, and how these conditions can be reflected and built upon for successful adaptation strategies (Baillie, 2004). Drought has serious repercussions on food security, availability, accessibility and utilization and food system stability. Women farmers currently account for 45–80 per cent of all food production in developing countries depending on the region. In India, women are actively engaged in agricultural activities, including paddy cultivation and fishing, which are both affected by changing weather patterns. Loss of livelihood increases women's vulnerability and marginalization. (Ram Singh, 2013)

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