ASSESSMENT OF ADAPTATION TO CLIMATE CHANGE THROUGH A GENDER LENS IN NAMAYINGO DISTRICT, EASTERN UGANDA.

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A dissertation submitted to the Faculty of Natural Resources and Environmental Sciences in Partial fulfilment of the requirements for the Award of Master of Science Degree in climate change and Disaster management of Busitema University.

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DECLARATION

I, Busagwa Alex hereby declare that this dissertation is my original work and has not been presented to any other University or Institution for any other award.

Date: _____

APPROVAL

I hereby confirm that this dissertation has been submitted with my approval.

DR. ALICE NAKIYEMBA

Date: _____

DEDICATION

I dedicate this piece of work to my dear Aunt, Mrs. Byemaro Rebecca Kiwanuka and Okulega John (RIP) whose tireless efforts gave a firm background to my academic path up to this level and my family who withstood hard times because of my decision to pursue further studies.

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ABSTRACT

This study investigated adaptation to climate change through gendered Lens in Namayingo District. Four specific objectives guided the study; the gender roles in climate change adaptation, effect of climate change on various gender groups, approaches considered in climate change adaptation, the extent to which gender roles have been adopted by stakeholders towards climate change adaptation and recommendations on issues that require balanced gender in climate change adaptation. A cross sectional survey was used on 242 respondents and the primary data collection tool was a questionnaire. Results were analysed both descriptively and quantitatively.

The distribution of gender in climate change adaptation (CCA) activities was not even during evaluation activities, campaigns towards use of plastic bags, advocacy for recycling programs, among other issues. The three main strategies used in climate change adaptation are; investing in capacity building for vulnerable population coupled with enhancing knowledge and understanding of policies and politics of climate change, control of black smoke and encouraging tree planting/reforestation efforts. Climate change was found to have significant effects mostly on the female gender given the fact that they do most of the work such as cultivation, firewood collection, fetching water, among others, which necessitate environment. Negative climate changes cause floods, droughts, storms which destroy harvests and loss of trees in compound and garden, which affect more female gender than the males. Gender role was recommended mostly during monitoring and evaluation. Monitoring provided for gender role in terms of enabling both genders have access to fertilizers, and planting materials, while evaluation was ensured through; gender-disaggregated data used to conduct gender analysis, gender impact on programs, and keeping in touch with gender focal points, as well as increasing gender learning opportunities.

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LIST OF ABBREVIATIONS/ACRONYMS

AfDB	African Development Bank
CARLA	Climate Change Adaptation for Rural Livelihood and Agriculture
CBA	Community Based Adaptation
СВО	Community Based Organization
CCA	Climate Change Adaptation
CICERO	Climate and Environmental Research–Oslo
DEA	Department of Environment Affairs
EAC	East African Community
ECOSOC	Economic and Social Economic Council
FGD	Focus Group Discussion
FtFT	Farmer to Farmer Trainers
GEF	Global Environment Facility
NGOs	Non-Government Organizations
NSCCLCD	National Strategy for Climate Change and Low Carbon Development
SPSS	Statistical Package for Social Sciences
UN	United Nations
UNDP	United Nations Development Program
UNEP	Uganda National Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNV	United Nations Volunteers
USA	United States of America
VRA	Vulnerability and Risk Assessment
WE-RISE	Women's Empowerment: Improving Resilience, Income and Food Security

CHAPTER ONE

1.0 Introduction

The study assessed Climate Change Adaptation (CCA) through the gender Lens. Gender refers to socially constructed roles, responsibilities and opportunities associated with men and women, or hidden power structures that govern the relationships between them (UN Report, 2016). Inequality between sexes is reportedly determined by the learnt, unequal and inequitable treatment socially accorded to women (Ashley, 2017). In response, the use of a 'gender lens' can help people to better understand social processes, thereby ensuring that adaptation projects consider gender differences and do not inadvertently perpetuate inequality (Aguilar, 2007).

1.1 Background to the study

Climate change is may be the largest and most complex environmental problem facing mankind. It is characterized by increased temperatures, changes and unpredictability in precipitation patterns and extreme weather events like drought and floods (see e.g. Nelson 2009). Climate change impacts increasingly affect people's health and livelihood, e.g. by way of affecting agriculture, especially food production, and access to water (Bathge 2010). The impacts of climate change are especially problematic for poor rural people, living mainly from subsistence farming. This is evident in many African countries, for example Uganda. Deforestation, wetland reclamation, certain cultural practices and population increase aggravate the problem further. Poor people have very limited capacity to take precautions and engage in measures to adapt agricultural practices and local use of natural resources to the ever-changing climate and its impacts (Anderson 2002). This is particularly true for women in these communities, as in most African countries, they are responsible for producing food for the family and in charge of other domestic tasks, such as fetching water and firewood. At the same time, they usually have less decision power and access to money

and other resources. When designing policies and other interventions targeting climate change adaption, it is therefore important to focus on the needs of poor rural farming communities. Furthermore, the measures must be gender sensitive, taking into account the different needs and capacities of men and women (UNDP 2008).

In Uganda, men and women experience different levels of vulnerability and adaptive capacity to climate change. The Ugandan government has made some efforts towards climate change adaptation by carrying out a review of Uganda's national policies on climate change adaptation and mitigation based on stakeholder engagement and analysis (Banana et al. 2014). The government also tries to sensitize and inform the public about the dangers associated with climate change effects through institutions such as the National Environment Management Authority and non-governmental organizations (Hepworth and Goulden 2008). These efforts are valuable, but they seem to have only limited influence on rural people's capacity to deal with the climate change impacts affecting their livelihoods.

This study is aimed at assessing how people respond and adapt to the effects of climate change in Namayingo district eastern Uganda, focusing specifically on gender, with a hope of increasing the rural peoples' capacity to adapt their daily activities to climate change.

Climate change and gender is concerned with gender differences in the context of climate change and the complex and intersecting power relations arising from it (Nelson, 2016). By altering the ecosystems of the planet, adaptation to climate change, and more specifically global warming, directly impacts human race (Huffington, 2015). These effects vary for different segments of the population, specifically for people of different genders (Araujo & AQuesada, 2007). In many cases, women are more vulnerable to negative effects of climate change because of their lower social status in most countries (Nelson, 2016). Many impoverished women, especially those in the developing world, are farmers and depend on

natural environment for subsistence and income. By further limiting their already constrained access to physical, social, political, and fiscal resources, climate change often burdens women more than men (Behringer, 2007).

1.2 Problem Statement

Gender and climate change impacts are mostly problematic to the rural poor, with limited capacity to take precautions and engage in measures aimed at adapting to the ever-changing climate. This is evident in many African countries and in Uganda; some areas such as Namayingo appear to be seriously impacted.

Most rural communities are highly dependent on subsistence farming for livelihoods and are vulnerable to adverse climatic conditions e.g. drought whose effects are seen to be on the increase. Deforestation, wetland reclamation, and population increase aggravates the problem. In most African countries, women are responsible for producing food for the family and in charge of other domestic tasks, such as fetching water and firewood, this means that, each gender is affected differently by climate change impacts based on their respective roles and responsibilities.

There is also the need to look at pervasive poverty impacts on adaptive capacity. This is because poverty limits the means to cope with and adapt to climate change effects. Lack of employment in rural areas and continued reliance on subsistence agriculture are among the many factors behind deeper poverty in rural areas of Tanzania. As a result, majority engage in non-farming activities that have detrimental effect to the state of the environment. Their engagement does not necessarily help them walk out of poverty but help them to support livelihood (Arnette, 2013).

In 2015, UN General Assembly passed the 2015 Sustainable Development Agenda recommending the gender lens approach to ensure CCA at all levels of development. The

intended results have however not been realized in most of the rural districts. At the moment, there is not much done to advocate for UN aspirations, available studies on CCA have concentrated more on developed countries, and less is known about the effectiveness of a gender lens approach to CCA in Uganda where women seem to face continuous exclusion from CCA policies on adaptation. Based on this, the study assessed the effectiveness of a gender lens in CCA at a local level using the case of Namayingo District.

1.3 General Objective

The general objective is to assess Climate change adaptation through a gender lens in Namayingo District of eastern Uganda

1.4 Specific Objectives

The specific objectives were to:

- 1. Identify the gender roles towards climate change in Namayingo District
- 2. Establish the effects of climate change on various gender groups in Namayingo District
- 3. Determine strategies considered in adaptation to climate change in Namayingo district
- To determine the extent to which gender roles have been adopted by stakeholders in adapting to Climate Change in Namayingo district

1.5 Research Questions

- 1. What are gender roles towards Climate Change in Namayingo District?
- 2. What are the effects of Climate Change on various gender groups in Namayingo District?
- 3. What approaches are considered in Climate Change adaptation in Namayingo district?
- 4. To what extent has gender been integrated by stakeholders in Climate Change adaptation

in Namayingo district?

1.6 Significance of the study

This study is important and useful to the Government of Uganda and other stakeholders as follows:

The study provides information about the different copying mechanisms that can be used by youths, women and men in adaptation to climate change effects. The study contributes to a step towards advocating for gender mainstreaming in any single program intended to adapt to climate change. This is because climate change adaptation is a new phenomenon, which is not widely discussed or researched about, in developing countries such as Uganda. Findings of the study could assist policy makers throughout Uganda to closely monitor and advocate for implementation of strategies, which promote gender balance during Climate Change Adaptation.

1.7 Scope of the study

The study was divided into three parts namely content scope, geographical scope and time scope.

1.7.1 Content scope

The study assessed Climate Change Adaptation (CCA) through gender lens. It looked at the effect of climate change based on gender, then the current approaches to climate change adaptation, the extent to which the gender role as been integrated in CCA, and then measures by stakeholders towards enhancing the role of gender in CCA.

1.7.2 Geographical scope

The study was conducted in Namayingo, one of the districts found in the greater Busoga sub region of Eastern Uganda. The study surveyed major areas in the district with activities that affect the climate conditions in relation to how each relate to gender.

Figure 1: Conceptual Framework

Independent Variable	Dependent Variable
Gender Roles 1. Planning 2. Monitoring 3. Supervision 4. Evaluation	Climate Change 1. Global warming 2. Climate variability 3. Industrialization 4. Pollution.
	 Decision making processes and procedures Attitude of community Sensitization attempts Environment policies A forestation

1.8 Conceptual Framework

Figure 1: Adaptation to climate change through gendered Lens

According to figure 1, the independent variable is Gender lens, achieved through balancing roles between men and women in planning, monitoring, supervision, and evaluation. On the other hand, CCA can be in form of: The Sun and the Global Energy Balance, natural Variability of the Climate, Global and Hemispherical Variability, and regional Variability. The illustration further shows that the relationship between the gender lens and CCA is influenced by: Decision making processes and procedures so that they either include both gender or not, attitude of community towards balance in gender, Sensitization attempts to make community informed, environment policies and the extent of industrialization. In general, the nature of dependent variable is determined by the state of intervening variables such that if they are negative, then the relationship between independent and dependent variable follows suit.

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