

**THE EFFECTS OF CLIMATE VARIABILITY ON GENDER ROLES AND FOOD
SECURITY IN KOTIDO DISTRICT, UGANDA**

BY

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BU/GS18/MCC/27

**A DISSERTATION SUBMITTED TO THE FACULTY OF NATURAL RESOURCES
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SEPTEMBER, 2021

DECLARATION

I, the undersigned **OKOT Agiro Gabriel**, declare that this dissertation is my original work, except where due acknowledgement has been made. I declare that this work has never been submitted to this University or to any other institution of higher learning for any award.

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SUPERVISOR(S) APPROVAL

This dissertation was submitted in a partial fulfilment for the award of Master of Science in Climate Change and Disaster Management Degree of Busitema University, with my/our approval as the academic supervisor(s).

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DEDICATION

I dedicate this piece of work to my family, who did not enjoy my company when they needed me most due to this academic journey, to all my colleagues, friends and relatives, you all stood by me.

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Finally, I express my appreciation to my supervisors at work giving me the enabling environment and space to balance work and this academic trek. Thank you

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ACRONYMS AND ABBREVIATIONS

CC	Climate Change
CCA	Climate Change Adaptation
COVID-19	Corona Virus Disease
Etc.	Et cetera
FCS	Food Consumption Score
FEWSNET	Famine Early Warning System and Network
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GoU	Government of Uganda
ICPAC	IGAD (Inter-Governmental Authority on Development) Climate Prediction and Application Centre Intergovernmental Authority on Development
IFAD	International Fund for Agricultural Development
IPC	Integrated Food Security Phase Classification
IPCC	Intergovernmental Panel on Climate Change
KII	Key Informant Interview
MAM	March to May
MFPED	Ministry of Finance, Planning and Economic Development
MoH	Ministry of Health
MWE	Ministry of Water and Environment
NPA	National Planning Authority
NPA	National Planning Authority
SDGs	Sustainable Development Goals
SON	September to November
SOPs	Standard Operating Procedures
SPSS	Statistical Packages for Social Sciences

SSA	Sub-Sahara Africa
UBOS	Uganda Bureau of Statistics
UDHS	Uganda Demographic and Health Survey
UN	United Nations
UNDP	United Nations Development Programme
UNFAO	Food and Agriculture Organisation of the United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
UNWFP	United Nations World Food Programme
USAID	United States Agency for International Development
WHO	World Health Organization

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ABSTRACT

Climate variability effects are felt by the different genders due to their level of vulnerability and capacity to cope and adapt. These effects influence gender roles and responsibilities regarding contributions to food security (availability, access, utilization, and stability) at household level. The study aimed to assess the effects of climate variability on gender roles in relation to food security. The specific objectives were to: (1) assess the effects of climate variability on food security in Kotido district, (2) examine how gender roles, affect food security (availability, access, and utilization) amidst effects of climate variability, and (3) identify the strategies undertaken by households in coping with and adapting to climate variability in relation to food insecurity. This study was conducted in Kotido district, and the data collected was both primary and secondary. The study involved gathering primary data through a household semi-structured questionnaire using Kobo Toolbox (an open-source online tool), key informant interviews and focus group discussion guides. Additionally, secondary data was sourced from peer reviewed articles, reports and journals, and geospatial information was sourced from Uganda Bureau of Statistics for developing the study area map using QGIS. All the data was analysed using Microsoft Excel, SPSS, and NVIVO. The study findings reveal that across Kotido district, the main climate variability conditions perceived by respondents include reduced, intense and erratic rainfall, rise in temperatures and prolonged and frequent droughts, including rising incidences of flash floods. These changes therefore meant that gender roles keep changing due to the food security conditions at household level. The findings indicate that traditionally observed roles of women (such as fetching water, collection of wild fruits, ploughing and planting, land opening and preparation, and weeding among others) are gradually being undertaken by men too. In conclusion, climate variability is real, and although it has negative effects, it also triggers society to unknowingly under difficult circumstances to confront traditionally observed norms, believes and values. The study underscores the need for; a comprehensive empirical research on effects of climate variability on gender roles with specific focus to the pastoral areas of Uganda; government of Uganda and development organizations to deliberately initiate gender transformative actions; and development of policies and frameworks to guide implementation of appropriate and localized strategies for coping with and adapting to climate variability and its effects.

CHAPTER ONE.

INTRODUCTION.

This chapter provides a description and highlights the background regarding climate change, gender roles, and food security. It therefore elucidates the problem statement, research objectives and questions. The section also gives highlights on originality and intention of this study to contribute to the existing body of knowledge. Additionally, the chapter gives the narration on the significance of the study, its scope and conceptual framework.

1.1 Background

Climate variability is one of the major threats hampering agricultural productivity of small scale farmers, achieving food security as well as sustaining the livelihoods of the rain fed agricultural dependent rural poor. Globally, the change in climate is occurring with severe impacts on human livelihoods (Caserini, 2017). In the last few decades, observed dramatic changes in climate are attributed to rapid increase in anthropogenic greenhouse gas emissions. According to the UNFCCC Article 1 (United Nations, 1992), climate change is defined as a change of climate as attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods. In light of increasing human population, expected to be at 9.7 billion by 2050; 2.5 billion of whom will be in Africa (Nations, 2014), climate variability and change will therefore further undermine efforts to meet food demands (Hubert et al., 2010).

Africa remains highly vulnerable to the effects of climate change and variability due to over dependence on rain-fed activities and the low adaptation and coping up levels. Climate variability and change are projected to cause a drop in agricultural production in Africa by 20% by the year 2050 (R. B. Singh, 2012). Crops like maize and beans which form the main food crops in Sub-Saharan Africa (SSA) are expected to drop by 25% to 50 % by 2050 (Challinor et al., 2014; Field et al., 2012). However, with the food demand in SSA expected to increase to 60% by 2050 (Van Ittersum et al., 2016; Fischer et al., 2014), the variation in climate will exacerbate the number of food insecure households and thus the need for food aid. On a gender lens, these consequences of climate change will have differentiated effects on men and women especially in Africa (Van Ittersum et al., 2016; Fischer et al., 2014) and thus adaptation and coping up.

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