

BUSITEMA UNIVERSITY

FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF BIO-PHYSICAL AND GEOINFORMATION SCIENCES

**FINAL YEAR PROJECT REPORT ASSESSING THE IMPACTS OF CLIMATE
VARIABILITY HAZARDS ON WOMEN ENGAGED IN CAPTURE FISHERIES**

A CASE STUDY OF NAMASAGALI SUB COUNTY

BY

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**A RESEARCH REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE
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ABSTRACT

The study assessed the impacts of extreme weather events on the different actors of the fish value chain of the Victoria Nile fishery at the three landing sites namely Kabeto, Kalama and Nsagabiyiire in Namasagali subcounty to determine the changes in income, animal protein intake, risks encountered as well as the adaptive measures undertaken by the fisherfolks to enhance their resilience to the hostile weather events caused by climate variability. Random and Snowball sampling techniques were used to gather information from the respondents. E-questionnaire designed in Kobo collect tool was used to collect primary data, secondary data from published journals, articles, reports on related studies were used to gather different insights on the study. The results showed that income of the fisherfolks changes with the seasons and these changes can be either be positive or negative depending on the circumstances and the type of fish one deals in. Dagaal traders are more vulnerable to flood effects where as traders dealing in other fish species are more vulnerable to the effects of dry spells. The consumption of other fish species with the exception of dagaal is highest during seasons of heavy rains when catches are high and the consumption declines during dry spells when catches become very low and the prices rise. Results also show that fish is the main source of animal protein to the households of Namasagali as only 13% of the respondents can afford meat as an alternative animal protein source during the dry spells when fish becomes scarce. The findings showed that flooding of roads and landing sites during seasons of heavy rains greatly affects the accessibility to the market areas and the landing sites hence indirectly affecting effective trading activities due to transport hinderance. There are no government related programs that extend financial or extension services to help the fisherfolks to cope with the effects of climate variability hazards. Most of the traders cope with the effects of floods by use of personal protective gears to cross the muddy roads and also do some preservation and value addition to reduce post-harvest losses due to surplus fish supply yet with reduced market access due to flooding of the pathways.

DECLARATION

I, KANTONO KHADIJA, author of this report hereby declares that with the exception of the references this is my own work, it has never been submitted to any institute or university.

Signature

Date.....

APPROVAL

The report has been submitted with the approval of the following individuals.

Prof. Wilson Mwanja

Project supervisor

Signature..... Date

DEDICATION

This report is dedicated to my beloved family

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CHAPTER ONE:

1. INTRODUCTION

1.1. Background to the study

Climate change and extreme weather conditions is likely to profoundly impact the variability in weather patterns which in turn increases the cases of climate-related hazards such as floods and droughts with consequent impacts on the people's livelihoods. However, the magnitude and nature of the effects of climate variability hazards vary depending on social dimensions of vulnerability of the people affected (Nyboer, 2019). The changes in weather patterns also have impacts on the aquatic ecosystems such as lakes and rivers and can change the fish distribution and abundance of fish populations and communities that derive their livelihood from fisheries need adopt adaptive measures to cope with these changes (Nyboer, 2019).

Disaggregated analyses enable exploration of vulnerable groups of people to climate-related hazards. These analyses are important in designing adaptive capacity programs to be targeted for those in greatest need. (Timmers, 2012)

The major cause of climate -related vulnerability in Uganda is the extreme weather events specially the floods and droughts. Studies have shown that if the global greenhouse gas emissions remain high, the mean annual temperature of Uganda is likely to increase by 3°C and the mean annual rainfall by 7% by 2080. Some models forecast that Uganda is likely to experience 20-30% increase in extreme weather events in the future. (Timmers, 2012)

Much as the Inland fisheries provide nutritional and economic benefits to the African states especially the landlocked countries, these fisheries, face multiple stressors such as overexploitation, pollution, habitat degradation due to increasing human population. (Richard Ogutu-Ohwayo, 2016). Climate variability and change were said to be intensifying since the 1970s according to the 2014 IPCC report is another challenge that inland fisheries are facing which complicates sustainability.

In Uganda, there are four areas that are often more affected by floods and they include; northeastern region along the White Nile, Southern region along the Semiliki River on the boarder of

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