

AMERICAN UNIVERSITY OF BEIRUT

WOMEN'S CONTRIBUTION TO FOOD SECURITY IN THE
PASTORAL COMMUNITY OF NAPAK, KARAMOJA
UGANDA: STATUS AND STRATEGIES FOR
ENHANCEMENT.

by
MIRIAM ILUKOL

A thesis
submitted in partial fulfillment of the requirements
for the degree of Master of Science
in Rural Community Development Graduate Program (RCODE)
of the Faculty of Agricultural and Food Sciences
at the American University of Beirut

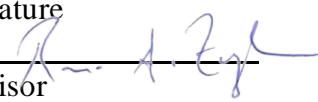



Beirut, Lebanon
April 2022

AMERICAN UNIVERSITY OF BEIRUT

WOMEN'S CONTRIBUTION TO FOOD SECURITY IN THE
PASTORAL COMMUNITY OF NAPAK, KARAMOJA
UGANDA: STATUS AND STRATEGIES FOR
ENHANCEMENT.

by
MIRIAM ILUKOL

Approved by:

<hr/>	Signature
Dr. Rami Zurayk, Professor	
Landscape Design and Ecosystem Management	Advisor
<hr/>	Signature
Dr. Ali Chalak, Associate Professor	
Department of Agriculture	Member of Committee
<hr/>	Signature
Dr. Shady Hamadeh, Professor	
Department of Agriculture	Member of Committee
<hr/>	Signature
Ms. Rachel Anne Bahn, Instructor	
Department of Agriculture	Member of Committee

Date of thesis defense: April 26th, 2022

AMERICAN UNIVERSITY OF BEIRUT

THESIS RELEASE FORM

Student Name: Ilukol Miriam
Last First Middle

I authorize the American University of Beirut, to: (a) reproduce hard or electronic copies of my thesis; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes:

- As of the date of submission
- One year from the date of submission of my thesis.
- Two years from the date of submission of my thesis.
- Three years from the date of submission of my thesis.



Signature

07/05/2022

Date

ACKNOWLEDGEMENTS

Work of this nature would have been a dream if not for a concerted effort of the majority whom I need to enthusiastically recognize here.

From my favorite quote by R.S. Grey “she believed she could, so she did.” I have always found myself rooted in the pursuit of my goals because of the self-belief and faith that radiates within me. The ultimate faith I derive from God who has always seen me through my entire life journey, this academic journey inclusive, the Honor goes back to Him.

It is my joy and gratitude to have such a supportive fatherly and ever-present supervisor/advisor Prof Rami Zurayk, whose immense and immeasurable efforts I would not reward if there was a price tagged on it, always pushing me towards my dream and goal, Prof, may all your efforts be rewarded. Additionally, to the most enthusiastic committee that has never turned their backs to my constant knocks at their offices for help, Dr. Ali Chalak, Dr. Shady Hamadeh, Ms. Rachel Bann. You have been a wonderful, supportive, and incredible committee in pushing this course to completion, may lack never be your portion. And to the AUB staff who were not in my committee but offered their resources to see a smile on my face; Dr. Martiniello, Dr. Samer Kharroubi, the FAFs librarian Sally, Joyce Aways, Dr Hassan, Ms. Diana, Ms. Nivine, Mr. Abed and Tharwat, I say a sincere thank you to you all.

My special unlimited and utmost thankyou to Mastercard Foundation (MCF) for being a steppingstone, a shield, and a driver to this vehicle of achievement. I am and forever will be indebted to you for such timely, endless, and boundless support. To especially the staff of MCF, Patil, Sally, Melisa, Maha and the rest, your presence was always felt even during tough moments.

To the greatest, treasurable and God given family, my father Lorot John, my mother Logir Theresa and my dear siblings Achia Mark, Lotukei Natalina, Prisca Angolere and Longole Esther, you have honestly been my shoulder to lean on, my run to people and my forever encouragement that I find no words to describe how grateful I am to you, but mostly I wish you more life to come so you witness my forth coming achievements.

To the best friends and loved ones that the world blessed me with, the new found family of friends at AUB that were close to pick me up; Magdalene Sophie, Grace, Esther Daniels, Shakira, Chancelyne, Mahmoud, Denis Lorika, Talha, Mary, Omega, Celumusa, Fahad, Crespin, Godiolla, Ayomide, Adebayo, Rejoice, Meshach, Monica, Gertruda and many others, how would life be at AUB without you, I am so humbled by your presence in my life. And to my great and true version of friends back home; Trevor my ever run to kind of person, my Tutu (forever soul raiser), Ika Lino (my cry on academic guide), Sharon, Scovia, Patricia, Deborah Lomongin, Deborah Achok, Dorothy, Abraham Achok, Florence, Martha, Nancy, Sarah, Peninnah, Anna, Isaiah, Jacinta, Sylvia, Isaac, Farouk, Emolot, Emma Tikol, Gideon, Ngorok Simon Peter, Loupa Pius, Simon Longoli and many more who put their efforts together to water the seed in me, you have been so wonderful and blessings to me, my wish is that God locate each of you with his unending blessings.

My message to you all is, keep walking and leaving footprints of success wherever you go and continue touching and changing lives with your beautiful gestures of love and kindness. I love you all.

ABSTRACT

OF THE THESIS OF

Miriam Ilukol

for

Master of Science

Major: Rural Community Development

Title: Women's Contribution to Food Security in the Pastoral Community of Napak, Karamoja Uganda; Status and Strategies for Enhancement.

Napak, a district in Karamoja sub-region of North-Eastern Uganda still grapples with the problem of food insecurity with about two-thirds (62%) of households reported to be food insecure in 2017 and 55% of households in 2019. And yet food security is an area of boundless global concern towards the achievement of the Sustainable Development Goals at all levels. The food security problem in Napak is linked to the pastoralist livelihood currently encountering pressure from increasing dry lands, conflicts in the form of cattle raids and change in the land tenure, forcing the community to rethink alternative livelihood sources. Women in the pastoral communities play a pivotal role through assuming diverse responsibilities in livestock keeping, the land, and household. The study aimed at examining women's contribution to food security in the pastoral community of Napak and strategies to enhance their efforts in curbing food insecurity.

To complete this investigation, the study engaged different stakeholders to respond to the questions it sought to address: What role do women play in enhancing food security in the pastoral community of Napak? Which women's empowerment strategies can be employed to enhance the food security situation in the pastoral community of Napak? These questions were addressed qualitatively through semi-structured interviews with district officials and women-targeted NGOs; and focus group discussions with women community members. Data was analyzed qualitatively with the aid of Atlas.ti, a qualitative data analysis tool, and presented in a narrative manner.

The study findings present women as instrumental in enhancing food security in the pastoral community of Napak as indicated in the roles expressed by respondents like; Farming, livestock keeping, self-employment, water, sanitation, and hygiene management, fruit and vegetable gathering, among others. However, their efforts have been undermined by inadequate access to resources, insecurity, gender-based violence, male dominance, illiteracy, negative cultural practices, among others. Capacity building, agricultural mechanization, girl child education, curbing negative cultural norms, advocacy and decent employment were some of the strategies identified to consolidate women's efforts in enhancing food security. The conclusion of the research presents the gap in understanding of the entire concept of food security, the contemporary issues in the region and the evolving nature of pastoralists. Hence, more research is required to be conducted including interventions that are more focused on improving pastoralists livelihoods, ensuring sustainability as the goal of any food security interventions as well as consolidating the right to food by women.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	1
ABSTRACT	3
ILLUSTRATIONS.....	7
TABLES.....	8
ABBREVIATIONS.....	9
INTRODUCTION.....	11
1.1. Background and Problem Statement.....	12
1.1.1. The concept of food security.....	12
1.1.2. Women and food security.....	13
1.1.3. Food Security, Women, and Pastoralism.....	14
1.1.4. Pastoralism, Food security and women in Napak, Karamoja, Uganda.....	15
1.2. Research objectives.....	17
1.3 Research questions.....	17
LITERATURE REVIEW.....	19
2.1. Conceptual literature review.....	19
2.1.1. Pastoralists.....	19
2.1.2. The concept of pastoralism.....	20
2.1.3. The concept of women empowerment.....	21
2.1.4. Food security.....	22
2.1.5. The concept of community.....	24
2.1.6. The concept of agrarian system.....	24

2.2. Empirical literature review.....	25
2.2.1. The role of women in enhancing food security	25
2.2.2. The women empowerment strategies that can be employed to enhance food security	36
METHODOLOGY	43
3.1. Description of the Research Methodology	43
3.2. Study Area	44
3.2.1 The history of the pastoralists people of the study Area (Karamoja, Napak)48	
3.3. Sampling and sample size	52
3.3.1. The socio-demographic characteristics of the respondents	52
3.4. Data Collection.....	55
3.4.1 Interview method.....	55
3.4.2 Focus group discussion (FGD).....	56
3.4.3 Document review.....	56
3.5. Data Analysis.....	57
3.6. Ethical considerations	59
RESULTS PRESENTATION AND DISCUSSION	62
4.1 Introduction.....	62
4.2 Question 1: What role do women play in enhancing food security in the pastoral community of Napak?	62
4.2.1. Pillar 1: AVAILABILITY	63
4.2.2. Pillar 2: ACCESSIBILITY	71
4.2.3. PILLAR 3: UTILIZATION	78
4.2.4. PILLAR 4: STABILITY	83
4.2.5. PILLAR 5: AGENCY.....	86
4.2.6. PILLAR 6: SUSTAINABILITY.....	89

4.3 Question 2: What women empowerment strategies can be employed to enhance food security in the pastoral community of Napak	96
4.3.1. Capacity building.....	96
4.3.2. Access to financial services.....	97
4.3.3. Early girl child engagement.....	98
4.3.4. Supporting girl child education.....	100
4.3.5. Fighting against negative cultural practices	101
4.3.6. Establishing sustainable livelihoods	102
4.3.7. Lobbying and advocating for women targeted programmes.....	103
4.3.8. Sustainable Agricultural Intensification.....	104
4.3.9. Need for male involvement.....	106
CONCLUSION AND RECOMMENDATION	108
5.1. CONCLUSION.....	108
5.2 RECOMMENDATIONS.....	111
5.2.1 Literature based recommendations.....	111
5.2.2 Other recommendations.....	112
APPENDIX 1: DATA COLLECTION TOOLS	115
1. KEY INFORMANT INTERVIEWS.....	115
2. FOCUS GROUP GUIDE.....	121
APPENDIX 2: CAO’S INTRODUCTORY LETTER	124
REFERENCES	125

ILLUSTRATIONS

Figure

1. The map of Uganda showing the location of the study Area (Napak)..... 45
2. Map of Karamoja showing the first seven districts of the region 46
3. Map of Napak district 47
4. Components of data analysis: Interactive model..... 58

TABLES

Table

1. Socio-demographic distribution of the respondents..... 53
2. Respondents distribution by gender and departments..... 54
3. Results summary table for question 1: what role do women play in enhancing food security in the pastoral community of Napak..... 90

ABBREVIATIONS

AAH	Action Africa Help
AAHU	Action Africa Help Uganda
ACTED	Agency for Technical Cooperation and Development
AfDB	African Development Bank
AIDS	Acquired Immune Deficiency Syndrome
APFS	Apple File System
AUB	American University of Beirut
CAO	Chief Administrative Officer
CAQDAS	Computer-Assisted Qualitative Data Analysis Software
CARES	Cooperative for Assistance and Relief Everywhere
CBOs	Community Based Organizations
CLTS	Community Led Total Sanitation
CWD	Centre for Women and Democracy
DCA	Dan Church Aid
EASSI	East African Sub-Regional Support Initiative for Advancement of Women
EU	European Union
FAO	Food Agricultural Organization
FGDs	Focus Group Discussions
FGM	Female Genital Mutilation
GEWE	Gender Equality and Women's Empowerment
HIV	Human Immune Virus
HLPE	High Level Panel of Experts
HPG	Humanitarian Policy Group
IBFAN	International Baby Food Action Network
ICRW	International Centre for Research on Women
IEG	Independent Evaluation Group
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
IRB	Institutional Review Board

IUCN	International Union for Conservation of Nature and Natural Resources
KEEP	Karamoja Economic Empowerment Project
KII	Key Informants Interview
MGD-F	Millennium Development Goal Achievement Fund
MGLSD	Ministry of Gender, Labour, and Social Development
NCDs	Non-Communicable Diseases
NGOs	Non-Governmental Organizations
NHW	National Hand Washing
NHWI	National Hand Washing Initiative
NSWG	National Sanitation Working Group
NUSAF	Northern Uganda Social Action Fund
OD	Open Defecation
OECD	Organization for Economic Co-operation and Development
OXFAM	Oxford Committee for Famine Relief
PHAST	Participatory Hygiene and Sanitation Transformation
PROACT	Pro Resilience Action
RWANU	Resilience through Wealth, Agriculture and Nutrition in Karamoja
SACCOS	Savings and Credit Co Operative Society
UBOS	Uganda Bureau of Statistics
UNICEF	United Nations Children’s Fund
UNRISD	United Nations Research Institute for Social Development
USAID	United States Agency for International Development
UWEP	Uganda Women Entrepreneurship Programme
VHTs	Village Health Teams
VSLAs	Village Savings and Loan Associations
WASH	Water, Sanitation and Hygiene
WHH	Welt Hunger Hilfe
WHO	World Health Organization
WUC	Water User Committees

CHAPTER 1

INTRODUCTION

“The key to economic security- to food security in Africa is by empowering women,” Judith Rodin - Philanthropist

“There is no development strategy more beneficial to society as a whole - women and men alike - than the one which involves women as central players,” Former UN Secretary-General Kofi Annan

The above quotations make it apparent that food security and development are intertwined and that women are essential towards achieving food security. This is why food security and women empowerment are presented as driving tools and cornerstone of most economic discussions tabled in the development agenda like Sustainable Development Goals. These discussions have been sparked off by persistent hunger and malnutrition which have become a chronic food insecurity problem, especially in the sub-Saharan region of Africa where malnutrition stood at 31% by 2019 (Kileteny & Wakhungu, 2019). It is important to note that women possess an untapped capability to improve the economic prospects of communities and societies as a whole in their pivotal role towards food security. However, they are more vulnerable to food insecurity than their male counterparts and an estimated 60% of undernourished people worldwide are women or girls (Sumbadze, 2020). It is upon this backdrop that this paper discusses women’s contribution to food security in the pastoral community of Napak, Karamoja Uganda: Status and strategies for enhancement.

1.1. Background and Problem Statement

This section sets us to the background of the study and states the issue of concern understudy through addressing different concepts.

1.1.1. The concept of food security

The concept of food security has significantly evolved over the past 50 years, its development can be traced back to the Hot Springs conference of food and agriculture in 1943 with the coming up of the idea of “a secure, adequate and suitable supply of food for everyone,”([HLPE], 2020). But most importantly, the subject of food security came to the fore in the 1970s at the 1974 World Food Conference in Rome. This marked the initial acknowledgement of food security as an issue concerning the whole of mankind and since then, the concept has evolved, developed, multiplied, and diversified over time ([HLPE], 2020). The ultimate objective of world food security is to ensure all people at all times have physical, social, and economic access to the required basic food (Napoli et al., 2011). These aspects were incorporated in the definition of food security by FAO as;

“a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life,” (Napoli et al, 2011:7).

This definition has been acknowledged and used overtime, even when agency and sustainability were later incorporated and recognized, the definition remain constant but with distinctiveness of each pillar highlighted as;

“a situation that exists when all people (agency) at all times (sustainability and stability), have physical, social, and economic access (accessibility) to sufficient (availability) safe and nutritious food that meets their dietary needs (utilization) and food preferences for an active and healthy life,” (HLPE, 2020:8).

Despite the goal of food security to see that hunger is ended and that all people including the most poor and vulnerable have access to safe and nutritious food at all times, FAO (2021) reports that one in three people in the world faced food security at moderate or severe level by 2020. This is estimated to be 2.37 billion people and the number expected to have risen resulting from COVID-19 pandemic (Clapp et al., 2022).

1.1.2. Women and food security

Among other interventions by the world organizations to curb food insecurity, women empowerment has been recognized as one of the strategies towards enhancing food security. This is because women are regarded as vigorous economic actors with high economic involvement leading to stronger and more sustainable economic growth which are tenets of food security (V. Carter et al., 2015). Women are also responsible for half of the world's food production, and in most developing countries they produce between 60% and 80% of the food, they are responsible for nutrition in most homes, including the purchase and preparation of food (Dodson & Goebel, 2014). Unfortunately, despite their contribution, women and girls still remain overrepresented among those who are food insecure. Worldwide, an estimated 60% of undernourished people are women or girls. There is need for global priority to be given to the campaign against gender discrimination in regard to food through investing more in women using an approach that is empowering and enlarges their freedoms and the gains they accrue to all of society (Sumbadze, 2020)

1.1.3. Food Security, Women, and Pastoralism

In the pastoral community setting, the situation of women in relation to food security appears unique compared to other non-pastoral communities. It is important to note that, despite the current evolvments on food security situation with opening up of new markets, agricultural advancements, industrialization among others, the situation surrounding women in pastoral communities remain challenging. Pastoral communities are still traditional and patriarchal with social and cultural practices excluding women and girls from the mainstream support given to pastoral communities such as education, subsequently reducing participation in the job market; Access and ownership of resources like land and livestock, where they seldom make decisions regarding land or livestock use; they also do not have access to information and technology, women and girls bear the greatest burden of drought, primarily because of the gendered division of labour at household level and decision making power. Women suffer more climate change-induced food insecurity and related risks ([IUCN], 2013). Additionally, Rawlins et al. (2014) highlight that, women in pastoral communities encounter barriers in accessing livestock markets and controlling income accrued from the sale of livestock and livestock products. And yet they have the primary responsibility of food preparation and consumption and lack of decision-making power means limited nutritional status as well as that of their children.

The empowerment of women in the livestock sector is fundamental for the achievement of both gender equality, increased household productivity and improved household health and nutrition which aspects contribute to food security (Galiè, 2019). And even more notable, women empowerment in a pastoral setting is a prerequisite for poverty eradication since pastoral women are key agents in livelihood development

through their engagement in socio-economic and cultural activities, and in the conservation and management of natural resources (Rota., 2012).

1.1.4. Pastoralism, Food security and women in Napak, Karamoja, Uganda.

Pastoralism continues to be a dominant form of livelihood among communities in Africa with crosscutting patterns of operation. In Uganda, pastoral areas constitute around 44% (approx. 84,000 km²) of its total land mass, and around 10% of Uganda's population (3–3.5 million people) are pastoralists. Pastoralists in Uganda are recognized by the extent of livestock they keep and the different activities in which they engage in vary along gender, age, and wealth lines. The Karimojong of North-Eastern Uganda and the Bahima of Western Uganda are the famous pastoralist communities in Uganda (Wamahiu, 2018). For purposes of this paper, the focus is on the Karimojong of North-Eastern Uganda.

Pastoralism in Karamoja region is presented to be more complex on issues related to food security as compared to the rest of Uganda. To begin with, pastoralism in Karamoja presents challenges not only to food security but also to the lives of the people in the region. Since early 1990s, Karamoja has been associated with persistent local conflict involving cattle raiding, robbery, theft, and wanton killings. This has not only impoverished households but also contributed to extensive outmigration and a shift towards more risky and non-sustainable livelihood strategies (Aklilu, 2016). The current news broadcasts in all media houses in Uganda (newspapers, TV stations) as of the beginning of 2022 report intensive cattle raiding in the region, presenting the region to be getting back to its history of cattle raids resulting from possession of firearms.

This situation has escalated the state of food insecurity with half of the population being food insecure in the region which condition has attracted humanitarian organizations. The conflicts in the region are both among communities (also known as clans) in the form of cattle raids within the region, and between communities, that is Karamoja and bordering countries namely Kenya and Sudan (Krätli, 2016). The situation has undermined community efforts to engage in productive livelihoods. According to FAO, (2018), a high level of climate variability in the form of droughts, floods, and dry spells has also undermined the capacity to utilize the region's natural resources. Moreover, USAID, (2014) notes the region's semi-arid nature, the subsistence-based livelihoods, relative isolation of its inhabitants, and its volatile security status heavily influences its food security.

Napak district is home to the majority of the Karamojong pastoralists, who engage in subsistence-based extensive livestock production characterized by low inputs and low outputs (Muhereza, 2017). This has left an additional burden of food insecurity to the district compared to other districts in the region. The food insecurity situation in the district is also attributed to its larger size, being one of the largest districts with many more households than the sub-region's average (International Baby Food Action Network [IBFAN], 2017). It is hit by food insecurity with about two-thirds (62%) of households in the district reported food insecure by 2017, ([IBFAN], 2017) and 55% of households by United Nations Children's Fund ([UNICEF], 2019).

As far as women are concerned, food insecurity is reported to be a major issue of concern among women in Karamoja especially Napak who are described to be more vulnerable than women elsewhere in the country as a result of their inability to ownership and control over resources including livestock. However, if the same access, ownership,

and control to productive resources by women is guaranteed in the region as men, it is anticipated that there would be an increase in yields thus reducing the number of hungry people in the region (Organization for Economic Co-operation and Development [OECD], 2012).

Building on this background and problem statement, the study considered conducting research in the pastoral community of Napak to explore women's contribution to the food security in the district and how their efforts can be enhanced to improve food security. The research is driven by the hypothesis that women are the major contributors to food security not only in Napak but entire world, and if their efforts are strengthened, and barriers to their empowerment dealt with, they will have appealing impact on food insecurity figures.

1.2. Research objectives

With the overall objective aiming at exploring women's contribution to food security in the pastoral community of Napak and strategies for enhancing their contribution, the study was guided by the following specific objectives;

1. To establish the role of women in enhancing food security in the pastoral community of Napak.
2. To explore women empowerment strategies for enhancing food security situation in the pastoral community of Napak.

1.3 Research questions

1. What role do women play in enhancing food security in the pastoral community of Napak.

2. Which women empowerment strategies can be employed for enhancing food security situation in the pastoral community of Napak?

CHAPTER 2

LITERATURE REVIEW

The review of literature for the study has been drawn from journals, documents, books, and newspapers discussing topics on women, pastoralism, food security and other aspects that are covered by the study globally, regionally, nationally, and locally in Karamoja (Napak) as a targeted area. The literature review examines how myriad studies have analyzed the role of women in promoting food security in various aspects of life, the strategies to be employed as well as highlighting the key terms used in the study with more emphasis on recent studies.

2.1. Conceptual literature review

The conceptual review presents a description of major terms underlined by the study.

2.1.1. Pastoralists

Pastoralists are people who derive most of their subsistence and income from keeping livestock under natural pastures (Wamahiu, 2018). They put into use the drylands that experience low and unreliable rainfall due to its variability which cannot support sustained and reliable agriculture (Humanitarian Policy group [HPG], 2009). Pastoralists can be found in all continents, from the drylands of Africa and the Arabian Peninsula to the highlands of Asia and Latin America, or the Tundra in the circumpolar zones, and in particular where crop cultivation is physically limited. In the study conducted by Jenet et al. (2021) on 26 countries that practice pastoralism, the following were identified as hot spots; the Altiplano and Chaco in South America; the Arkhangai in Mongolia; Wagadou

and East Gourma in in the Sahel; Tiris Zemmour (the southern Atlas); and the Afar and Chalbi areas and Uganda were among the pastoral communities in East Africa. The pastoral communities in Uganda are basically two prominent ones, the Bahima of Western Uganda and the Karamojong of North Eastern Uganda. For purposes of this study, the focus is on the Karamojong who are traditionally cattle keepers, reliant on the open savannah and free movement between the region's dry belt and the area known as the 'green belt,' a rainier zone running through Napak, Kotido, and Kaabong district (Action Africa Help [AAH], 2017).

2.1.2. The concept of pastoralism

Whereas pastoralists are people who practice the activity of herds keeping and management, pastoralism is the practice itself by pastoralists. It refers to a range of livelihoods including pure nomadism and mixed agro-pastoral practices (Kileteny & Wakhungu, 2019). Pastoralism is an inevitable livelihood in the drylands of most parts of the world. It is an extensive production system largely dependent on more than 0.5% of its income from livestock (Mugerwa, 1992).

Pastoralism takes different forms which include; Nomadism described as the highly mobile form that does not undertake cultivation; Transhumance a form of production that is highly mobile with pastoralists moving between seasons annually; Semi-transhumance which involves part of the pastoral family or livestock moving seasonally while others who remain sedentary take part in cultivation; Agro-pastoralism that entails growing crops at a specific season while rearing animals within the same piece of land especially during dry season (Mugerwa, 1992). Pastoralism is commended not only for its ability to make optimal use of the drylands without degrading the environment but also its tremendous contribution in the national economies ([HPG], 2009).

2.1.3. The concept of women empowerment

Building on the work of Kabeer (1999), Petesch (2009) defines women's empowerment as "women's ability to make strategic life choices where that ability had been previously denied them," (Cornwall, 2014). The Centre for Women and Democracy [CWD], (2007) describes women empowerment on the basis of equality in all spheres of society, including participation in the decision-making process and access to power. The Millennium Declaration identifies Gender Equality and Women's Empowerment (GEWE) as one of eight Millennium Development Goals considered an effective means to combat poverty, hunger, and disease as quoted in the (Millenium Development Goal Achievement Fund [MDGF], 2015). The United Nations [UN], (2021) report on the 2030 agenda for Sustainable Development has provided additional impetus and clear targets with member states recognizing gender equality and the empowerment as a crucial contribution to progress across all the Sustainable Development Goals.

Christine Lagarde in International Centre for Research on Women [ICRW], (2016) quotes, "*Women's empowerment is not just a fundamentally moral cause, it is also an absolute economic no-brainer,*" giving weight to the growing demand for women empowerment in all aspects of women's lives as an essential hope restoration strategy for women by expanding their opportunities (Ipsos, 2019). It has become a remedy to lift economies, drive growth, improve infant and child health, enhance women's skills as mothers as well as opening up opportunities for women's economic and political engagement (Cornwall, 2014). It is also a manner of enhancing social, economic, cultural, and political standing of women, a source of acquiring power individually and collectively, fosters the family progress, and a source of global sustainable development through environmental sustainability (Hasin et al., 2018).

Centre for Women and Democracy [CWD], (2007) identifies four aspects of empowerment that should be the guiding principles for women empowerment, and they include; Assets involving greater economic power on material assets such as income, land, tools, or technology. The second is knowledge, entailing a more practical and intellectual awareness or skills, enabling a person or a community to make the best of the opportunities that arise. Will is the third implying psychological strength or spiritual power, one's values and fears, self-confidence, and self-perception and finally capacity entailing internal power to make decisions, take on responsibility, be free to function as one pleases and use one's resources. This means that, any effort to empower women should consider the four aspects of assets, knowledge, will and capacity for complete empowerment process.

2.1.4. Food security

The conceptual understanding of food security is the basis of this paper especially in exploring women's role towards achieving it. With the earlier discussion advanced on the concept of food security, the conversation here expresses more of its pillars rather than definition. The pillars or dimensions of food security are presented by (High Level Panel of Experts [HLPE], 2020) as:

Availability implying having a quantity and quality of food sufficient to satisfy the dietary needs of individuals, free from adverse substances and acceptable within a given culture, supplied through domestic production or imports.

Accessibility (economic, social, and physical) referring to having personal or household financial means to acquire food for an adequate diet at a level to ensure that

satisfaction of other basic needs are not threatened or compromised, and that adequate food is accessible to everyone, including vulnerable individuals and groups.

Utilization indicating having an adequate diet, clean water, sanitation, and health care to reach a state of nutritional well-being where all physiological needs are met.

Stability denoting having the ability to ensure food security in the event of sudden shocks (e.g., an economic, health, conflict, or climatic crisis) or cyclical events (e.g., seasonal food insecurity).

Agency entailing individuals or groups having the capacity to act independently to make choices about what they eat, the foods they produce, how that food is produced, processed, and distributed, and to engage in policy processes that shape food systems.

Sustainability implying food system practices that contribute to long-term regeneration of natural, social, and economic systems, ensuring the food needs of the present generations are met without compromising the food needs of future generations.

This indicates that, we cannot claim to be food secure when any of the six dimensions of food security do not exist. While it is true that we live in an era where we are growing and producing more food than ever before, where we have enough food to feed the world's population, we should also admit that food is not distributed properly nor culturally appropriate across the globe. This is attributed to the primary areas of global concern that impact food security; overpopulation, climate change, inequality in food distribution and urbanization. It is upon these areas of global concerns that the world biggest organizations like WFP, FAO and others have geared their efforts to different governments in the coordination of humanitarian food security interventions (Havas & Salman, 2011).

Therefore, the entire discussion on the role of women will revolve around these pillars and this is why it is mandatory to have them presented.

2.1.5. The concept of community

A common definition of community is given by MacQueen et al. (2001) as a group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings.

2.1.6. The concept of agrarian system

In an attempt to have a comparison of land ownership structures with farming systems, agrarian systems were defined by M. Derruau in 1960s as the spatial arrangement (plot layout, fences, and boundaries) and the temporal organization (crop rotations, permanent crops) and their relationship with techniques and social factors (community practices, land ownership patterns) (Rieutort, 2009). And so, the discussion of agrarian system is noted to have become the theoretical expression of a type of agriculture that has developed through history and is geographically located comprising a characterized cultivated ecosystem, and a defined social system of production that enables the fertility of the ecosystem to be exploited in a sustainable manner (Rieutort, 2009).

From this explanation we are driven to the concept of agrarian reform that conforms to the explanation provided in Rieutort, (2009) where it is argued that agrarian reform, constitutes widespread redistribution of land. It aims to empower poor peasants and to alter the agrarian and class structure of rural society (Valuanatos, 2010). In regard to women, Jacobs, (2010) discusses that the majority of the rural poor are female and so land reform and redistribution could clearly be of importance as the predominant model

of land reform, distribution to the individual household. Unfortunately, the reform, usually marginalizes women, especially wives with land mostly reallocated to the 'household head' who is supposed to be a man (Valuanatos, 2010).

2.2. Empirical literature review

The empirical literature review entails the review and analysis of the literature related to the research objectives which include the role of women on food security and the strategies to enhance their role.

2.2.1. The role of women in enhancing food security

This section entails the analysis of various literature sources related to the role of women in food security presented according to their contribution to different communities such as pastoral communities, agrarian communities, pastoral communities in Africa and their roles in other sectors beyond agrarian and pastoral communities in the fight against food insecurity.

2.2.1.1 In the pastoral communities

It is critical to think of pastoral women's contribution to food security by recognizing pastoralists as a group of people who represent a considerable proportion of the population in the drylands, which are particularly vulnerable to desertification. The system has ensured that the non-arable land is put into economic use. The sparse vegetation and relatively low fertility of dryland soils has been adopted by pastoralists with the wellbeing of millions of the world's poor based upon pastoral systems, which support a wide range of globally valued services and products, including biodiversity and

raw materials stated by (International Fund for Agricultural Development [IFAD], 2009). Subsequently, women are recognized as primary agents towards fighting food insecurity in their capacity as pastoralists.

To begin with, a study by Okali, (2011) recognizes women's role in the care of small animals in the pastoral communities whose argument is backed up with the study conducted by Zhang, (2018) on *Pastoralism in Uganda; Theory, practice and policy* presenting women as caretakers of small animals in the pastoral communities in Uganda. The key argument presented is that as men go out herding big animals such as cows, camels among others, small animals like goats are left at home under the care of women. These animals are not only cared for, but they also provide milk for women at home to supplement their diet and that of children. This implies that the more care the women give to these animals, the higher the productivity of milk for diet supplementation. Correspondingly, the intention for leaving women at home with the disguise of taking care of small animals is such that they get ample time to take over household responsibilities. Okali, (2011) summarizes it this way, because rural women have a robust association with the care of small animals, especially in low input systems, they take the duty of household food security and improvements in the production of these systems may be plainly presented as prospective to contributing to household food security, and equally elevating households out of poverty.

In the traditional pastoral community like Karamoja in Uganda, every newly married woman is allocated land and a cow during dowry payment to enable her feed herself and her children (Zhang, 2018). Although these animals later become a family property, newborn animals are the charge of the women, and in some instances, additional animals may be given as more children are born or more cattle are received in the

homestead. In such a situation, a women can sell her cow to obtain income to support her family wellbeing, and this income is put in to provide household food security. There is evidence on income under the control of women more likely to be used to improve family welfare (family food consumption, education, child nutrition) as compared to that of men (Jemimah Njuki, 2019)

In the study conducted by IFAD, (2009) on women pastoralism, the women are appreciated for their pivotal role in natural resource management which is an aspect contributing to sustainability a great pillar of food security. Women are presented to play this role in the course of their daily tasks, where they have developed an intimate knowledge of natural resource management, which they put into practice for the benefit of both their communities and the environment. An example is given of the Rakai, the proverbial pastoralists of Rajasthan, in the dryland state of West India and the Masai women of Kenya, who are applauded for their work in passing knowledge of preserving the environment to their children since they are charged with the responsibility of child rearing. They do this through songs, riddles, and proverbs to the younger generation, thereby contributing towards future environmental conservation. Another example is given of the Bedouin women who are articulated to be so sensitively in tune with the needs of their environment, they ensure that their goats are grazed lightly to protect the sparse vegetative cover, thereby helping prevent land degradation caused by overgrazing. They are also mindful of protecting the desert vegetation due to its healing properties. In addition, only dead wood is collected for use as fuel. By tradition, the existence of the Bedouins depends upon living with sensitivity to their environment ([IFAD], 2009). The narrative of this study is so attracting in wholesomely presenting women's role in the pastoral communities; however, it is also important to note that women's activities can

be detrimental to sustainability through their unconscious engagement in unsustainable activities in their various communities such as uncontrolled animal grazing.

Also recognized is the role of women associations in pastoral communities which in one way or another contribute to food security. Pastoral women form and belong to many types of groups related to livestock, including self-help groups, producer associations, savings, and credit cooperative organizations (SACCOs), religious organizations, voluntary associations, groups that involve livestock, and joint activities initiated around an economic purpose, which includes the production of goods or services or collective management of natural resources important for pastoralism (Zhang, 2018). This membership may not account for a direct role to food security but certainly pastoral women putting themselves as a pool towards a goal implies that much has to be expected in terms of economic empowerment which is contributory to food security.

Women's role in pastoral communities is documented in their ability to know and understand all the tree species over time as they engage in herding and thus preserve them. IFAD, (2009) presents a situation where women take part in the preservation of trees which have a variety of uses such as being nutritious, medicinal and fodder for livestock, certain trees are also said to play a preservative role in milk and meat which is the staple diet for pastoralists. In the same study, a story of a Masai woman is narrated as described in the quote;

“When a Maasai woman becomes an adult, she will have known about 300 species of plants that can be used as medicine for both humans and livestock, as insecticides and fumigants, for house building and for rituals, for example, splinters of the wild olive (oloirien) tree are burnt, and its charcoal is used to smoke the milk gourds, both to sterilize the milk and to give it the smoky olive flavors which the Maasai enjoy,”([IFAD], 2009)

Similarly, among the Samburu pastoralist women in northern Kenya, an intimate relationship with trees is noted from them, which play a significant role in their daily life.

Women milk the animals on which their families depend, squeezing this precious substance into containers made of wood or gourds to preserve it ([IFAD], 2009).

Presented by Gitungwa, (2018) in the study exploring *The relationship of male and female pastoralist income with household food security and nutrition status in Tanzania: Barabaig ethnic groups* is that female-controlled resource in the pastoralist households, are linked to greater food security and higher levels of women's dietary diversity, both of which are important for the health and well-being of the woman and the developing fetus. The findings of their studies show that female-control of livestock is significantly related to household food security and dietary diversity in pastoralists. In most cultures, women are expected to possess "maternal altruism," which refers to the devotion of a woman's energies and earnings to their families' well-being, especially the wellbeing of her children. This does not only emphasize women's role but also presents the need of control and ownership of livestock by women in the pastoral communities if food security is to be realized or enhanced.

The above studies presented highlight that the role of women in enhancing food security in the pastoral communities goes beyond households and so we see them as great contributors to the entire wellbeing of a community, nation or globe as indicated by different studies from various countries pointed out. However, studies above have presented mostly the role of women covering pillars of availability with few studies relating to accessibility, stability, and sustainability. None of the studies outline the role women play in the pillar of agency, implying a literature gap on what it is that women contribute to this pillar, or we could say the ability of decision making by women over their lives in the pastoral communities is not clear. Should we assume they do not take

part in the decision-making process, or should we think the literature has not yet been written on this?

2.2.1.2 In Agrarian communities

Agriculture remains important in most parts of the world. Specifically in Africa, 64% of the total population are engaged in the sector (Ahenkan & Osei-Kojo, 2014). Moreover, over six hundred million rural people derive their main source of income, work (livelihoods) and food directly from living, cultivating and/or grazing on family landholdings. Family farms contribute about 70 per cent of the total food supply in Africa, they feed most of the urban populations through diverse formal and informal markets (Moyo, 2016). Another consideration is that agriculture employs about 70% of Africa 's labour force and half of whom are rural based, undernourished farmers living in extreme poverty. Significantly, the agricultural sector is the major driver for growth, poverty reduction, and food security in Africa. Valuing the sense behind the ancient African proverb "*without women we all go hungry*, women have played a prime role in traditional agriculture, from manually growing crops to agro-processing to homemaking (Majumder & Shah, 2017).

In the field of labour force, women represent a larger proportion of laborers than men in the agricultural sectors of Asia, sub-Saharan Africa, the Middle East, and North Africa. Women also dominate in some Caribbean and Central American countries, especially in economies with low per capita income. And women's proportion in agricultural wage labor markets has increased ([IFAD], 2009). The sector employs 50% of women in the labour force in agriculture as agents of change and resilience ([IFAD], 2018). In developing countries alone, they account for 43 percent of the agricultural labour force, ranging from 20 percent in Latin America to 50 percent in Eastern Asia and

Sub-Saharan Africa. Women's indigenous knowledge and skills are deemed essential for food production and sustainable agriculture (Majumder & Shah, 2017). What does this imply in the field of food security? To begin with, all food production fulfills the pillar of food availability, hence denoting women as major key players in ensuring food is made available at all levels.

There is also a close association between women and family farming. Moyo, (2016:4) illustrates "family farming as a diverse range of small-sized socio-economic structures that use limited landholdings to pursue diverse agricultural, pastoral, and natural resource management activities." The author describes family farms as pervasive in the economic life of the agrarian communities and help in shaping the social organization of life in most rural settings, playing a dominant role in food production and social protection which aspects are all contributory to food security. Women are seen as essential ingredients towards the success of family farming and especially of rural families in contributing labour and knowledge required for agricultural practices and biodiversity. According to Food Agricultural Organization [FAO], (2018), these farmers produce about 80 percent of the world's food value, hence making family farmers key actors towards achieving food security, poverty reduction and environmental preservation if supported by an enabling policy environment.

A pertinent role of women in agrarian communities is presented by Stulina, (2015) study on *The Role of Women in the Irrigated Agriculture Sector in the Fergana Valley: Findings of Field Surveys* as providers of water and maintainers of water sources. In the survey conducted by the author, women are described as assuming the responsibility of providing not only drinking water but also community water. The survey findings show that the conditions for drinking water supply in rural areas of Uzbekistan seem better than

in the provinces of Kyrgyzstan and Tajikistan because women are so involved. In most cases, residents have to get water from various sources, including open water sources, drainage and well systems and yet according to the sanitary and epidemiological supervision specialists, this water cannot be used for drinking purposes. And the story is narrated of women being able to safely store water in buckets, cans, and flasks while others use containers in the form of standard ground-mounted concrete wells in case of scarcity. And so, distribution, control, and regulation of water supply for drinking and domestic needs are vested upon women (Stulina, 2015). Additionally, water supply for inter-farm irrigation through the distribution of water within the farms is done by women farmers.

At subsistence level of agrarian communities, women are involved in household food security through performing numerous roles such as purchasing, processing, and preparing most of the food consumed in the household hence are in a unique position to improve household nutrition (Wamahiu, 2018). They are also involved in household food security and nutrition through the education and care of children, the preparation of safe and nutritious meals, and the diversification of household food intake through their home garden. Moreover, nutrition of the lactating mother is key for children, including their brain formation ([FAO], 2018). Similarly, women take care of domestic chores, such as collecting water and firewood, they do agricultural tasks and also sell any surplus from their harvests at local markets (James, 2012). In most cases, households headed by women often succeed in providing more nutritional food for their children than those headed by men (Hohenberger, 2017).

2.2.1.3 The role of women in pastoral communities in Africa

Africa presents uniqueness and existing peculiarities in diverse regions practicing pastoralism irrespective of the continental cross-cutting characteristics as discussed in the background. African pastoralism is understood in terms of high reliance on livestock as a source of economic and social well-being, and various types of strategic mobility to access water and grazing resources in areas of high rainfall variability (Zhang, 2018). The word highlighted there is high reliance on livestock, denoting that societies practicing pastoralism in Africa hardly have supplementary source of livelihoods except for pastoralism.

Substantial is that the description of African pastoralism evokes not only subsistence based herding but also a belief that emphasizes the social superiority of cattle-owning males over females who merely perform routine household tasks (Miller, 2008). This ideology is traced to historical processes, which include the colonial powers' tendency to interact only with male authority figures and the production of descriptive anthropology by male ethnographers who imposed the western idea that male activities were the only "important" ones onto the activity patterns in pastoral societies (Miller, 2008)

The two arguments on the prevailing situation of pastoralists presented above, provide a momentous validation for looking at the role of women in food security in Africa. Another previously discussed uniqueness is that globally, Africa is considered a home to large numbers of nomadic pastoralists, ranging from the camel and sheep herders of North Africa, the Sahara and northern Sahel (including Sudan), the cattle herders of the belt of savanna vegetation from west Africa to the Horn and south into Kenya, Uganda, Tanzania and those scattered throughout southern Africa (Cossins, 2003). It is

the main livelihood of an estimated 268 million people in Africa ([FAO], 2018). It as well consists one-half of the world's pastoral peoples with thirteen million Africans being predominately pastoral and another nine million agro-pastoral, keeping large numbers of livestock while practicing agriculture (Fratkin, 2016)

Stemming from the above background, at the outset I would emphasize that there is no distinctiveness in the roles women perform in the pastoral community in Africa versus those performed by women pastoralists else where as noted in my previous discussion (see section 2.2.1.1). But the interest is rooted on the changing roles of women pastoralists over time in Africa. For example in the early days, women's role in pastoral life was only limited to milk production from the animals they interact with, which milk of course was used to supplement the diet of their children in most cases and homekeeping which was there core role. Miller, (2008) in the study of the Round Head Rock Art presents an ideological association between women and milk that is believed to have developed into women's control over milk products during the pastoral phase. However, various writings have addressed a couple of changes on roles of women pastoralists in food security as in the earlier discussion. For example in Uganda, pastoral women are experts in marketing cattle milk, milk products, and small stock, as well as being experts in animal health, monitoring the growth and health of calves and their mothers, deciding how much cattle milk to take for the family (Zhang, 2018).

In the report presented by African Development Bank [AfDB], (2015), poverty reduction in Africa requires growth that generates labour demand outside traditional agriculture and the extractive resources sector, as it was the case with Asia that achieved successful poverty reduction by having a rapid increase in the demand for unskilled labour in the manufacturing industry.

2.2.1.4 Other roles of women beyond agrarian and pastoral communities

- **Women as social support networks**

De Jode & Flintan, (2020) consider women as key players in ensuring food security through building up the social support networks so important in the collective systems through sharing food and household items with other women, with a reciprocal relationship established. With Organization for Economic Co-operation and Development [OECD], (2012) depicting women as investors of a higher proportion of their earnings in their families and communities than men, producing 50% of the world's food, and in developing countries as high as 70 or 80%, implies that food is literally made available to other communities and families through sharing. And so, by their virtue of being social support networks especially in a state of their ability to have more food through extending a charitable hand to the rest of the people in the community food security can be realized through them.

- **Women in the market economy**

Coughlin, (2002) states that women who participate in the market economy can increase their status within the household and community. They are also more likely to participate in household decision making and to demand their legal rights. Research shows that women's access to and activity within the market economy results in a significant increase in their authority within the household and community. When women become empowered, there is a strong positive correlation with the education, health, and productivity of household members, particularly children. In short, things get a lot better.

And in that angle, their participation in the market economy implies increase in food supplies through boosting economic growth.

2.2.2. The women empowerment strategies that can be employed to enhance food security

2.2.2.1. Capacity development

Capacity development through education and training has been affirmed my diverse literature as a tool to enhancing women's ability to boost food security. It is believed that childhood accessibility of a girl to education has not only a spill-over effect in breaking intergenerational poverty cycles, delaying marriage and childbearing, and improving labour market outcomes but also contributes primarily to increased economic outcomes later in life with adult training and skills development programmes being important to women's economic empowerment (Hunt, A; Samman, 2016). Whereas gender gaps in skills and knowledge is critical to addressing talent pipeline shortages that many industry experts claim make it difficult to hire women ([ICRW], 2016). Additionally Livingstone & Ruhindi, (2011) and OECD, (2012) recognize education and training as the most important part of women's empowerment that provides women with the knowledge, skills, and self-confidence they need to seek out economic opportunities. Alonso (2015) relatively supports this argument with a demonstration of a strong link between economic growth as predictor of the level of food and nutrition security in a country and education levels which is considered to be a determinant of the bargaining power in wage negotiations and income earnings that contribute to economic boost (Kileteny & Wakhungu, 2019).

2.2.2.2. Productive employment

A call to provide productive employment and decent work for women is advanced as a desirable strategy. In the discussion by OECD, (2012), women involvement in unproductive employment in developing countries, including in fragile contexts, is the main route of poverty and that women's participation in the labour market can be increased by addressing the constraints and barriers women face accessing work, including public employment programmes. Similarly, Hunt, A; Samman, (2016) argue for access to decent and quality work as deemed central to women economic empowerment, given its inherent importance to women's well-being and ability to advance in areas such as acquiring income and assets. To Hunt & Samman, formal sector work is more likely to be 'decent.' They paint a picture of women around the world being less able to realize their economic ambitions through work than men. For example, across 138 countries studied in 2015, an average of 15% of women were unemployed (i.e., looking for work) compared with 11% of men. More women than men are underemployed that is, working fewer hours than they would wish. In 2015, on average, about 25% of working-age women were underemployed, compared with 19% of men (Hunt & Samman, 2016:13). These statistics imply that providing a decent work opportunity for women serves not only a purpose of women economic empowerment but also contributes to the wellbeing of a family, community, and a country.

2.2.2.3. Ownership of resources

Ownership of assets is an indicator of economic strength by women. Most of all, in a state of hard times, a household may dispose of its assets to get money for its basic needs or in certain instances, assets can even be bartered directly in exchange for food (Kileteny & Wakhungu, 2019). Whereas women make up more than 40 percent of the

agricultural labor force, providing critical raw materials to consumer products companies, they do not have secure land rights and are often barred from inheriting or owning those fields. This affects crop yields and overall productivity as well as their ability to engage more fully in the formal economy (Kileteny & Wakhungu, 2019). And yet, women's limited access to productive resources impacts their ability to own and operate business ([ICRW], 2016). USAID, (2019) advances that ensuring secure land and property rights for women is one of the most effective long-term solutions to advancing women's economic empowerment. In this case it is important that women are given access and control over property and assets. A wealth of literature discusses that women's control and ownership of resources boosts their self-esteem as they earn respect from other family members, economic opportunities, mobility outside of the home, and decision-making power (Sumbadze, 2020). Similarly, women's access to productive resources could increase yields on their farms and raise total agricultural output in developing countries by 2.5 to 4 percent, which could in turn reduce the number of hungry people in the world by 12 to 17 ([FAO], 2018). In pastoral communities, Esesu, (2005) presented that opening up opportunities for women to own and control benefits from cattle would improve food security. This implies that policies to increase women's land ownership must be tailored to specific tenure systems, including changes to legislation and customary practice that consider ownership and inheritance rights as well as marital and divorce laws (Sumbadze, 2020). Evidently, USAID, (2019) advances that it is not just about a woman's increased income but rather her ability to control the income accrued that helps her achieve economic empowerment. But even more, a woman's capacity to reinvest income into sustainable assets; livelihood expenditures; and her family's and community's overall health, education, safety, and wellbeing.

2.2.2.4. Formation of women associations

The potential by women to organize with others to enhance economic activity and rights ('power with') is key to women's economic empowerment. It is visualized that collective action in form of social protection is strongly associated with improved productivity, income and working conditions, through changes to workers' rights, wages, and benefits (Hunt & Samman, 2016). In the report by International Labour Organization [ILO], (2009), the ability of women to better their environment lies in their effort to organize themselves with commitment within their communities. With this they can be positioned to convince authorities or institutions to create an enabling environment for their initiatives. Moreover, where group objectives focus specifically on changing social norms, such as restrictive attitudes towards women's work and property ownership, collectives can contribute towards boosting women's self-esteem and identity as citizens, hence transformational gains for gender equality in the community and within broader political structures (Sumbadze, 2020). In the policy brief presented by United States Agency for International Development [USAID], (2019), Women associations in the form of cooperatives, collectives, farmer groups, business associations, and trade unions are regarded the bedrock of sustainable economic development for many women around the world.

2.2.2.5. Access to financial services and markets

Building from African Development Bank [AfDB], (2015) report that a shift from traditional agriculture and pastoral lifestyles to participation in the labour markets are drivers to poverty eradication, this shift requires women's financial inclusion which drives access markets. According to Trivelli et al., (2018), women face multiple barriers

that limit their access to and use of financial services. These include insufficient traditionally required collateral, mobility constraints and limited financial literacy, amongst others, thus requiring a more gender inclusive financial system that addresses the specific financial barriers faced by women. Morsy, (2020) forwards that introduction of financial products aimed at meeting the needs of female borrowers usually presenting informal system of finance like acceptance of loans with small and movable assets like livestock, or other mineral as collateral would be a better way to foster women's demand for financial services. Also presented by USAID, (2019) is that job creation through a vibrant community of women entrepreneurs and women-owned businesses, requires financial inclusion. This can be done by building women's financial literacy and management most especially in rural areas where financial constraints have bogged down women's ability to engage in improved agriculture and pastoralism. It is important that these services shift from being male dominated to include rural women who have been neglected by these services (James, 2012).

2.2.2.6. Agricultural transformation

According to Taffesse & Tsakok, (2019), agricultural transformation requires the alteration of an agri-food system from a high prevalence of subsistence farming to high productivity, so that poverty falls and food security increases. But this depends on the country's economic resource endowments, institutions, and other factors. Within the structural transformation of an economy, agricultural transformation has a primary role it plays especially considering the consequences in terms of the social outcomes, environmental impacts and the economic efficiency of the development process (Laborde et al., 2019). This implies that, agricultural systems must undergo a transformation in

order to meet 21st century challenges such as climate change and rising population. As notable agro-ecology has taken precedence as a necessary tool in the processes of adaptation to climate change. However, we do not deny that farmers, especially those involved in small-scale cultivation, possess the appropriate skills for both managing and preserving biodiversity, especially in the process of them (rural women) traditionally taking charge of storing food and seeds, adapting crops to the external conditions, and passing on their knowledge from one generation to the next (James, 2012). But the current shifts in food systems revolve around agro-ecology, sustainable livelihoods and climate smart agriculture which require transformation in the food systems in which agriculture is part of.

2.2.2.7. Male involvement

It is important to note that men play an important and often dominant role in decisions crucial to women's wellbeing including reproductive health and any other family related matters and that women cannot do it without cooperation from men (Murthy, PV; Chandrasekarayya, 2009). From a gender perspective, International Labour Organization [ILO], (2014) appreciates gender transformative programs purposed to change gender roles to more gender- equitable relationships between men and women while recognizing the complexities and fluidity associated with gender identities. USAID, (2020) substantiates that, men have a critical role to play in challenging inequitable norms and power dynamics, given their positions in households, communities, institutions, and in their relationships with peers and others. With male engagement associated to better health and economic outcomes essential for the success of programs designed towards ensuring women's empowerment (Smith et al., 2021). This requires the transformation in the ways men are engaged towards achieving long lasting

social change. USAID, (2020), in their engagement with men and boys as positive agents and champions of change have provided programs that ensure male support in any women empowerment endeavor. However, International Centre for Research on Women [ICRW], (2018) counter argues that there should be criticality observed in engaging these men because it may pose a challenge of women's marginalization in the process if not well implemented.

CHAPTER 3

METHODOLOGY

This section describes the procedure or guiding principles that were employed by the researcher to achieve the objectives of the study which included; Establishing the role women play in enhancing food security in the pastoral community of Napak and Exploring the women empowerment strategies that can be employed to enhance food security situation in the pastoral community of Napak.

3.1. Description of the Research Methodology

The study adopted a qualitative approach to research designed to explore and understand the meaning individuals or groups ascribe to a social or human problem (John. W. Creswell, 2014). The methodology aided in capturing participants views and experiences on women and their role in food security including identification of the empowerment strategies.

The study adopted phenomenology as a research design aimed at describing the lived experiences of women in the pastoral community of Napak and explain the trend as expressed by participants (John. W. Creswell, 2014). Experiences shared include those provided by women community leaders, district officials, NGOs as well as views by the researcher who is a native of Napak community.

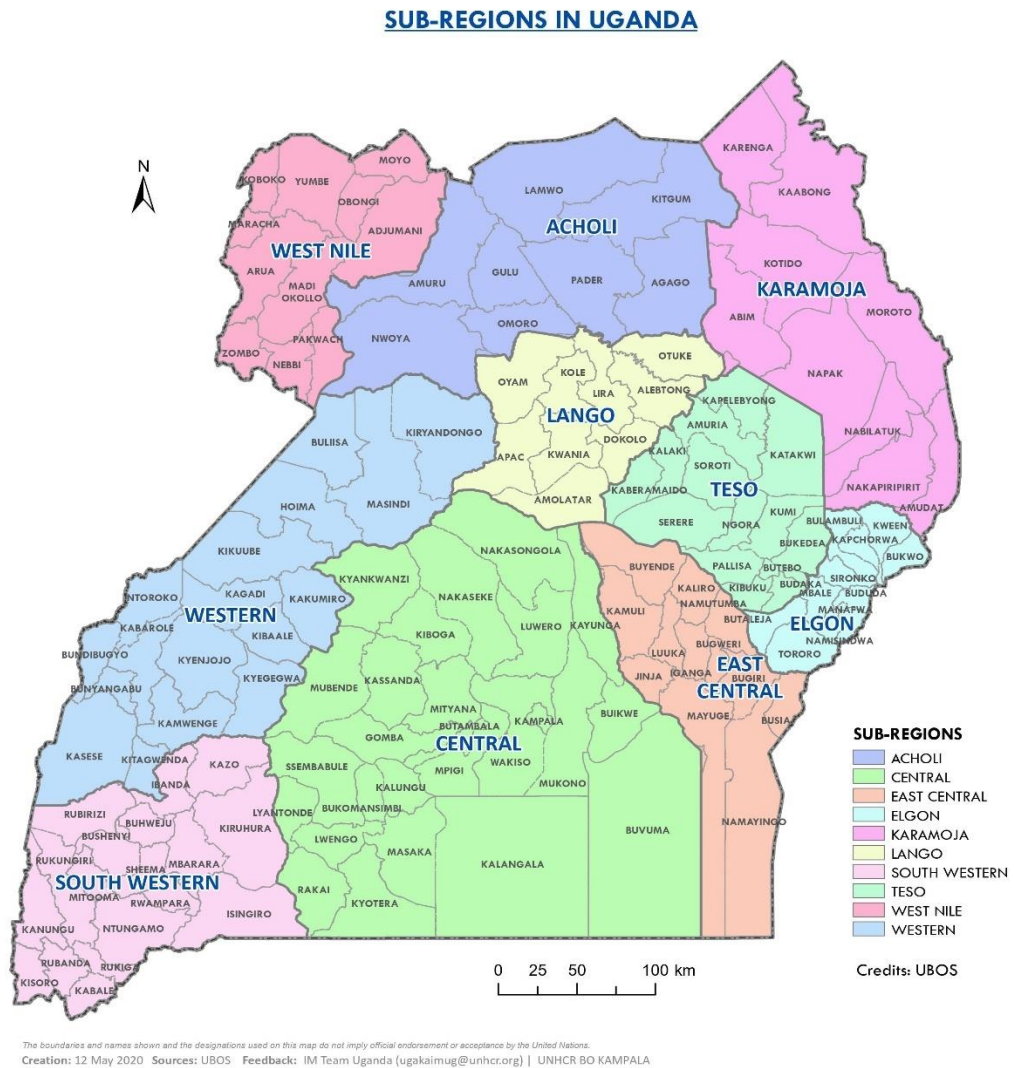
Phenomenology was chosen as a result of several successful studies that have been conducted using this research design. Barrow, (2017) conducted successful research of the *Lived experiences of parents of young children with autism receiving special education services* where he describes it as a suitable research design when focusing on

the uniqueness of people's experiences and how these experiences manifest and make meaning in an individual or their lives. Similarly, the same design was earlier on applied by Wylęgała, (2010) in the study purposed to gain a better understanding of the unique attitudes and perceptions that students at Kingsford county middle school have towards the various components of the CARES program. This justifies the basis of the choice of this particular research design for this study.

3.2. Study Area

The study was in Napak district of Karamoja region of North Eastern Uganda. Uganda is a land locked country located in East Africa and lies across the equator, about eight hundred kilometers inland from the Indian Ocean, it lies between 1⁰ 29' S and 4⁰ 12' N latitude, 29⁰ 34' E and 35⁰ 0' E longitude. It is bordered by Kenya in the East; South Sudan in the North; Democratic Republic of Congo in the West; Tanzania in the South; and Rwanda in Southwest with a total area of 241,551 square kilometers, and a total population of 4.3 million people. The country is divided into four regions; Central, Northern, Eastern and Western and these regions are sub divided into districts thus the country consists of 135 districts and Napak is among them (Uganda Bureau of Statistics [UBOS], 2017).

Figure 1: The map of Uganda showing the location of the study Area

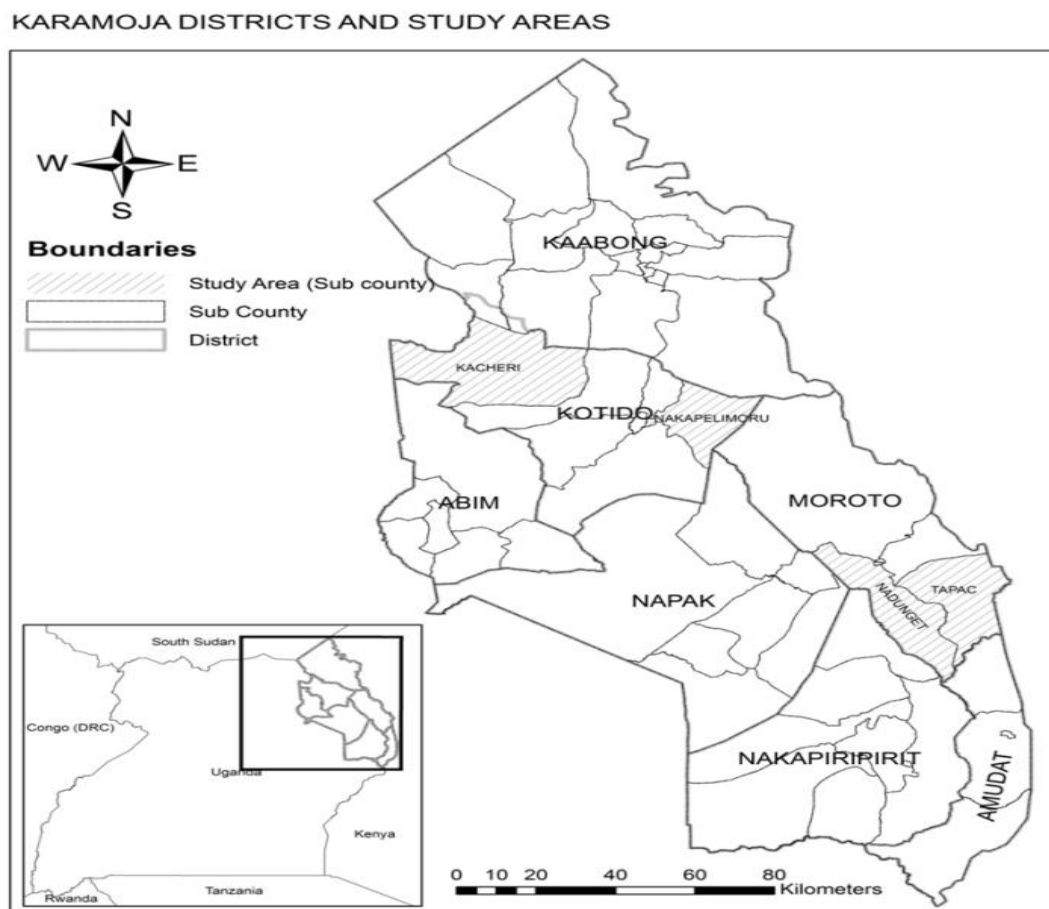


Karamoja a region in Northeastern Uganda where Napak is found is a well-known pastoral community administratively consisting of nine districts (Kaabong, Nabilatuk, Karenga, Kotido, Abim, Moroto, Napak, Amudat and Nakapiripirit) covering more than 27,000 square kilometers. It has a total population estimated at about 1.3 million people with over 70 percent of whom residing in the rural areas (United States Agency for International Development [USAID], 2014).

Regarding livelihoods, Karamoja region covers three types of livelihood zones, these are: 1) Pastoral livelihoods in a semi-arid zone where livelihoods revolve around

livestock production (cattle, goats, and sheep); 2) Agropastoral livelihoods in a zone that receives annual rainfall of 500–800 mm, covered with loamy soils supportive of crop production; 3) Agricultural livelihoods in a rainier zone of fertile, loamy soils referred to as the “green belt” in the south and west of the region, with average rainfall ranging from 800–1200 mm annually (United States Agency for International Development [USAID], 2013). However, the study focuses on the Pastoral livelihoods zone which is dominant with Napak as a district of focus.

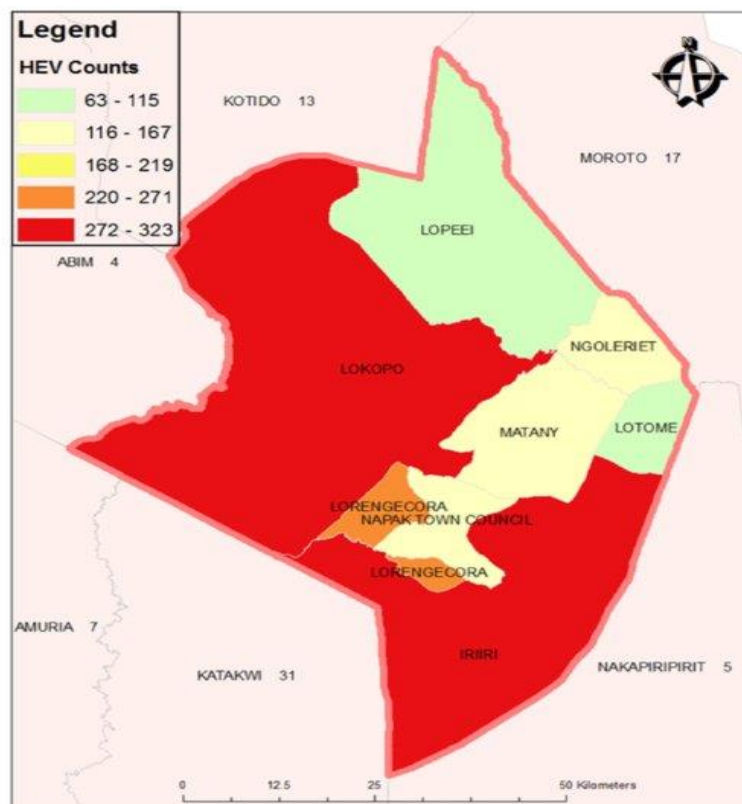
Figure 2: Map of Karamoja showing the first seven districts of the region



Adopted from <https://www.researchgate.net/figure/Map-of-Karamoja-sub-region-in-northeastern-Uganda-showing-the-seven-districts>

Napak is located in mid Karamoja, sharing borders with six other districts of the region namely: Kotido in the North, Abim and Otuke in the Northwest, Katakwi in the West, Amuria in the southwest, Moroto in the East and Nakapiripirit in the South as shown in the map. The district lies between latitudes 1°53'N, 3°05'N and longitudes 33°38'E, 34°56'E. It has a total area of 4,978 square kilometers and by 2018 the population projection (from 2014 census profiles) was 266,800 (United Nations Childrens Fund [UNICEF], 2019). The district is divided into sub counties (10 sub counties) which are sub divided into parishes and parishes to villages which is the smallest administrative unit of a district. The district consists of the largest number of people above the regions average and has the largest pastoral communities in the region (International Baby Food Action Network [IBFAN], 2017).

Figure 3: Map of Napak district



Adopted; <https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-017-2542-2>

3.2.1 The history of the pastoralists people of the study Area (Karamoja, Napak)

The Karamojong pastoralists of North Eastern Uganda migrated to the region between 1600 and 1700 AD from pasturelands in southern Ethiopia and have from then engaged primarily in pastoral activities (Action Africa Help [AAH], 2017). From the colonial times to date, they have been identified as a threat to Uganda's security associated with their weapons carrying habits for protection of their lives and animals from attack as they wandered in search of water and pasture. Karamojong have for long attracted concern for being described as cattle rustlers picking up conflicts with their neighbors in a bid to defend their pasture as well as their pastoral life. However, today's narrative seems to have changed from attacking their neighbors to conflicts within themselves. As with many other pastoral communities, the predominant explanation for these conflicts in the region today is attached to resource scarcity identified as violence resulting from competition for limited water and grazing resources (Mosebo, 2015). This has left the region somewhat disconnected from the rest of Uganda. Krätli, (2016) describes Karamoja to be of an exceptional situation, disconnected from 'the rest of Uganda' in cultural and economic terms, and desperately needing to catch up. Numerous reasons have been expressed to justify this statement. AAH, (2017) presents the region to be uncivilized, uncontrollable, and outside the system due to their temporary nature and independence. The persistence by the Karamojong people to defend their pastoral culture and custom has made them resistant to forced settlement, impermeable borders, and a forced transition to rain-fed agriculture which does not seem to be in line with their aspirations as pastoralists thus causing violence in the form of cattle raids amongst themselves. In the study by the Feinstein International Centre Stites et al. (2016) in Karamoja, the participants reported a significant decline in animal ownership over years

where herd numbers have fluctuated during periods of raiding and counter-raiding and also as a result of the poor conditions in the protected kraals with the kraal system arising during the disarmament process initiated by the government to settle these conflicts. Krätli, (2016) presents that, the problem of conflicts (cattle raids) in Karamoja are associated more with factors such as production, land tenure and modernization.

In regard to production, something important to note is that the pastoral community of Karamoja has got high reliance on rangelands for its livelihoods and most of their production is concentrated there in. Mbolanyi et al., (2016) in their study *Contribution of rangelands to household food basket and income in a pastoral area in Uganda* express rangelands as important ecosystems in providing livelihood options and food security to many people in Uganda. However, the rangeland areas in Uganda are known to be faced with climate variability such as grass and water and other resources that influence the regular supply of food and non-food requirements. In Karamoja and specifically Napak, International Union for Conservation of Nature and Natural Resources [IUCN], (2016), identifies numerous issues observed to threaten the sustainability of rangelands as a source of resilient livelihoods in Karamoja which include rapid loss of natural vegetation cover and species, soil erosion, overgrazing, uncontrolled bush burning, poor agricultural practices in the wetland areas, weak natural resources management institutions and structures, and high poverty levels among the community. This has highly affected production in the entire region and calls for efforts to ensure good local governance of the rangelands in the region.

With land tenure reforms taking precedence in the country, there has been pronounced problems of conflict resulting from this as it is believed to have led to ecological degradation and have frustrated the livelihoods of the peoples in the region. A

review of evidence on land conflicts in Uganda, found that the 1975 Land Reform Decree triggered the grabbing of grazing land by speculators through long-term leaseholds, especially in the southwest region, thus "progressive ranchers" fenced off the hitherto common access, grazing area, water areas, cattle tracks, and salt lick, marginalizing the traditional cattle grazers (Agency for Technical Cooperation and Development [ACTED], 2016). The land rights is a growing issue in the pastoral community of Karamoja resulting from the increasing pressure on the communal areas which have been infiltrated by the government of Uganda in form of promotion of private investment on mining believed to be able to benefit the region following the decline of their livelihoods from the recent increase of violence in the form of cattle raids in the region. However, this has presented fear to the communities in the region who have associated it to land grabs and environmental damage to the pastoral range lands coupled with poorly planned, conflicting, and frequently incompatible government policies related to land use/land tenure, forestry, water management, and customary law that go a long way to threatening pastoralist livelihoods and perpetuating conflicts in the region. It is thus emphasized that the issue of land rights is an area that requires careful watch over in the next few years with the growth of Karamoja's mining industry proving a threat and yet more intense conflict over available grazing land, agricultural land, and watering areas to be expected ([ACTED], 2016).

The failure to rebuild herds and address the land issue has proven to be life threatening to the pastoral livelihoods as far as food security is concerned forcing the majority of the Karimojong pastoralists to search for alternative livelihood sources. They have moved towards agro-pastoralism shifting from migration to settlement and increasing dependence on crops with support from some NGOs in the area (Mosebo,

2015). Within groups, pastoralists have expanded into trade, professional services, unskilled labor, and the service sector. They have supplemented their livestock herding with agriculture, casual labour, business, and education whenever possible. Unfortunately, their attempt has been and continues to be jeopardized by numerous challenges over the shift in their livelihoods; for instance, agriculture is not an alternative as a main livelihood strategy, because of the semi-arid ecology and unpredictable rainfall; the isolation of the region and general lack of livelihood opportunities make casual labour and business at best irregular opportunities; and those opting for education do not have resources to finish education and even if higher level education is attained, employment opportunities are scarce (Mosebo, 2015).

Napak was selected for this study out of the 9 districts in Karamoja for a variety of reasons; one is that, the district in terms of population has households with higher proportions than the region's average with 10 sub counties with each subcounty consisting of parishes and villages, 3 town councils each town council consisting of zones ([IBFAN], 2017) . The district has majority of clusters of pastoralists communities which makes it a more conducive site for this study. Additionally, food security situation in the district is at stake with malnutrition which is of public health concern. The 2017 IBFAN report highlights Napak as one of the districts in Karamoja sub-region faced with long-lasting food insecurity coupled with preeminent levels of malnutrition with about two-thirds (62%) of households being food insecure, (IBFAN, 2017). The situation has not changed with UNICEF, (2019) highlighting 55% of households were still food insecure in 2019. But even more, the researcher is a native of the district born and raised there. This implies the researcher understands the community, language and can easily gain access to informed parties via established relationships.

3.3. Sampling and sample size

In this study the targeted respondents were district officials, NGOs, and women community leaders of Napak district. Sampling of the respective respondents was conducted differently. For NGOs and district officials as key informants, they were sampled purposively or intentionally for their knowledge on the concepts under study that is either women empowerment, pastoralism, or food security. By virtue of their positions (for district officials) and their mandate (for NGOs) they were deliberately sampled. As for community members (women community leaders), both purposive sampling and snow balling was applied. They were purposively sampled for their positions as women community leaders with the logic that they are aware and take charge of women related activities in the community of Napak. Snowballing came at the time of identification of these leaders, where contact information of potential subjects (women) was shared with the investigators, after the approval was sought by the seed participant to share this information from the Sub County chief who in this case is the head of the subcounty level. The total sample was 34 respondents (8 district officials, 6 NGOs and 20 community leaders).

3.3.1. The socio-demographic characteristics of the respondents

The study comprised of three categories of respondents as stated above who were either residents of Napak (as of women community leaders) or workers in the district (NGOs and District officials). The respondent's characteristics are summarized in the table below:

Table 1: Socio-demographic distribution of the respondents

Category	Research method	Gender Distribution of the study respondents		Total
		Males	Females	
District officials	Interviews	04	04	08
NGOs	Interviews	02	04	06
Women community leaders	Focus group discussions	00	20	20
Overall total		06	28	34

In reference to the respondent’s distribution table, we notice that there are more females than males. This is because the study was intentionally gender segregated to have the highest number of women participate since their views were more required by the study in pointing out their roles as far as food security in the region is concern and the strategies that can be employed to consolidate their role. The males who took part in the study were from NGOs and District officials selected purposively for their job positions, and their presence made the study meaningful as we shall later see in the study results. Primarily, it is important to note that Napak is still a traditional pastoral society where women’s participation is deterred by men’s presence causing women to shy off from expressing their views in the presence of men as noted during mobilization. The phenomenological study aimed at obtaining women’s experience necessitated grouping women alone to have them express their experiences without restraint.

Table 2: Respondents distribution by gender and departments

Title	Department/Focus	Gender	No. Interviewed
CATEGORY 1: District Officials			
District official 1 (DO 1)	Production	M	1
District Official 2 (DO 2)	Production	M	1
District Official 3 (DO 3)	Community Based	F	1
District official 4 (DO 4)	Community Based	F	1
District Official 5 (DO 5)	Community Based	F	1
District Official 6 (DO 6)	Nutrition	M	1
District Official 7 (DO 7)	Community Based	F	1
District Official 8 (DO 8)	Community Based	M	1
CATEGORY 2: Non-Governmental Organizations			
NGO 1	Pastoralism	M	1
NGO 2	Advocacy	F	1
NGO 3	Livelihoods	F	1
NGO 4	livelihoods	M	1
NGO 5	Skills development	F	1
NGO 6	Skills development	F	1
CATEGORY 3: Women community leaders			
FGD 1 (Village 1)	Ngoleriet	F	5
FGD 2 (Village 2)	Matany	F	5
FGD 3 (Village 3)	Lorengchora	F	5
FGD 4 (Village 4)	Iriiri	F	5

The district officials interviewed tallied to eight respondents. Whereas 6 NGOs were approached for their prominent work in the district and their willingness to participate in the study.

For women community leaders, a standard procedure involving focus groups was followed considering the vastness of the district and also the nature of the study

(qualitative). The women community leaders sampled by the study were those not politically elected but chosen for the prominent, outspoken, and voluntary role they play in their various communities. Initially a focus group was planned for each of the ten sub counties in the district, but saturation was reached on the fourth focus group hence the study covered four FGDs in the sub counties of Ngoleriet, Matany, Iriiri and Lorengchora. The number of participants per FGD was intended for 6 to 8 as of a standard FGD, unfortunately, the women community leaders amounted to five per subcounty thus each of the four groups consisted of five (5) women community leaders. The study could have gone up to five FGDs or even more for triangulation purposes despite saturation point, but there was a logistical challenge faced by the researcher in terms of transport to the field as well as financing the women groups (transport and refreshments). There was also fear moving to far sub counties like Poron, Nabwal and Apeitolim due to the prevailing insecurity situation in the region.

3.4. Data Collection

The primary data collection took place in Napak district, Karamoja, Uganda after obtaining authority from the district head of administration (CAO) with the two qualitative data collection methods of interviews and focus group discussions and document review for secondary data collection.

3.4.1 Interview method.

The study involved a face-to-face interview using a semi-structured interview guide with the respondents. The key informants' interview with an in-depth and free interaction was initiated by the researcher to the targeted district officials and the NGOs. Representatives from each of the district departments dealing on issues related to

pastoralism, food security or women related issues identified are in the table above. The interview session with the key informants was in English with the researcher taking notes of the responses in the spaces provided in the semi-structured interview guide.

3.4.2 Focus group discussion (FGD).

This was employed to obtain data from a larger number of women community leaders, as it is considered an in-depth field method that brings together a small homogeneous group to discuss topics on a study agenda (Megel & Heermann, 1994).

Focus group discussions took place in the form of an in-depth interaction with the women community leaders who were sampled from the four (4) sub counties of Napak as the primary stakeholders or interest of the study. The FGD session involved interaction with the researcher and women community leaders guided by the questions in the translated FGD guide developed based on the research objectives/or questions. During this session, the researcher was the moderator as well as the note taker where participants' responses were captured through note taking and critical listening since the local language (Ngakarimojong) was the medium of communication.

Summarily, twenty participants (women leaders) were reached in four focus groups and each focus group consisted of five women.

3.4.3 Document review.

This is purely secondary data involving revising of the already collected information related to the topic under study. According to Kothari, (2004), When researchers utilize secondary data, they are to consider various sources and so in this case one is certainly not confronted with the problems usually associated with the collection of original data. Existing records often provide insights into a setting and/or group of

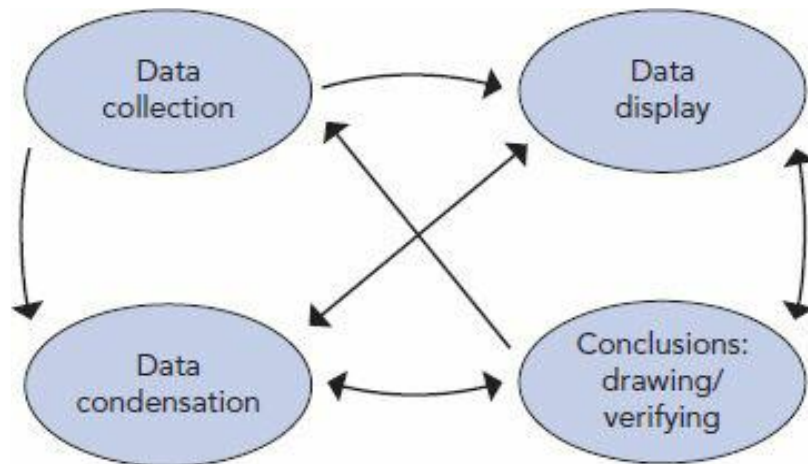
people that cannot be observed or noted in another way, this information can be found in document form (Gill et al., 2008).

Consequently, the study made use of the existing literature as both a backbone of the study as well as backup for the already collected data. The documents reviewed were journals, books, magazines and newspapers, reports and publications of various associations or individuals with a meticulous eye paid on to scrutinize and obtain the required literature. In this study there was not just application of convenience on the search for existing literature but a careful and dedicated pursuit for the necessary documents required by the study. Moreover, the researcher paid close attention to the recent literature with a few of them being ancient literature used for triangulation and tracking purposes.

3.5. Data Analysis

Data analysis is a step-by-step process involving putting together the raw facts to create meaning out of it or it is simply processing data to information. The steps are summarized in the figure below;

Figure 4: Components of data analysis: Interactive model



Source: Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.

The study was purely textual employing Qualitative Data Analysis (QDA) tool that makes sense of the vast quantities of data so that the data can be presented in a systematic manner to the readers (Archer, 2018). Just like any other QDA procedure, the process started with identification of important texts (quotations) and then codes were allocated to these quotation. A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data (Saldana, 2020). The initial coding helps identify the data feature that serves as the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon (Majumdar, 2021). The researcher then conducted group coding where codes with common points of reference were merged. Group coding ensures a high degree of transferability through which ideas can be united throughout the study phenomenon and transformed into themes (Vaismoradi & Snelgrove, 2019).

Once themes (the subjective meaning and cultural-contextual message of data) were generated, there was analysis, identification, and reporting of the most probable and major themes from the data set also referred to as thematic analysis (Majumdar, 2021). Thematic analysis further interprets important aspects of research topics and hence, describes research data in an organized and rich format with specific and clear guidelines for its conduction, and these practical guidelines no doubt give the method a scientific vigor (Majumdar, 2021). Post to thematic analysis, a discussion of the major findings was conducted relating to the existing literature. ATLAS.ti, a Computer Assisted Qualitative Data Analysis Software (CAQDAS) that facilitated the breakdown of the semi-structured qualitative data obtained from the field through aiding in generating codes that were later used to identify themes, patterns and create meaning in the collected data. Hence it aided the process of data analysis

3.6. Ethical considerations

Understanding on what constitutes ethical behavior in research is a primacy in knowing the discourse of academic research especially for the novice in the field of research. The field of ethics looks to it that none of the participants is exposed to harm and that they are protected from any threat to their safety. This is so because, unethical research usually makes both participants and researchers vulnerable and exposed in negative ways. It is even worse for the researcher since it compromises with the trustworthiness and validity of the data (Vicars et al., 2015). For this reason, the study ensured utmost adherence to the professional code of conduct by the researcher as well as safety of the participants guaranteed in many ways.

Firstly, right from the start of the writing, the researcher restrained from plagiarism. All the secondary data collected as per the study recognizes and acknowledges the authors and sources of the information are warranted with proper citation and referencing with the aid of Mendeley app.

Importantly, consent was obtained in the right and proper manner and even so, with hierarchical consideration. At university, there was consent sought from AUB-IRB to have data collected in the area of study with all the formal documentation authorizing the researcher to collect data stamped by the AUB-IRB committee upon approval. At the district level, consent was formally sought from the head of administration department at the district and a letter of authorization provided to the researcher by the CAO. Whereas during data collection, participants consent was sought prior to the interview, a written consent was handed to each participant and for those who did not know how to read, a Karamojong consent form was read loudly to them by one of the learnt women community leaders in their group.

Additionally, the principle of confidentiality and privacy was upheld. While the two terms have been used interchangeably, each has a different meaning. Privacy relates to controlling the kind of information that is released about an individual or a group of people who are involved in a research project while Confidentiality refers to the way in which data is managed and stored (Vicars et al., 2015). The study ensured that the information collected from the respondents is treated with utmost confidentiality to certify nothing spills out illegally. This applied to who has access to the data collected and the degree to which data was shared with others outside of the research project.

Furthermore, there was respect for participants guaranteed, especially their autonomy. Regarding this, honesty, fairness, and respect for all respondents involved in

the study was one of the guiding principles. There was utmost respect in ensuring respondents views were not biased to and that the participants say whatever is considered without judgement.

Also, there was zero tolerance to deception. Drew, Hardman, & Hosp, (2008, p. 67) explain deception as the intentional misrepresentation of facts related to the purpose, nature, or consequences of an investigation (Vicars et al., 2015). Yet Hammersley & Traianou, (2012) present it in form of inaccurate portrayal of data findings or sample size (Vicars et al., 2015). With such a basic understanding of the concept by the researcher, no act of deception was exhibited during the study, prior to the exercise, the researcher provided an honest and transparent account of all stages of the data collection process, giving out consent forms that clearly detailed the research process. This enhanced and built a trusting relationship between the researcher and the participants involved in a study. Furthermore, data collected during the study was channeled to the specific use/ purpose for which it was been collected.

CHAPTER 4

RESULTS PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter presents the research findings on the role women play in enhancing food security in the pastoral community of Napak including suggested strategies for the advancement of their role backed up with the literature from different scholars. The aim of this chapter is to give an account of the respondents' views regarding the research questions of the study alongside what has been written. The section provides answers to the following research questions; what role do women play in enhancing food security in the pastoral community of Napak? and what strategies can be employed for the enhancement of their role? These responses were gleaned from the primary sources who were the targeted respondents of the study: district officials and NGOs as key informants of the study, and women community leaders for the focus group.

4.2 Question 1: What role do women play in enhancing food security in the pastoral community of Napak?

The results of this objective are described building on the six pillars of food security which are guiding principles of the discussions and were also applied in the set-up of the tools addressed to the respondents. Each pillar will have the roles of women attached to it as per the responses during data collection and the discussion obtained from the literature.

It is important to note that, all the target respondents (district officials, NGOs, and women leaders) had similar responses regarding the roles performed by women in

enhancing food security in each pillar, despite the initial assumption by the researcher that different views would be obtained from different respondents. It was surprising that same views were expressed by all the respondents.

4.2.1. Pillar 1: AVAILABILITY

Identified in this pillar were ways women make food available to the pastoral community of Napak as presented below.

- **Livestock keeping**

The women of Napak are traditional pastoralists in Northeastern region of Uganda particularly Karamoja with pastoralism being their dominant source of livelihood. In this community, livestock is said to be attained in a couple of ways which include inherited from parents/and relatives or gifted during traditional marriage. This is consistent with the findings by Zhang (2018) in the article *Pastoralism in Uganda; Theory and Practice* who noted the traditionally married women in Karamoja are rewarded a cow for milking during her marriage. Women

**Female pastoralists expression on livestock keeping
(Extract from FGD village 2)**

Long ago women use not to own animals like cows or goats but when you look at now, women own them. As a woman, I can now afford to buy a goat and have control over it. There are also some NGOs that have supported most of us with goats and cows which are directly under our control and men do not have a voice over them, sometimes my friend on her marriage can give me a cow, so it is my choice to decide what to do with the animals. For example, I can keep them and when they multiply, I can decide whether to sell or give out to any one I want. But in most cases, you find that when there are challenges at home, I sell some of them to solve the issue at hand. But what I do daily is milk my cow and use the milk to eat my bread (atap) or tum some raw fresh milk from the cow to pasteurized milk (ngakibuk) to produce butter.

community leaders further indicated that women in Napak also partake in the rearing of modest number of animals (usually goats and newborn calves) which in most cases could range from 2 to 10 animals under their care whereas they may own an average of up to 5 of the animals they graze while men own up to a 100. A similar situation is noted in other pastoral communities in Africa like the Western Shoa region of Ethiopia with findings indicating women in female headed households own fewer livestock than men in male headed households (Kinati & Mulema, 2019). During the interaction with women community leaders, women are said to participate in the grazing of these animals, usually walking short distances to look for fodder for their animals as the men walk long distances with big animals. These animals are subsequently utilized by women to provide food for their families. A woman is engaged in the milking of cows, goats and other milk producing animals to provide sauce for eating the traditional bread (*atap*) made from sorghum flour, the staple crop of the region. They also sometimes exchange these animals (barter trade) with other food items lacking at home and on rare occasions sell animals during livestock market auction to obtain income meant to provide food for their households. The women community leaders of Napak also reported that, these animals are not only cared for, but they also provide milk for women at home to supplement their diet and that of children. This implies that the more care the women give to these animals, the higher the productivity of milk and consequently copious amounts of milk for diet supplementation. Correspondingly, the intention for leaving women at home with the disguise of taking care of small animals is such that they get ample time to take over household responsibilities. Okali, (2011) summarizes it this way, because rural women have a robust association with the care of small animals, especially in low input systems, they take the duty of household food security and improvements in the production of

these systems may be plainly presented as prospective to contributing to household food security, and equally elevating households out of poverty.

In other pastoral communities like Iraqi Kurdistan, India and Asia, the findings differ from those presented by respondents of Napak on women owning small number of animals and small sized animals. Iraqi Kurdistan presents 70% of both female and male-headed households' own livestock, with female headed households on average owning twice as many animals as male-headed households (J. Njuki et al., 2004). In Asia, analysis of a project involving the Grameen Bank, which provided microcredit loans to women Helen Todd, (1998) showed a clear investment trajectory, with the women given credit investing their new capital in poultry keeping and then moving to goats and eventually to milk cows (Flintan, 2011). In India, Herrero et al., (2013) found that, despite a common perception that only men own bullocks, they were of particular interest among landless women, who rented them to farmers. This implies that a common perception held in pastoral societies like Napak on women frequently owning fewer small sized animals than men can be changed and that the type of species owned by women varies by region and culture and can be dynamic. And livestock assets can be more equitably distributed between men and women.

- **Poultry keeping**

A strong nexus exists between livestock keeping and poultry rearing with poultry keeping considered another form of livestock rearing. In the sub counties visited (Lorengchora, Matany, Ngoleriet and Iriiri), women community leaders noted poultry rearing as the most prominent activity that women engage in on top of ruminant rearing. The majority of the poultry reared is for home consumption with a few kept for sale. Chicken, ducks, and turkeys are among the poultry birds kept or reared by pastoralist communities in Napak and this is a function that is primarily performed by women. It was pointed out that these birds are

rarely marketed; nonetheless, they can be slaughtered sometimes while their eggs are occasionally fed to children to improve on their diet. Abbas et al., (2010) argue that poultry keeping provides a chance to

What is said about women and poultry keeping in Napak (FGD village 3 extract)

Poultry is also the main responsibility of a woman at home, we manage by ourselves in terms of feeding, treating whenever they are sick, a woman can later sell these birds to access other basic needs in the family required, but most cases we slaughter them whenever we receive a visitor at home.

women for self-employment which may lead her towards income generation and a better standard of living eventually. Poultry is significant in empowerment of poor women and poverty reduction. It is a good source of income for women especially who want to work by staying at their home doing other household chores aside (Fattah 2000) cited in (Dolberg, 2003). Napak women in contrast present poultry keeping as a source of food with few sales if any, but Abbas et al, provide an alternative way in which poultry keeping can be made productive by these women through marketing.

- **Crop production**

The Karamojong peoples have introduced crop farming as a livelihood diversification strategy and a source of income and food, even though this shift leaves farmers more reliant on the more variable environment, with a large dependence on rain-fed agriculture and inefficient farming. The shift is attributed to change in land tenure from communal to private land ownership and some women have been able to obtain pieces of land for cultivation, there has also been a decline in livestock keeping as a result of insecurity. Similarly, Napak community has a crop production aspect, but it is purely traditional family farming, with members of the household getting to till a small piece of land just to have food for

subsistence (beans, maize, sorghum, cassava, potatoes), and if there is a sale, it is on a casual basis, with a family selling a small quantity to get what they lack. Most of the

Women and crop production (A quote from NGO 3)

In my community tasks such as weeding, drying, threshing, and marketing small quantities of produce fall under women's responsibility. In traditional Karamoja, the economic survival of households falls heavily on women. A woman will, in a good year, end up with enough food to feed her family or little in certain periods.

crop production activities in the communities examined are reported to be conducted by women. Women perform majority of the crop production activities. Men were said to perform roles related to land preparation for tilling while a woman takes care of the rest of the process till final stage where a man comes to support in harvesting. Although Napak practices crop production, all respondents agreed and expressed this to be commonly conducted in the green belts around the district which include Nakayot, Irriiri, parts of Lorengechora, Poron and Apeitolim and the rest of the sub counties such as Ngoleriet, Lotoome, Matany, Lokopo and Lopeei are the dry belts with little or no farming activities

taking place. But of the four sub counties reached, two of them happen to be green belts where active farming takes place as in the map presented on figure 3 in the methodology section. Issues on the ground reflect that these women face challenges in land ownership while practicing agriculture and this is orchestrated by the cultural believes of non-land inheritance by the women. Women community leaders expressed that, in most cases they are able to access the land to use for agriculture but do not own it, this makes it hard for them to decide on the land utilization. In a study by Lakidi, (2020) on *Assessing and measuring the gender gap in land rights under communal land associations in Karamoja* Oxfam (2013) is reported quoting over 86% of women in Karamoja have access to land under customary tenure with no formal documentation as proof of ownership implying lack of security of tenure but men still play a dominant role in land management. This still makes it questionable on women's ownership and control of land for agriculture. Despite this, women are still noted to contribute to 50% of the labour force in agriculture as agents of change and resilience ([FAO], 2018).

- **Gleaning from local plants for wild fruit and vegetable gathering**

Pastoralists rely heavily on natural resources to maintain their livelihood. People in pastoral communities have a prominent level of flexibility and reliance on indigenous plants materials for sustenance, which they primarily feed both humans and livestock as reported by women community leaders. Women go hunting for locally acceptable edible fruits and vegetables while men go hunting for wild animals such as rats and rabbits to

provide food for their families (meat mostly, because killing animals for meat in a traditional setting like Napak is only done on rare occasions such as traditional events and probably if an animal dies for any reason). *Balanites aegyptiaca* (*Ekorete* in the native language), *tamarind* (*ngapeduru* in the native language), *desert dates* (*ngimongo* in

A Woman's voice on fruits and vegetable gathering (Extract from FGD village 1)

As women, we sometimes gather in groups and go hunting for wild fruits to supplement our diets in our homes and for treatment because some of us stay far from health centres. Unfortunately, it is not easy these days because the trees are dry due to the dry spell season but also the insecurity situation scares us from going out to gather fruits since you cannot know which side the cattle raiders have passed on a particular day, so you may go hunting and meet them, and you end up losing your life for nothing. What we do, we try climbing those trees around us to get some fruits or vegetables.

the native language), and others such as "*ngalam, ngakamura, ekadelwai, and ngalebulebuo*" (all in the native language) are the fruits mentioned. Vegetables harvested include *Leptadenia hastata* (*ekamongo* in the native language), desert dates leaves, and others only known in the ngakarimojong language spoken by the locals of Napak, such as "*akiliton, lomuthugui, akeo, eliaro, athuguru*" and others. According to the women community leaders, some of these fruits and vegetables are edible and used for food as well as oils ointments while others are medicinal and used as preservatives. IFAD, (2009) reports that women do not only gather fruits or vegetables for use but also take part in the preservation of these tree species which have a variety of uses such as being nutritious, medicinal and fodder for livestock, certain trees are also said to play a preservative role in milk and meat which is the staple diet for pastoralists. A study by [USAID], (2013) in Karamoja notes wild foods such as tamarind (*Tamarindus Indica*), shea nut (*Vitellaria paradoxa*) and desert date (*Balanites aegyptiaca*) along with a host of other wild fruits, nuts, water lilies and tubers to be primarily collected by women and sold in local markets.

In some areas, people participate in wild honey collection using traditional beehives and honey production/gathering can be quite lucrative and there appears to be a growing demand for honey. It was also noted earlier on by (Dan Church Aid [DCA], 2010) in the article *Climate change and adaptation strategies in the Karamoja sub region* that cultivated vegetables, wild fruits, and wild greens although with a high degree of variation by season and location has been adopted by the people of Karamoja as a strategy to supplement their diet. The reliance on the harvesting of wild plant to complement diets has similarly been reported in other African countries like Zambia that face food difficulties. According to the 2018 Global Nutrition Report, Zambia is classified as a country suffering from the triple burden of malnutrition that is over nutrition, under-nutrition, and micronutrient deficiencies. Zambian diets are reported to be relatively monotonous, consisting of large portions of maize-based staples along with a ‘relish’ of vegetables, and small portions of fish or meat for those who can afford them (Kaliwile et al. 2019) cited in (Ickowitz et al., 2021). However, when the communities embarked on consuming wild fruits, cereals, and vegetables, it improved their nutrition greatly and minimized deaths and food shortage. The World Health Organization (WHO) recommends that individuals consume a minimum of 400g of fruit and vegetables per day which is often interpreted as 200g of fruits and 200g of vegetables, or two and a half servings of each (at approximately 80 g per serving) per day, although some countries recommend a higher proportion of vegetables (Nicholson & Monterrosa, 2021). Therefore, it is imperative for communities to embrace such practices and avert food insecurity.

4.2.2. Pillar 2: ACCESSIBILITY

The ways women in Napak make food accessible are discussed in this section. They include their contributions towards improving economic, social as well as physical access to food.

- **Self-employment**

Women's self-employment was expressed through their participation in small scale local businesses such as brewing, charcoal burning, and selling firewood, which they conduct in their community of residence. Women are said to be increasingly involved in these businesses to ensure that food is accessible for the family. The common business identified by majority was brewing. Brewing is explained as a method in which women make local beer (*kwete*) in a step-by-step process that takes a week or more. The business entails a woman purchasing sorghum and cassava flour from adjacent regions, allowing the sorghum to germinate before grinding it to make beer, flour is steeped in water for 4 to 5 days before being fermented. The enterprise, according to the women, is profitable since *kwete* is a traditional drink in the region. Women community leaders stated that women in this business generate quite a reasonable income on good days of about 50\$ to 100\$. The amount in this kind of business usually becomes family money because a man in most cases contributes to the startup income but the entire process is performed by women. It was expressed that a woman after sale presents the money to the husband who then supports in making decision on how the money should be spent especially in acquiring family needs. Iyer, P., (2017) findings concur with this argument expressed by women leaders with brewing noted to be a lucrative business mostly in the dry season in Karamoja as a common risk management strategy of replacing food with local brew. The author presents the brewers to be an important source of credit and cash

redistribution in village networks. However, it was mentioned by the women community leaders that this enterprise is only beneficial for middle-class or slightly better-off women in the community, i.e., those who can obtain, or whose husbands can supply, initial funds. Most women, on the other hand, engage in burning and selling charcoal and collecting firewood which activities are considered cheaper for all as a way to support their families. Roadside selling has also been reported by women who are able to buy tiny quantities of food such as cassava, sweet potatoes, and seasonally harvested sorghum or maize, which they pack into small portions or measure using cups and sell in their locality to make the food accessible to their residences at an affordable cost and quantities. Iyer, P., (2017) describes Napak and Karamoja workforce to be an informal employment, with limited job security, labor rights, or associated benefits with people looking for wage labour primarily for basic survival. Most job opportunities identified by the author include construction, domestic labor, service and sales work, and other casual labor such as loading/offloading, brewing, sorting cereals, fetching firewood and water, restaurant, and hotel work, and working as hawkers which are described as seasonal characterized by unorganized labour market, unpredictability, highly competitive unskilled labour aimed at attaining basic needs. For all these reasons, decent employment can be seen as one of the most sustainable and dignified means of food procurement, social inclusion, and long-term food security.

- **Stone quarrying and mining**

Women in Napak have gone as far as participating in stone quarrying and mining to provide for their families. Mining was less mentioned because the women community leaders expressed that the mines were located outside of Napak district and that access to the mines was limited to those who could afford the transportation fare (15000ugshs) which is about \$12 to the nearby district (Moroto), where mining is prevalent in Rupa Sub County. Stone quarrying is what is conducted in Napak community near the hills of Matany, Morulinga, and Mount Napak where stone extraction and breaking for sale to construction companies is done. A view by women community leaders regarding stone quarrying is that it is done in the nearby hills, near homesteads, a family goes every morning as early as 6:00am to the nearby hills (estimated distance of 2 kilo meters) to break stones for an entire day and come back in the evening. It was also noted that this activity is done by low-income women. Some women community leaders expressed the support given by some men to their women during stone breaking. Once the broken stones make a trip (usually takes an average of two weeks to make a trip), they are sold to the construction companies with a trip costing about 150000ugsh, or about \$50, which they believe is small earnings for the labor they do under scorching sunshine and sometimes adverse

A woman's expression about stone quarrying in Napak (Extracted from FGD village 1)

There is also stone quarrying done here as an alternative source of income where most women here go up the mountain in the morning to collect and break stones and come back home in the evening. They later sell these stones to building companies and get money to buy food at home. Right now, if you want to walk to the mountain with us, you will find that its mostly women who are doing this activity. But the problem is that sometimes you collect and break stones for an entire day in an empty stomach and nothing is sold for even up to a week. Ngican ca (a phrase describing poverty)

rains and wind. However, most women expressed the support this activity has on their livelihoods with a family that successfully engages in stone quarrying and sale living a fairly better life. On a sad note, it was reported that this activity has for long impacted on the health of those engaged in it as a result of carrying heavy stones and heavy hammers to break them. When asked about mining, the women community leaders reported that, they only hear some of their colleagues go mining but have not seen anyone within their villages. Although SAFERWORLD, (2013) expresses that, Karamoja has attracted investors for its potential in minerals such as limestone, marble and gold which has made the government to promote private investment in Karamoja's mining sector as a means to stimulate development and improve security in a region that has suffered for decades from conflict. But these minerals are concentrated in Rupa sub-county in Moroto district causing majority of the people in the region to flood the subcounty. The report on participation of women in Napak on mining doesn't come out clearly. Whereas stone quarrying is described by Iyer, P (2017) to be carried out in the most rural parts of the region like some sub counties in Napak and Moroto. Elizabeth, (2006) in her study on *small scale stone quarrying in Mukono, Uganda* argues that poverty in Uganda and Africa at large is predominantly rural, with more than 70 percent of the continent's poor people living in rural areas forcing people to engage in non-agricultural activities like small scale stone quarrying which in most cases has got adverse environmental changes such as drought and floods. Exploitation of the natural environment has depleted most resources and rendered most productive land beyond repairs (Independent Evaluation Group [IEG], 2008). This development is likely to compound the health and unemployment problems of the poor majority seeking alternative means of livelihoods in rural areas (Bewiadzi et al., 2018).

- **Other income generating activities**

The income-generating activities mentioned earlier included petty small businesses such as brewing, charcoal burning, and collection of firewood for sale, but this section focuses on the income-generating activities provided to women by NGOs and the district. It was noticed during the discussion with the women community leaders that there are NGOs in the region that support women, such as Action Africa Help (AAH), Welt Hunger Hilfe (WHH). For example, the Karamoja Economic Empowerment Project (KEEP) by Action Africa Help Uganda (AAHU) with funding from UNWomen focuses on vulnerable women in the Karamoja region (Napak), on reducing HIV/AIDS vulnerability among adolescent girls and young women aged between 15 to 24 years, as

well as improving the ability of those living with HIV/AIDS to manage the disease's effects. The project works to strengthen the capacity of women and girls in the Karamoja region of Uganda to perceive and prevent HIV/AIDS infection

Women and IGAs (A quote from DO 7)

There are existing community development programs that women can get involved in for instance the Uganda Women Entrepreneurship Program allows organized women associations to access financial support from the government and this platform enables them to become financially independent and implement ideas on food related issues. Uganda Women Entrepreneurship Program works through women groups to identify a suitable enterprise for such a group and support them with skills and startup capital among women of age 18-79, this has been helpful in strengthening women livelihoods through IGAs.

through a variety of activities, including the establishment of Women Business Enterprises for Business (WBEB). Cereal banking (stocking and sale of cereals like sorghum and maize) and tailoring are some of the enterprises that women own. The district, on the other hand, has women targeted project called UWEP (Uganda Women

Entrepreneurship Program) and this is from the Uganda Ministry of Gender, Labour, and Social Development (MGLSD) that helps women create business enterprises. All the above initiatives are focused on empowering women so that they can provide food for their families, given the region's conventional gender roles. Noted during the KIIs is that women who take up these programs have registered progress for the past two years. And among women community leaders in the FGDs, there were 10 women who confirmed their participation in these initiatives, and who reported that these income generating activities have enabled them to provide for their family basic needs, including supporting their school going children. Their engagement in these activities was reported to be once a week, giving them time to engage in other activities. Boserup et al, (2015) argue that women participation in income generating activities is a crucial mechanism for ensuring rural development of developing countries. Institutions and individuals promoting rural development should see income generating activities as a strategic development intervention that could accelerate the rural development process (Akerele E. O. and Aihonsu J.O.Y, 2011). Feminist studies in the academic arena and other initiatives in the world advance that, empowering women has led to a desire to learn more about businesses that are owned and run by females (Alemu et al., 2021). This means that gender sensitive in the form of gender mainstreaming in economic participation on livelihoods and income generating activities improves household income, albeit food security.

- **Food transportation and storage to improve access to food**

In Napak, food is typically delivered from the garden on heads, bicycles, and wheelbarrows for those who have them. However, the women community leaders stated that women walk carrying food from the garden to their homes on their heads. While men assist in harvesting, women engage in post harvesting practices such as transporting, threshing, drying, and storing the crops and ensure that they are meticulously kept for daily consumption.

The food is stored in locally constructed stores/granaries (*edula* in the native language), which are made of hardwood reeds and thatched with grass to keep the food safe from pests, rats,

Women's opinions on food storage and transportation (FGD village 2 extract)

Question: In your opinion do women contribute to food accessibility in your community, if so, how?

Woman one; Yes, because when it comes to harvesting and storing of food it is women who know which food to put where and which one to be eaten now, and which one to keep for the next season.

Woman two; It is us women who provide casual labour in our community whereby we engage ourselves in carrying food on our heads up to our homes or sometimes go to work in people's farms as transporters.

Woman three: Yes, because when you look at the season of harvesting and storage it is us women who fully participate to make sure food is stored in the right place and who take charge of procedures of sun drying, sorting, and storing of various categories in different granaries and stores for consumption and sustainability compared to men.

thieves, and aflatoxins. Women are said to play an active role in ensuring that food is stored appropriately in the household. Besides the storage question that affects food security among pastoral communities, food accessibility is also affected by culture, religion, and traditional knowledge. According to (Turner et al., 2000), knowledge about resources on which people rely on for example, where and when to find, harvest, transport, prepare and store their food; how to harvest and use the materials they need to maintain themselves: fuel, tools, containers, clothing is gained over time by people living

in a given locale and depending on their local sources of food, water, materials, and other necessities. This kind of knowledge is often revolving around seasons and particular places and habitats and is closely tied in with people's values and worldviews (Turner et al., 2022). This line appreciates the role of local knowledge and locally available resources in ensuring food security in rural communities in Napak.

4.2.3. PILLAR 3: UTILIZATION

When asked how women guarantee food utilization in the pastoral community of Napak, respondents in both the KII and FGDs expressed the following opinions.

- **Food preparation**

Women community leaders highlighted women to manage the process of food preparation, they are considered to be the main agents of home food security. Food preparation includes cooking raw foods for consumption, as well as preparing various food combinations, both cooked and uncooked, such as fruits and animal products, in a way that is healthy for the family. Women's involvement in the kitchen is said to be contributing to nutrition management at the household level in a traditional community like Napak, as stated by one of the women "*in my community, women are taken as stay-at-home spouses whose duty is confined to the kitchen. And unless he is still a boy, you will only see a man in the kitchen on rare occasions.*" Mills et al., (2017) observed that food choices, including meal source and preparation method, have an important impact on dietary intake, and hence health. Preparing food at home has been associated with a range of potential benefits, such as consuming fewer calories and smaller portions, and eating less fat, salt, and sugar. Home food preparation is also positively correlated with greater intake of fruits and vegetables and a healthful dietary pattern. Recent systematic

reviews have identified potential advantages of home cooking interventions, in terms of diet, health, and cooking knowledge/skills, confidence and attitudes. However, they also found the evidence base was overall inconclusive, due to the predominance of poor-quality studies. Cooking classes for children, parents and care givers have been recommended as part of a wider strategy to reduce childhood obesity. It was estimated that by 2020, non-communicable diseases (NCDs) will account for 60% of all disability adjusted life years and 75% of all deaths worldwide, with the majority of NCDs related to diet. In almost every part of the world, health problems attributable to NCDs associated with dietary intake now outweigh the burden due to under-nutrition. Moisiu et al., (2004) assert that most female workers with children have been shown to feel frustrated and defeated when they could not organize regular proper family meal or homemade cooking due to their engagement with the office work especially during working days. Family meals especially dinner in fact were problematic and complex in the present days than in the past for most of the working women (Salehuddin et al., 2016). Therefore, much as food insecurity is a major contributor of malnutrition in Napak, the process of home base food preparation also matters to guarantee a healthy family living. This would be a great initiative given the high influx of already made foods sold on streets and small retail shops and supermarkets in the district.

- **Maintenance of Water, Sanitation, and Hygiene (WASH)**

In terms of water, hygiene, and sanitation, the district officials interviewed recognized the role of women in Napak in ensuring water supplies are clean both at home and in the community. Women are also in charge of providing WASH facilities, but with the assistance of males and NGOs in charge of WASH initiatives. The efforts of women are recognized in the majority of the locally built tip taps, latrines, plate racks, and locally constructed latrines. Women, on the other hand, are primarily responsible for ensuring that the home atmosphere is hygienically conducive. This is accomplished by sweeping the compound and ensuring that the children's and spouses' clothing are clean with assistance from the children. In support of this finding, numerous studies within

Karamoja region have had findings confirming women's efforts in maintaining water, hygiene, and sanitation.

WASH and women (Extracted from DO 3)

Since one of the prime roles of women in my community is water collection, they have been involved in water source protection through the water user committees, human waste disposal and mostly in ensuring household and community hygiene.

The journal presented by

[WHH], (2019) on *Hand Washing in Napak*, had the district applauded for its ability to embrace WASH initiatives signified by the acceptance of Napak to embrace the National Hand Washing Initiative (NHWI) a government led inventiveness that was conceived by the National Sanitation Working Group (NSWG) in 2005 with the aim of championing the National Hand Washing (NHW) with soap campaign as compared to the hostility said to have been exhibited by the district in the preceding years. In Karamoja, P. R. C. Carter & Kidega, (2013) recognize the Watershed project by the European Union aimed at improving WASH through Community Led Total Sanitation (CLTS) an approach

focused on stopping open defecation (OD) within a community, acknowledging that individual hygiene behavior can affect the health of other community members; Participatory Hygiene and Sanitation Transformation (PHAST) a participatory learning methodology that seeks to help communities improve hygiene behaviors, reduce diarrheal disease and encourage effective community management of water and sanitation services and the Cluster System developed by WaterAid in order to capitalize on the strength of relatively small, coherent groups of households. Substantiated by the study titled *“Invisible Women” in the Karamoja Cluster* by East African Sub-Regional Support Initiative for Advancement of Women [EASSI], (2020), women’s role in providing the water in their homes, for schools and community institutions in instances where there are no boreholes in those institutions, is recognized.

- **Passing of oral nutrition knowledge.**

All respondents (Women community leaders, NGOs, and district officials) highlighted this role, it was mentioned that women engage in passing on knowledge orally to their fellow women and children. Nutritional knowledge is transmitted to the community through community-led techniques such as sensitization, role plays, and group talks with parents whose children have been enrolled for nutrition management due to unsatisfactory anthropometric data spearheading them. It was expressed that there are community

campaigns

organized by NGOs

handling nutrition

where key messages

on how to prepare

healthy food,

exhibition of food

varieties to

community

members through

dramas and songs is

done. As a result,

A narration on knowledge transfer by women (DO 5 extract)

Women try to improve dietary intake of micronutrients for their families especially for the children. Compared to men, they have a better understanding of foods based on their nutritional value, including legumes, vegetables, fruits etc. However, lack of economic security and effects of poverty makes it difficult for them to consistently provide dietary diversity for their families. Nonetheless programmes like NUYOK, Andre Foods International and CARITAS have trained pregnant and lactating mothers on dietary, and children supplementary feeding foods and this knowledge has helped them improve their children's nutritional status, they are also trained to prepare good meals for the children. Women have now got knowledge on different nutritional feeding habits from various NGOs and are now working hard to ensure proper feeding at households. And the knowledge acquired has been passed to other women in their informal gathering. During locusts' season women were supported with cash, seeds for planting to improve on their livelihoods, Office of the prime minister also came in and gave food relief like beans and posho to have something to eat).

Napak women have benefited from these programmes and have gained information that they have decided to share with other women and their families not enrolled to benefit from these programmes. Women community leaders also identified some of them as lead mothers who through the knowledge acquired are able to monitor the nutritional status of

children in their communities and provide recommendations for action. Moisió et al., (2004) noted that knowledge on food plays an important part in the production of family identities and preparation of homemade food which is part of the communication of devotional love to family and providing homemade food seems more important when children are young. And in the study conducted by IFAD, (2009), an example is given of the Rakai, the proverbial pastoralists of Rajasthan, in the dryland state in the West of India and the Masai women of Kenya, being recognized for their work in passing knowledge of food habits to their children since they are charged with the responsibility of child rearing. They do this through songs, riddles, and proverbs to the younger generation.

4.2.4. PILLAR 4: STABILITY

There were fewer reports on women's role in ensuring food stability in the pastoral community of Napak as in the discussion below.

- **Membership in village savings and loan associations (VSLAs).**

Women’s participation in VSLAs has expanded dramatically in the pastoral community of Napak says one of the district officials. Women rely on their small businesses and NGOs for support to establish village savings clubs, which they say supports their families during time of crisis. The district officials and NGOs interviewed praised women for their active participation in local savings and loan associations. The expressed situation was so much appealing with numerous VSLA groups coming up compared to the past years where women were afraid of saving with the fear that their money will be demanded for by their husbands for their personal use, signaling not only a shift in mindset but also indicative of the effect of the financial literacy classes provided by the NGOs for VSLAs. Within these groups, women can obtain money at any point of their financial need through

How VSLA’S help women (Extract from DO 8)

Some women get engaged in VSLA groups which help whenever there is need for money. They are able to deal with family problems like lack of food, paying medical bills, education purposes and for farming. Women have also resorted to saving groups, to regenerate money that can be used through loans and sharing of profits this has helped them get access to money anytime they need to address any threat that may arise.

taking a loan from the VSLA. The experience of women in Napak has been reported elsewhere in the literature, where well-designed development programs are noted to support women to save their income and use those funds for the benefit of their families including for food and education. Similar results have been reported in Nigeria (Oyerinde & Naphtali, 2021), among other countries.

Christine, (2012) correspondingly opines the same among people in Karamoja who survive on meager and erratic earnings, emphasizing access to the VSLA can help stabilize their incomes. For instance, report from Schelling, (2013) indicated that from nothing, St. Mary's APFS now has a portfolio of Ush 4 million (USD 1500), accumulated over two years. The group is being supported under an EU funded Government of Uganda's Karamoja Livelihood Programme component implemented by FAO.

- **Economic diversification**

Women engage in a range of livelihood sources according to women community leaders and key informants in the study. In addition to their pastoral livelihood, they have ventured into farming, small-scale businesses, casual labor, wild fruit harvesting, poultry keeping, and VSLAs to assure their families' food security in the event of a disaster. Although these may not be long-term solutions, it was widely reported that each woman has at least two sources of income in case pastoralism and farming failed. Most women have exerted extra effort to provide for their families through a variety of other sources of income, particularly quick income sources such as fetching firewood for sale, brewing, and, most

Opinion on how women ensure economic diversification (NGO 4 Extract)

Despite pastoralism as one of the key sources of livelihood in Karamoja sub region, women have as well turned to alternative livelihoods like small business enterprises, VSLA, commercial agriculture which is more common in south Karamoja, stone quarrying and mining which is in most parts of the sub region, vocational skilling which has boosted their practical skills in tailoring, art and craft some engaged in male dominated skills like auto mobile mechanics to provide for their families and boost their income base.

commonly, casual labor, in which a woman goes to a neighborhood, preferably middle class, to perform a task in exchange for money or food for the family. The most prevalent types of quick income sources is casual labor like collecting water for money or food (sometimes brewing leftover residue (*adaka*)), or just home tasks for a formally employed family who does not have time to complete their chores. The findings by USAID, (2013) are consistent to the study findings especially that in the face of constraints, the Karamojong people have further engaged in various cash-generating activities such as brewing, construction, artisanal mining, casual wage labor, petty trade, natural resource extraction, agricultural labor, and service sector jobs. And that economic diversification in Karamoja is another ongoing trend that is likely to increase over time, particularly as more people move out of pastoralism and have to spread the risk of crop failure through alternative livelihoods activities. Also in agreement to the study findings is noted in Iyer, P., (2017) who states pastoralists in Karamoja just like other pastoralists around Africa have increasingly turned to a range of diversified and alternative livelihood activities to fulfill immediate nutrition and other household needs, as well as to mitigate risks from disease, drought, and insecurity. Just like (Bushby and Stites, 2016) and Abiodun, and Ekundayo, (2013) noted that one of the key issues in food security campaign is livelihood and income diversification potential of households. In fact, the issue of food security without consideration of the attendant security of the livelihoods of the individual/household in question may be inadequate to making appropriate policy recommendations (Abimbola, 2013).

4.2.5. PILLAR 5: AGENCY

Individuals or groups with agency can make independent decisions about what they eat, the foods they generate, how that food is grown, processed, and delivered, as

well as participate in policy processes that impact food systems ([HLPE], 2020). Even though agency appears to have emerged, it was clear that the pillar would receive little attention, given the preceding discussions of the results that Napak is still a patriarchal society. First, let us take a closer look at the community presentation.

- **Household consumption decision making**

Women have been reported to be the key decision makers on what is consumed at home since they participate in the cooking of food eaten by the family, so they are accountable for household consumption choice making in their endeavor to pick the food items. During the interaction sessions, women's decision-making abilities were mentioned frequently in relation to household consumption. It is a woman who decides on every meal that is; what should be eaten by whom and when; men are never involved in this level of decision-making, except in times of scarcity, when they step in to provide for the food required by the family. Nonetheless, when asked on how decisions of what to be planted, it was noted that this varies from family to family. But in most cases, what is to be planted in a particular season as of farming is decided upon considering the advice of extension workers. On animals to be reared, it is usually a man who decides on which animals are to be reared in a home.

Women and household consumption (DO 4 extract)

Women are entirely responsible for the food consumption at the household and therefore make most of these decisions as well as food production since they provide most of the labor in the fields.

- **Freedom of expression of ideas and issues**

This was reflected during women FGDs, the women admitted that, in contrast to the past few years where a woman was typically an observer even in matters that affected her, today's world

has given women channels to seek assistance and protection. There are numerous women groups coming up through support from non-governmental organizations (NGOs) where they can openly express themselves. It has also been claimed that

Perception towards women's freedom of expression (DO 7 narrates)

Despite the enforced lack of freedom of expression and opinion, women, through sensitization and social competence building programs have gradually demanded for their rights to be respected and are getting involved in many livelihood programs to increase their alternative income sources. They also have agencies that support them for example FIDA, Uganda human rights commission in way that if they have land that belongs to them and a man wants to take it away, these agencies come in to help which has helped a few women with property stand strong in ownership of property.

women participate in radio talk shows to discuss matters related to their empowerment. Other women have taken up leadership positions in the district or communities to preside on issues of their fellow women in the community. The study titled *"Invisible Women" in the Karamoja Cluster* presents cases where women in Karamoja have taken up vacant political positions with women elected to local government. The women engagement is also recognized through their participation in consultative meetings and discussions involving the impact of conflicts over resources on women. The Karamoja Women's Cluster is one of the fora which is pointed out to have provided leadership to the rest of the women in the cluster with a lot to learn in terms of disarmament and dialoguing on conflict ([EASSI], 2020). Through the Forum, the

women can discuss other community problems, such as income-generation for women, gender-based violence, alcoholism, and the need for children's education.

4.2.6. PILLAR 6: SUSTAINABILITY

Unfortunately, there is a missing link between community initiatives to promote sustainability and women's engagement throughout the fieldwork contact process. During the interaction by the district officials, it was noted that most of the women designed programs lack the sustainability trajectory. While appreciating the efforts to ensure women have better opportunities, it was acknowledged that the sustainability aspect of it lacks in the project designs and implementation. To begin with, women have been involved in activities that are undesirable to the pillar of sustainability, such as charcoal burning and firewood sale, which imply that trees are being cut down for survival hence affecting productivity of range lands. And yet Clapp et al., (2022), considers these activities to be degrading the ecosystems and ultimately compromising the capacity of food systems to produce and distribute food over the long term. Entirely, the livelihood activities presented in the discussion by women do not present a trajectory of sustainability. This is contrary to the discussion involving the application of the concept of sustainability which has become the guideline in designing livelihoods approaches in all aspects: livestock, fisheries, forestry, agriculture, health, urban development and more. And Guiné et al., (2021) present sustainability as a new dimension of food security that needs to be appropriately addressed integrating other variables such as climate change.

Table 3: Results summary table for question 1: what role women play in enhancing food security in the pastoral community of Napak

Pillar	Role	Sub-roles	Comment
Availability	Livestock keeping	Milking Grazing of livestock Marketing in case of sale.	
	Poultry keeping	Feeding Seeking for treatment	
	Crop production	Land acquisition Land clearance Digging Weeding Harvesting Threshing Marketing	Women perform majority of crop production activities.
	Wild fruit and vegetable gathering	Fruits and vegetable selection. Handpicking of fruits or vegetables.	Women exclusively perform this role.
Accessibility	Self-employment	Causal labour Brewing Charcoal burning Firewood collection Roadside vending	These are in form of personal initiatives by women themselves.
	Stone quarrying and mining	Gathering of stones Breaking of stones Selling of stones	This is by both men and women although majority of the workers are women.
	Other income generating activities	Tailoring Cereal banking Hair dressing	These IGAs are NGO or district initiated.
	Food transportation and storage	Carrying of food on their heads.	The food is usually transported by women on their heads while men who

		Construction of local granaries. Treatment of food	have bicycles or wheelbarrows use them.
Utilization	Food preparation	Cooking Making of food mixtures Food sorting	Exclusively done by women.
	Maintenance of hygiene and sanitation	Members to water user committees. Construction of locally hygiene sources like tip taps, plate racks, local latrines. Household cleaning through washing of utensils and clothes and garbage collection	Membership to WUCs has both men and women but household hygiene is entirely by women.
	Passing of oral knowledge	Participate in nutrition trainings. Good child feeding practices. Share information as lead mothers	This is usually by lead mothers who are members to NGOs nutritional committees like Village Health teams (VHTs) and lead mothers.
Stability	Membership to Village savings association	Savings Acquisition of loans during emergencies Loan repayment	The savings enable them in times of emergencies.
	Economic diversification	Pastoralism Farming Self-employment Stone quarrying	This is due to uncertainties caused by erratic climate and insecurity inform of cattle raids.
Agency	Household decision making	Women decide on what to cook. Who consumes what? And at what quantities	This role is not so strong, but we cannot excuse the fact that women are responsible for household consumption

			decisions although this is by gender roles.
	Freedom of expression	Membership to women groups Participate in radio talk shows. Conduct campaigns Taken up leadership positions	Women can speak up and stand for themselves.
Sustainability	-	-	No role came out on how women contribute to sustainability.

Considering some of the gaps highlighted in the study responses or results on the role of women towards food security in the pastoral community of Napak such as the inability by women to meet agency and sustainability pillars of food security several barriers were expressed to be deterring women from fully contributing to the six pillars of food security. The barriers identified include;

Unequal distribution of resources where it was underlined that resources in Napak community are unevenly distributed between men and women, for example the ownership and control of land is by men, women only access and use it. And from the pastoral perspective, women own small animals like goats, and in small numbers of 1 to 5 yet men own up to 100s. In the study conducted by Oxford Committee for Famine Relief [OXFAM], (2012) women ownership to property especially land in Uganda despite the importance of land to women lacks tenure as a result of gender biased laws which at their best only protect married women and at their worst do not protect women at all. It was questionable that if women cannot access land during a peaceful period in the region, then their rights to land is limited during times of peace, their enjoyment of

these rights during conflict situations is nearly prohibited as it is the case with Karamoja. The lack of ownership to resources by women has left them limited as far as decision making (economic) is concern implying lack of agency.

Food waste and food loss was also noted as a barrier. Food insecurity hits the district and the region at large because the community is so wasteful and yet their harvest is usually limited. Traditionally, any ceremonies organized in the community involve making of local brew (*kwete*) in vast amounts for a single ceremony, imagine having more of such ceremonies how much of the food is wasted. Food loss results from poor storage facilities reported in Napak, with food locally stored in granaries which are vulnerable to attack by thieves, pests, and sometimes adverse weather conditions. These have a greater impact on how much food is available and accessible to the community as a result of such losses and waste encountered.

Another barrier pointed out was male dominance with the district described as typically traditional where men have more powers over women in all matters including food, this leaves women with nothing to decide upon except household consumption decisions where she makes choices on what is to be cooked, at what amount and time, including who consumes what. This may not be enough for her to ensure food security in a situation where most resources are under the control of a man.

Decline in the numbers of livestock was another barrier as highlighted that prior to intensified insecurity in the early 2000s, a single household in Karamoja could own up to a thousand herds of cattle which is not the case today. District officials cited that today, the households are only owning a hundred of cattle which is a total loss to the food security situation of a community which has highly been dependent on livestock. The situation is associated to the unending raids in the region which have lasted for years, the

animal diseases which have claimed many of the animals resulting from all animals confined in one big kraal in the army barracks making them susceptible to disease in case one animal gets sick, and also the change of livelihoods which has resulted to sale of some cattle to acquire other sources of livelihoods like land for agriculture and business by other members of the community. The study findings by International Organization for Migration [IOM], (2014) highlight that the overall decline in the number of cattle in Karamoja has left many families unable to contribute income to their households and, therefore some of them especially in the district of Napak have been forced to migrate to urban centres to seek alternative ways of generating income, such as begging and cleaning. Additionally, Stites et al. (2016), expresses that in terms of volume, the study participants in Karamoja expressed that animal ownership has declined substantially over the past ten years. Historically, herd numbers fluctuated during periods of raiding and counter-raiding but currently the decline has been aided by poor conditions in the protected kraals, which arose during the disarmament process which involve removal of guns and to have animals protected, all animals were gathered in the army barracks for safety. Considering that livestock has been a major livelihood to this community, it is sad that they may become susceptible to general food insecurity situation resulting from loss of livestock.

Other threats spotted throughout the entire discussion with the women community leaders, district officials and NGOs as hinderances to women's involvement, productivity, and capacity Include: erratic climate (affecting the productivity of those involved in agriculture), negative cultural norms against women (limiting women's ability to stand up for themselves), gender-based violence, inferiority complex by women,

illiteracy (reducing the rate of participation among women in many programs) among others. As noted by one of the district officials (DO 5);

“Women, and girls in general face immense challenges to achieving safe, healthy, and productive lives due to poverty, limited education, harmful traditional practices, and cultural expectations that sanction men’s powers over women. These limit a woman’s role in more profitable parts of the agricultural value chain and increases the risk and reality of violence against women who step outside of those prescribed roles.”

As a result of these threats or barriers, strategies were identified by the respondents as well as the previous studies conducted to have the situation curbed and women strengthened as agents of food security as per the discussion in the following section.

4.3 Question 2: What women empowerment strategies can be employed to enhance food security in the pastoral community of Napak.

Women community leaders, NGOs, and district officials in Napak acknowledge that there have been women empowerment strategies put in place, however, they are insufficient, exclude most rural women, and are short-lived for other instances. They expressed several ways through which these roles can be consolidated to enhance food security.

4.3.1. Capacity building

This was emphasized in the form of providing opportunities aimed at ensuring women's capacities are built enough to assume the empowerment opportunities presented to them. Women community leaders reported that the government and NGO community programs usually require skills for women to engage in them which include entrepreneurship skills, life skills and other vocational skills. Women community leaders believe these skills will not only enable women benefit in these programs but can also be a source of livelihood in other aspects of life if put into use. The loud cry was directed by the women community leaders to the NGOs and district officials, whereas government officials urged the women targeted organizations to consolidate their efforts in ensuring this is attained. This implies that women hold NGOs and government responsible to provide them with the required skills, whereas the government expects support from NGOs and NGOs from the government. A study by USAID, (2013), *Livelihood Dynamics in Northern Karamoja. A participatory Baseline Study for the growth Health and Governance Program* in Northern Karamoja presents the need for capacity especially the household labor capacity which is noted as a constraint to crop production. Whereas ICRW, (2016) acknowledges skills as critical towards addressing talent pipeline

shortages that industry experts claim make it difficult to hire women. These studies help us understand that skills of any kind are vital for women empowerment at all levels including food security.

4.3.2. Access to financial services

Women need to take independent economic decisions through economic empowerment by engaging in businesses and saving associations, which require access to financial services. Women

community leaders appealed to the NGOs and government to respond to the imbalances in accessibility to financial services. Microfinance services inform of loans as well as financial intervention on vulnerable women by NGOs were some of the services considered by respondents. According to the women community leaders, Napak requires a financial

Women's opinion on how to ensure access to financial services (extract from FGD village 3)

The government should create more employment opportunities for us women to also enjoy our autonomy, more organizations should come in to support women financially such that they are able to sustain their livelihoods and also our Village Saving Loan Association groups should also be strengthened, and women should continue being mentored and monitored. Financial institutions like banks and other lending authorities should extend their services to the rural communities and support women financially at low interest rates to help us set up small business to improve our livelihoods.

institution of its own like banks and other microfinance services put in one of the sub counties in the district. This has become a burden especially for the people in Napak to access financial services. Whoever needs bank services must travel to the nearby district (Moroto) where banks are located which they feel is inconveniencing especially when they do not have transport or during an emergency. Insecurity situations have also made it unsafe for those in Napak to go on motorcycles to pick money out of the district.

Financial services were also expressed in form of the need for employment opportunities with the government urged to open job opportunities for rural women so they can be able to have income to fend for their families. Women community leaders gave an example of Uganda Women Entrepreneurship Programme aimed at improving women's access to financial services and equipping women with skills for enterprise growth, value addition and marketing of products and services, which was said although well intended has encountered implementation issues of failure to evenly benefit all women in a manner that can change society's subordinate perception towards women. This study relates to the recommendations presented by USAID, (2019) on the need for women's financial inclusion through building women's financial literacy and management most especially in rural areas where financial constraints have bogged down women's ability to engage in improved agriculture and pastoralism as necessary for job creation through a vibrant community of women entrepreneurs and women-owned businesses.

4.3.3. Early girl child engagement

There was a concern by most women community leaders that some of the food security problems faced are due to lack of early preparation during childhood. It was exclaimed that most of them grew up in families with a lot of livestock which was the back bone of their livelihoods, and today the number of livestock is said to have reduced drastically as a result of intense cattle raids by neighboring communities in the region which have lasted for years, the animal diseases which have claimed many of them and also the change of livelihoods which has resulted to sale of cattle to acquire other sources of livelihoods like land for agriculture and business by others. Women community leaders think the shift has been drastic with no early warning signs and so women just gamble to

look for a living as expressed “*imagine being a great cattle keeper with hundreds of herds of cattle and in a peek of an eye you have nothing or if any countable, the abundancy of milk is becoming history in most of our communities.*” Women community leaders suggest that girls in the current generation should be prepared early to be able to overcome similar

Women’s perception towards early girl child engagement (FGD village 4 extract)

Most of us here did not have a chance to see the blackboard and neither the back of the teacher. Girls of these day are lucky, but the problem is most of them drop out of school mostly because of school fees and unnecessary pregnancies, so government/NGOs should strengthen girl child education in order to improve on and help women rise up, government should reduce the school related fees for girl child to help them get access to education. They should focus on girl child scholarships for children from vulnerable families to help them get quality education and help their parents.

challenges in the future, with girls who are the would-be women engaged and prepared through mentorship, education and training which have proven necessary to cope with the contemporary challenges. (Bandera, 2013) suggests early girl preparation through mentorship of the would-be women with mentorship expressed to be a personal enhancement strategy involving sharing known resources, ideas, learning, expertise, values, skills, perspectives, attitudes, proficiencies and professional competence. Peretomode & Ikoya, (2019) also acknowledge mentorship prepare and build the learner skills (literacy skills, business skills, decision making skills) and knowledge required for one to accept any responsibility.

4.3.4. Supporting girl child education

Throughout my fieldwork, most of the female beneficiaries had not attained any significant level of education, if any, most of them dropped from elementary school while the rest were completely illiterate. This was attributed to the history of the region that denied women access to education coupled with the pastoral nature of the Karamojong characterized by the unmet education demands in pastoral communities for mobile-based education systems or schools, where children especially girls directly involved in pastoral livestock production receive schooling in their specific pastoral area. As a native of the area, I have witnessed that educating a girl in the past few years, was not embraced with an educated girl considered a prostitute or source of poverty. In the traditional community of Karamoja, an uneducated girl used to fetch quite many presents in form of bride price with an average of one hundred cows paid for uneducated girl. But the good news is that the world of today has seen girls in Karamoja and specifically Napak rising to enroll for school. So, the women community leaders urged that educating a girl child would mean eradicating poverty thus promoting food security with an educated woman being able to get good paying jobs to earn money for a living and even do more for other women in the community. While describing the entire situation of the Karamojong pastoralists, Ssenkaaba, (2015) narrates a state where girls in Karamoja spent most of their time on household and domestic chores, which knowledge is what is expected of them as successful mothers in future prior to introduction of girl child education, he describes a Karimojong girl in that era as one whose role was confined to livestock keeping and household chores. However, with the embracing of girl child education in the region, the author believes the male centered society will have girls spend more time in schools, limiting the time they would take taking care of household chores. He asserts this gesture

of the Karimojong embracing girl child education as an indicator that the Karamojong children can cope with life like children from other dominant communities in Uganda and even more empowering in the event where girls perform better than their male counterparts in school and academic activities. Education is therefore a way of accessing resources outside the pastoral livelihood (financial and social capital) considering the growing number of Karamojong households whose entitlements within the pastoral settings are being eroded for several reasons and feel increasingly vulnerable to destitution. Education would be an alternative source of survival. Thus, the community of Napak seeks interventions such as scholarships for girl children, policies, and by-laws for resistant families so that the region would overcome the poverty situation.

4.3.5. Fighting against negative cultural practices

Women community leaders reported that Karamoja has been a typical traditional region overwhelmed with negative cultural practices against women. These have for long contributed to the lagging behind of women in development in the region, the practices such as forceful marriage in form of rape, high bride price, and child marriages, have hindered women from speaking for themselves. For example, in Napak, district official (DO 4) stated that the girls are said to be running out of their homes as a form of refuge from forced child marriage. The disadvantage of this is that

Women's opinion on how to fight negative cultural norms (FGD village 3 extract)

There is need to focus on socio-cultural norms that are hindering the progress of women like widow inheritance, exaggerated bride prize, wife battering, polygamy, forced marriage and intergenerational marriages. Women in our communities still struggle with these practices, some of them have walked out of their marriages yet divorce in the history of Ngikarimojong is not heard of.

household responsibilities including livelihoods like farming, fetching firewood and so many others are left to be performed by the aged/elderly parents or relatives who have sometimes died as a result of starvation. Women community leaders also highlighted negative cultural taboos on women for example a pregnant woman is not supposed to eat liver, eggs because it affects the fetus, yet all these have nutritional implications to the wellbeing of these women and their fetus. The women community leaders acknowledged the government is eliminating these negative cultural practices, yet they feel that more effort should be put in fighting them.

4.3.6. Establishing sustainable livelihoods

The district officials presented their plea to the central government of Uganda to ensure that the programs designed for women's livelihoods are sustainable enough to meet the needs of the future generations. Most of the livelihoods engaged in by women in the community of Napak are said to be short lived leaving many of the women vulnerable to food insecurity. Interventions by the government programs such as SAGE (Social Assistance Grants for the Elderly), youth livelihood program, NUSAF programs and UWEP are promising but in all cases, these programmes come with no sustainability strategies says one of the district officials. While addressing NGO interventions on women, the district officer expressed NGO programs to be uncertain on the side of the community interventions dictated by their contractual nature. The district officer also added that many NGO programmes have been conducted with insufficient needs assessment which later exposes them to implementation difficulties, hence affecting their sustainability. One of the district officers in charge of environment stated that, the personal livelihood initiatives inform of quick income sources such as charcoal burning,

firewood cutting, hunting, stone quarrying among others have an adverse impact to environmental sustainability. Sustainable livelihood approach to food security concerns itself with economic access to food by household other than the physical presence of food (Abimbola, 2013). For years, development experts have been grappling with finding the reliable approaches or strategies that will enhance and coordinate rural development. Those identified include; the basic needs approach, integrated rural development, and participatory approach. The failure of these approaches to eradicate poverty gave rise to the sustainable development and specifically the sustainable livelihood approach which focusses on livelihoods as a means of achieving sustainable poverty reduction. Therefore, the understanding of the strategies adopted by the rural households to ensure sustainable livelihood and hence food security is important for agricultural research and development (Gilling et al., 2001). As it is important to understand the dynamism of rural livelihood strategies and how rural households develop their own strategies accordingly.

4.3.7. Lobbying and advocating for women targeted programmes.

Women community leaders expressed the need for the district to lobby for more women targeted programmes. On the other hand, the district officials argued NGOs to lobby for more women targeted programs in their donor proposals. This is so because, most of the available programmes do not reach to the grassroots where the most vulnerable food insecure women are, in most cases these programmes are said to remain within the periphery of urban centres of district or the region. Women community leaders additionally appealed for programmes vast enough to reach the most vulnerable women to be lobbied and advocated for not only in Napak but also for the entire Karamoja. On top of programmes, women community leaders expressed need for advocacy on their

rights which they said have been suppressed by situation such as negative cultural practices against women and the patriarchal nature of the region which has left women with limited decision-making ability. Whereas appreciating the district and NGOs for linking them to programmes on nutrition, the women community leaders felt the gap still exists and urge that linkages are widened especially to organizations dealing with food security. Coherently, United States Gency for International Development [USAID], (2020)

**A woman speaks about lobbying and advocacy
(FGD village 2 extract)**

The government should continue advocating for women's rights because now, we are fitting in the society unlike in the past where men were the ones enjoying all the liberties. But also, there is need to create community awareness on food security through sensitization of stakeholders on the aspect of food security and women economic empowerment through campaigns, dialogues, trainings, forming champions.

recommends partner coordination inform of lobbying, advocacy and networking would help solve some of the challenges faced by women. This means that synchronization of efforts will have a long-lasting impact on women empowerment.

4.3.8. Sustainable Agricultural Intensification

With a partial shift by the district from pastoralism to farming as an alternative source of livelihoods attributed to the decline in livestock resulting from cattle rustling, agriculture improvement becomes necessary. The district officer explained that compared to the previous years (early 80s and 90s) where land was communally owned characterized by rangelands that were mostly for livestock rearing, the recent years have seen individual ownership of land following the shift in land tenure, with most women having access to land. The majority of women, especially those in the green belts of the district like Iriiri, Poron, Apeitolim, Nabwal, have engaged in crop production. However,

farmers experience hardships tilling the rangelands through the rudimentary farming methods involving use of hand hoes and oxen for ploughing and yet the land cannot easily be opened for cultivation by these methods. It is then required that the district through advice from agricultural extension workers considers mechanizing agriculture especially supporting the farmers with tractors. The district officials and NGOs emphasized the role agricultural mechanization plays in driving agriculture through the formerly pastoral lands. For example, according to the district official (DO 2);

“The use of rudimentary tools for production leads to reduced yields which are not well distributed and subsequently less to be consumed. So, there is need to support women with agricultural incentives that will improve their yields.”

This implies that, agricultural systems must undergo a transformation to meet such 21st century challenges as climate change and rising population. Relative to the study findings are those noted in the study by Agency for Technical Cooperation and Development [ACTED], (2016), which notes agriculture to be gaining importance throughout the entire Karamoja, with a large portion of pastoralists taking up agricultural production in order to supplement their incomes and support food security at household level. In the quarterly report presented by United States Agency for International Development [USAID], (2014) it highlighted its support to a number of organizations like Welt hunger Hilfe, ACDIVOCA, CONCERN worldwide under Resilience through Wealth, Agriculture and Nutrition in Karamoja (RWANU) project in all districts in Karamoja geared towards promoting sustainable agriculture through interventions such as; improving smallholder farm management practices adopted by men and women through distribution of improved seed varieties, promoting horticulture among others. Also Food Agricultural Organization [FAO], (2017), in agreement with the study findings acknowledges agricultural mechanization as sustainable enough to reduce

manual labour time, relieves labour shortages, improves the productivity and timeliness of agricultural operations, and creates new employment opportunities.

4.3.9. Need for male involvement

Male involvement emerged from the discussion with key informants where one of the district officials voiced that some of the women empowerment strategies fail to succeed because men are not involved in them and yet Karamoja or specifically Napak is still a traditional society where men are the main decision makers with less decided upon by women. The district official pointed out that all men can fairly contribute to challenging inequitable norms and power dynamics, given their positions in households, communities, institutions, and in their relationships with peers and others. On the other hand, I

An opinion on male's involvement (NGO 9 extract)

In a pastoral setting like Karamoja, there are still fears in the community for example in the programs that focus on women, some men are not comfortable with them while some women do not take part in decision making without consulting their husbands. The percentage of participation is 70% to 30% as far as decision making is concerned. So, making women operate in isolation especially in programs targeting them are tricky because their participation depends on decisions made by men and incase a man refused, the probability of such a woman taking part limited. Women empowerment without male involvement in a traditional community like Karamoja is like a dream.

observed during my interaction and schedule appointment with women community leaders that the women in Napak community have vast roles at homestead before attending any meeting or organizational activities. Majority of the women community leaders came in 30 mins or an hour late with an explanation that they had to complete the household chores. This was beyond my capacity as a researcher, but it was frequently reported by these women community leaders that in situations where men just have a

hearsay of what their women were doing and are not consulted or included, it is obvious that such will fail. This is the reason male involvement is believed to create a greater impact to the journey of women empowerment and improvement in food security. Again, looking at it that the decisions are men controlled, involving them would be more rewarding. So, there is need to ensure that men participate in women empowerment strategies as expressed by one of the NGO officials. Relatively, International Labour Organization [ILO], (2014) appreciates gender transformative programs purposed to change gender roles to more gender-equitable relationships between men and women while recognizing the complexities and fluidity associated with gender identities. USAID, (2020) substantiates that, men have a critical role to play in challenging inequitable norms and power dynamics, given their positions in households, communities, institutions, and in their relationships with peers and others. With male engagement associated to better health and economic outcomes essential for the success of programs designed towards ensuring women's empowerment (Smith et al., 2021). However, International Centre for Research on Women [ICRW], (2018) counter argues engaging men requires critical observation because their presence might challenge women's participation especially in traditional communities where women are marginalized.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1. CONCLUSION

Throughout the study, the researcher tried to provide a narrative on the role women play in enhancing food security and the strategies that can be put in place to consolidate their role, borrowing from a vast knowledge obtained from the published literature, as well as sharing women experiences primarily from the perspective of the stakeholders or respondents themselves through an interactive fieldwork session. The conclusion and recommendations are also a built-up experience from the researcher as a native of Napak community.

From the study findings, it can be deduced that women are agents of food security contributing to mainly the four pillars of food security that is; availability, accessibility, utilization, and stability. However, the contribution of women to the newly incorporated pillars of agency and sustainability are still lacking both from the literature and the field reports. Majority of the roles highlighted present women as agents of food production, distribution, nutrition, and stability but their decision-making ability is frustrated by circumstances surrounding a woman as well as their ability to sustain resources for the next generation to benefit from.

Historically, women pastoralists in Karamoja frequently lacked agency when it came to food security, and they normally suffered from disproportionate levels of food insecurity. But nothing seems to have changed as history is repeating itself with the study findings presenting men as the main decision makers implying the solidity of patriarchy. This implies that women's rights to food have been violated yet food security is mandated

to guarantee protection of people's ability and rights to define their own models of food production, distribution, and consumption patterns. And yet agency if guaranteed can help disempowered women strengthen both their individual and collective capacity to shape their food systems, including creating political spaces for debate where power differentials are minimized while improving the nutritional capabilities towards a secure food system.

Moreover, sustainability is not factored in the women's efforts to promote food security in the pastoral community of Napak. The economic activities such as firewood collection, charcoal burning, and stone quarrying are detrimental to the survival of the future generations, yet sustainability must be an integral part of food security programming. It is important to consider the benefits generated, the fairness in the distribution of economic value considering vulnerable groups such as women, including biodiversity, water, soil, animals, plant health, carbon footprint, water footprint, food loss, waste, and toxicity, indicating that sustainability should be regarded as part of the long-term dimension for measuring the success of any livelihood. In this light, the concept of sustainable diets can play a vital role as a goal and a means of preserving nutritional well-being and health while safeguarding future food security.

Women have the potential to promote food security at all levels, of household, community, nationally or internationally, but the potential lies on their ability to have ownership and control over productive resources, such as land and livestock for the case of pastoralists. The literature and the primary data collected present a situation where women have little or no control over productive resources within their households and community. This has bogged down their effort in contributing to food security. Although equal access to resources does not guarantee equal returns, there is a likelihood of change

in the food insecurity figures with women being able to contribute to food security through increased food production from farming, cattle rearing and also renting or sale out of the resources. However the study findings highlight a wide gap on resource ownership, control and access between men and women with most of the economic resources under the control and ownership of men, a situation that has left many women helpless and only surviving under the mercy of men.

Beyond ownership and control of resources are also other constraints to women's ability to enhance food security through economic development in Napak district or rather the entire Karamojong community. They include insecurity in the region (cattle raids), a lack of basic infrastructure and services such as roads, water, communications and financial services in some parts of the region, male dominance, negative cultural practices such as child marriage, widow inheritance, forced marriage among others. We also have high illiteracy rate among women as compared to men in the district, more involvement in subsistence rather than commercial activities by women, gender based violence on women, erratic climate, food waste by women through alcoholism and wasteful traditional gatherings. All these challenges require immediate interventions because they have severe impacts on women's efforts to promote food security.

Although a wide number of strategies have been put in place or suggested to ensure women's effort to promote food security at all levels in the pastoral community of Napak such as providing sustainable livelihoods, capacity building, access to financial resources, agricultural mechanization, male involvement, early girl child engagement, breaking barriers such as negative cultural practices among others. These approaches are seemingly women centred and yet a lot would be changed if the approaches targeted both women and the entire transformation in the political, economic, social and ecological

aspects of food all aimed towards food system transformation to ensure availability, access, utilization, and stability, fair and equitable livelihoods, resilient and sustainable food systems which are the cornerstone for attaining food security in Napak especially considering the shift in the pastoral livelihoods to alternative livelihood sources .

5.2 RECOMMENDATIONS

Considering the loopholes identified by the study in the role women play in promoting food security in the pastoral community of Napak and the strategies for the enhancement of these roles, some proposals are presented in this section by the researcher who believes the implementation of these submissions shall cause improvement not only in women's role towards food security in Napak.

5.2.1 Literature based recommendations

From the study findings, there is a gap in the literature regarding women's role on agency and sustainability as pillars of food security. The papers present women's role towards the initial four pillars of availability, accessibility, utilization, and stability but the newly incorporated agency and sustainability have not been clearly presented by the literature and yet these are important components in ensuring proper or a better understanding of food security and in identification of gaps when designing policy approaches to address food insecurity. This implies that more research or studies need to be conducted on these two pillars.

Additionally, Karamoja or Napak is an evolving society with a lot of changes occurring day by day, implying the need for updated literature regarding the region, especially on the existing livelihoods. And to engage in future interventions, a modern

view of the Karamojong pastoralists would be key to understanding how pastoralists interact with their environment and economics and the contribution to the lifestyles of people within the region. However, it was noted that most literature about Karamoja or Napak is NGO driven, there are countable individual studies regarding the area. Again, the literature provided does not depict the current situation in the region such as the ongoing life and livelihood threatening insecurity (cattle raiding), COVID 19, locusts outbreak, climate change and livestock disease outbreak that I suppose should be having effects on the region's food security needs. The current situations are merely seen on media houses such as televisions and newspaper with no concrete write ups for future references. The papers studied about the area are 3 to 5 years older and yet the pastoral nature of the community has often implied changes in the area. There is need to reinforce the ability of native writers to document and disseminate this kind of information necessary to provide a solid understanding of the region while ensuring the indigenous knowledge is enriched with best documentation practices.

5.2.2 Other recommendations

The study identified areas for improvement not only of women's role towards food security in Napak but entirely ensuring the food security situation in Napak/Karamoja is enhanced.

It should be noted that, the people of Napak as well as Karamojong pastoralists depend on natural resources like water and pasture for the survival of both people and livestock to harness their livelihoods. The practice of pastoralism relies on natural resource base for its sustainability. This calls for good governance of resources in the pastoral landscapes with adequate attention given to land, water, wildlife, people,

livestock, and others. Governance structures must be properly capacitated such that the rangelands and natural resources of the area are perfectly safe guarded for future generations to benefit from.

Gender mainstreaming should be the guiding principle for any food related interventions. This implies that the designing of any food related policy should bend towards seeing the uniqueness in the food needs between men and women to guarantee that no single gender overshadows the other as far as food related issues are concerned. The current situation of women in Napak demands enhancement of their role towards food security attainment, expanding opportunities for women outside agriculture or pastoralism by particularly raising the level of women empowerment, offloading the vast gender roles put on women and delaying the marriage age, is crucial to countering these trends. Gender-sensitive food and nutrition security strategies should identify how the emergence of women's organizations can be facilitated, strengthened, and encouraged, whether in the form of unions, cooperatives, or community-based organizations to consolidate women's efforts towards food security.

Considering the short-lived nature of activities engaged in by majority of women in Napak (firewood collection, charcoal burning, brewing, casual labour among others), it would be important that NGO/government programs targeting women are designed in such a way that they are inclusive enough of the most vulnerable communities and also should consider the sustainability trajectory in their design and implementation. This can be properly done through an organized process of needs assessment prior to the designing and implementation of community targeted

According to analysis by the United Nations Research Institute for Social Development (UNRISD) of different patterns of growth, countries that have been

successful in reducing poverty in short periods of time have done so through employment-centered structural transformations, in which industrial and agricultural policies as well as active social policies were used in cooperation. As such, there is need for the government and the local authorities to provide suitable environment for the private sector, small and medium enterprises to thrive so that such women benefit from their economic ventures and provide food for their families in Napak, Karamoja.

APPENDIX 1:
DATA COLLECTION TOOLS

1. KEY INFORMANT INTERVIEWS

Interview Number/Identity _____

Date Conducted _____

Time Started _____

Time Concluded _____

Interviewer _____

Note taker _____

INTRODUCTION

Please briefly introduce yourself and your role in the pastoral community of Napak.

PART 1: Questions within this section address the role of women in enhancing food security in the pastoral community of Napak (focusing on and organized by the food security pillars).

PILLAR 1&2: FOOD AVAILABILITY AND ACCESSIBILITY

1.1. Apart from pastoralism, what alternative food sources are available in your district?

1.1.1. Of these sources, which ones are targeting women?

1.2. In your opinion, do women contribute to food availability and accessibility in your district? If so, how?

1.3. In your opinion, would you recommend women targeted development projects in your district? If yes, why? Or if no, why?

PILLAR 3: UTILIZATION

1.4. How do women contribute to the nutritional status in your district?

1.5. How involved are women in the water, sanitation, and hygiene projects district?

1.6. What food varieties do women in your region produce in your district? How are these foods used (e.g., consumed by the household, used for animal feed, sold/traded on the market)?

1.7. How can you describe women’s participation towards curbing over nutrition, under nutrition and malnutrition in your district?

PILLAR 4&5: STABILITY AND SUSTAINABILITY

1.8. How can you describe the trend of livelihood sources by women? How have these trends changed over time in your district?

1.9. In your view, what are the most significant threats to the stability of women’s livelihoods?

1.10 How do women cope with these kinds of threats?

1.11. What resources do women own and control to enable them overcome threats to their livelihood?

PILLAR 6: AGENCY

1.12 How are the decisions on food production, storage, marketing, and consumption made in your district? Who is responsible of making these decisions?

1.13 How involved are women in making decisions of which foods are produced and consumed at household and community level?

1.14 How is power distributed among gender on food related issues in your district?

1.15. what platforms are available for women to express and implement ideas on food related issues in your district?

PART 2: Questions in this section address women’s economic empowerment strategies that can be employed to enhance food security situation in the pastoral community of Karamoja.

2.1. Which policies exist to guide women economic participation in your district? (Probe for legal frameworks on women economic empowerment)

2.2. How effective are these policies in enhancing women's economic participation?

2.3. What programs are currently run in your region to promote women's economic empowerment in your district? (Probe for which projects or government programs target women)

2.4. Overall, what is women's willingness to participate in these development programs?

2.5. What women's economic empowerment approaches has your organization adopted to improve women's economic status in your district? (Probe for strategies employed in support of women economic empowerment)

2.6. What is the general attitude and perception of your community towards women's economic empowerment?

2.7. Which practices affect food production, distribution, and consumption by women in your district?

2.8. What else could be done to consolidate women's efforts towards promoting food security in your district?

CONCLUSION

We have now reached the end of the questionnaire. Before closing the interview, are there any concluding thoughts that you would like to share?

Thank you for your time and participation in this research

2. FOCUS GROUP GUIDE

Focus Group Number _____

Date Conducted _____

Time Started _____

Time Concluded _____

Interviewer _____

Note Taker _____

PART 1: Questions within this section address the role of women in enhancing food security in the pastoral community of Napak (focusing on and organized by the food security pillars).

SECTION A: FOOD AVAILABILITY AND ACCESSIBILITY

- Apart from pastoralism, what alternative food sources are available your community?
- Of these sources, which ones are targeting women?
- In your opinion, do women contribute to food availability and accessibility in your community? If so, how?
- In your opinion, would you recommend women in your district for development projects? If yes, why? Or if no, why?

SECTION B: UTILIZATION

- How do women contribute to the nutritional status of your community?
- How involved are women in the water, sanitation, and hygiene projects in your community?
- What food varieties do women in your district produce? How are these foods used (e.g., consumed by the household, used for animal feed, sold/traded on the market)?
- How can you describe women's participation towards curbing over nutrition, under nutrition and malnutrition in your community?

SECTION C: STABILITY AND SUSTAINABILITY

- How can you describe the trend of livelihood sources by women in your district?
How have these trends changed over time?
- In your view, what are the most significant threats to the stability of women's livelihoods in your community?
- How do women cope with these kinds of threats?
- What resources do women in your district own and control to enable them overcome threats to their livelihood?

SECTION D: AGENCY

- How are the decisions on food production, storage, marketing, and consumption made in your district? Who is responsible of making these decisions?
- How involved are women in making decisions of which foods are produced and consumed at household and community level?
- How is power distributed among gender on food related issues in your community?
- What platforms are available for women to express their views on food related issues?

PART 2: Questions in this section address women's economic empowerment strategies that can be employed to enhance food security situation in the pastoral community of Napak.

- As women leaders, what is your role in supporting women's engagement in your community?
- Which organizations support women economic empowerment strategies in your community and how do they support them?
- Can you describe women's participation in economic activities in your community?
- As women leaders, which strategies have you put in place to empower women in your community?
- Which conditions surround women economic empowerment in your community?
- Which local ordinances or other policies affect food production, distribution, and consumption by women in your community?
- What more can be done to improve women's status in your community?

CONCLUSION

We have now reached the end of the questionnaire. Before closing the discussion, are there any ultimate thoughts that you would like to share?

Thank you for your time and participation in this research.

APPENDIX 2:

CAO'S INTRODUCTORY LETTER

Chief Admin Officer
0772516389/0775769093
Email: byaruhangajck@yahoo.co.uk
Email: caondig@gmail.com
PAS/ACAO: 0772845080
Email: tkoryanga@gmail.com



NAPAK DISTRICT LOCAL GOVERNMENT,
Office of the Chief Administrative Officer,
P.O. Box 106,
Napak-Uganda

In any correspondence on this Subject

Date: Wednesday, January 12, 2022

Please quote: CR/220/1

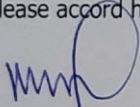
The Sub County Chief of Ngoleriet, Matany, Lorengecora and Iriiri S/C
Napak District Local Government

ACADEMIC RESEARCH:

The bearer of this letter one Ilukol Miriam is a student at American University of Beirut.

She has been sent by the University to do a research in fulfillment of her degree.

Please accord her all the necessary help.


Jack Byaruhanga

CHIEF ADMINISTRATIVE OFFICER, NAPAK

Copies

- District Education Officer -Napak
- ✓ • Ilukol Miriam – Napak
- File



REFERENCES

- Abbas, A., Zeeshan, M., & Abbas, A. (2010). *Poultry Farming : An anthropological take on women empowerment*. 6, 203–206.
- Abimbola. (2013). Livelihood diversification and welfare of rural households in Ondo State, Nigeria. *Journal of Development and Agricultural Economics*, 5(12), 482–489. <https://doi.org/10.5897/jdae2013.0497>
- Action Africa Help [AAH]. (2017). *Future livelihoods in Karamoja; A scenario analysis looking forward to 2022*. April 2017, 1–14.
- African Development Bank [AfDB]. (2015). The way forward to achieving sustainable development in Africa Key messages. *African Development Report 2015. Growth, Poverty and Inequality Nexus: Overcoming Barriers to Sustainable Development*, 214–240.
https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/ADR15_chapter_8.pdf
https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/ADR15_UK.pdf
- Agency for Technical Cooperation and Development [ACTED]. (2016). Pastoralism in Karamoja. *Report on Assessment of Factors Affecting Pastoralist Lifestyle in Moroto. Astoralist Lifestyle in Moroto.*, May.
- Ahenkan, A., & Osei-Kojo, A. (2014). Achieving sustainable development in Africa: Progress, challenges and prospects. *International Journal of Development and Sustainability*, 3(1), 162–176. www.isdsnet.com/ijds
- Akerele E. O. and Aihonsu J.O.Y. (2011). Determinants of women’s participation in entrepreneurship development in Yewa North local government area, Ogun-State, Nigeria. *Angewandte Chemie International Edition*, 6(11), 951–952.

- Alemu, A., Woltamo, T., Abuto, A., Alemu¹, A., Woltamo², T., & Abuto³, A. (2021). *Determinants of women participation in income generating activities: Evidence from*. <https://doi.org/10.21203/rs.3.rs-334075/v1>
- Archer, E. (2018). Qualitative data analysis: A primer on core approaches. *Online Readings in Research Methods (ORIM)*, October, 1–23. <https://www.psyssa.com/newsroom/publications/orim/orim-2-2-2/>
- Bandera, et al. (2013). Five challenges , one solution : Women. *World Economic Forum, March*, 1–29.
- Barrow, D. M. (2017). A phenomenological study of the lived experiences of parents of young children with autism receiving special education services. *Proquest Dissertations and Theses*, 337. https://search.proquest.com/docview/1979339103?accountid=12507%0Ahttp://openurl.ac.uk/athens:mmu/?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:ProQuest+Dissertations+%26+Theses+A%26I&atitle=&tit
- Bewiadzi, S., Awubomu, R., & Glover-Meni, N. (2018). Searching and cracking: Stone quarrying, livelihood and the environment in the daglama quarry site in the ho municipality. *West African Journal of Applied Ecology*, 26(2006), 149–166.
- Carter, P. R. C., & Kidega, G. (2013). *Assessment of the sustainability of water and sanitation services set up as part of the WaterAid / EUWF Post- Conflict project in Uganda. February*, 1–23.
- Carter, V., Bekkers, H., & Jones, L. (2015). Women’s economic empowerment; How women contribute to and benefit from growth. *Integrating Women’s Economic Empowerment into the MDF Approach approach, Strategic*(Version 1).

- Centre for Women and Democracy [CWD]. (2007). *The women empowerment approach*.
- Christine, A. (2012). *Food and Agriculture Organization of the United Nations (FAO) Village Savings and Loan Schemes empower women in Karamoja*.
- Clapp, J., Moseley, W. G., Burlingame, B., & Termine, P. (2022). Viewpoint: The case for a six-dimensional food security framework. *Food Policy*, 106, 102164. <https://doi.org/10.1016/j.foodpol.2021.102164>
- Cornwall, A. (2014). *Women ' s empowerment : What works and why ?* (Issue August).
- Cossins, N. J. (2003). Pastoralism and mobility in drylands. *Global Drylands Imperative*, 9.
- Coughlin, J. H. (2002). *The rise pf women entrepreneurs: People, Processes, and Global Trends*.
- Dan Church Aid [DCA]. (2010). *Climate Change and adaptation strategies in the Karamoja Sub Region. May 2010*. www.dca.dk
- De Jode, H., & Flintan, F. (2020). How to do note: Gender and pastoralism. *IFAD Sustainable Production, Markets and Institutions Divisionvision*.
- Dodson, B., & Goebel, A. (2014). Food security and gender. *Controversies in Science and Technology*. <https://doi.org/10.1093/oso/9780199383771.003.0014>
- Dolberg, F. (2003). Review of household poultry production as a tool in poverty reduction with focus on Bangladesh and India. Pro-poor Livestock Policy Initiative (PPLPI) . *Food and Agriculture Organization of the United Nations*, 6, 40.
- East African Sub-Regional Support Initiative for Advancement of Women [EASSI]. (2020). *The “ invisible women ” in the Karamoja cluster*.
- Elizabeth, B. (2006). *Small-scale stone quarrying : Its contribution to people ' s*

- livelihoods . A case study of Kasenge darish , Nama Sub-county , Mukono District.*
140.
- Esesu, N. B. (2005). Gender Relations in Livestock Production and Ownership: Implications for food security in Teso Farming System (TFS). *ResearchGate*.
https://www.researchgate.net/.../265160328_Assan_N_2014_Gender_disparities_in_live..
- Flintan, F. (2011). *Changing nature of gender roles in the drylands of the Horn and East Africa: Implications for DRR programming. December 2011.*
- Food Agricultural Organization [FAO]. (2017). *Sustainable agricultural mechanization. Food and Agriculture of the United Nations, Rome Italy.*
[http://www.fao.org/sustainable-agricultural-mechanization.2.](http://www.fao.org/sustainable-agricultural-mechanization.2)
<http://www.fao.org/sustainable-agricultural-mechanization/overview/why-mechanization-is-important/en/>
- Food Agricultural Organization [FAO]. (2018). *Leaving no one behind empowering Africa's rural women for zero hunger and shared prosperity.*
- Food and Agriculture Organization [FAO]. (2018). Empowering rural women , powering agriculture contents. *Food and Agriculture Organization of the United Nations and Sustainable Development, 1*, 1–14.
- Fratkin, E. (2016). East African pastoralism in transition : Maasai , Boran , and Rendille Cases. *African Studies Review*, 44(3), 1–25.
<https://www.jstor.org/stable/pdf/525591.pdf?refreqid=excelsior%3Aed0c9f17744dd1e6c61cfd218642e04b>
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal*, 204(6),

- 291–295. <https://doi.org/10.1038/bdj.2008.192>
- Gilling, J., Jones, S., & Duncan, A. (2001). Sector approaches, sustainable livelihoods and rural poverty reduction. *Development Policy Review*, 19(3), 303–319. <https://doi.org/10.1111/1467-7679.00136>
- Gitungwa, H. (2018). *The relationship of male and female pastoralist income with household food security and nutrition status in Tanzania : Maasai , Sukuma , and Barabaig ethnic groups*. 77.
- Guiné, R. de P. F., Pato, M. L. de J., da Costa, C. A., da Costa, D. de V. T. A., da Silva, P. B. C., & Martinho, V. J. P. D. (2021). Food security and sustainability: Discussing the four pillars to encompass other dimensions. *Foods*, 10(11). <https://doi.org/10.3390/foods10112732>
- Hasin, F., Hasin, F., Hasan, A. K. M. B., & Musa, H. (2018). Women empowerment model: Strategies to overcome challenges. *J Fundam Appl Sci*, 10(1S), 1068–1083. <https://doi.org/10.4314/jfas.v10i1s.78>
- Havas, K., & Salman, M. (2011). Food security: its components and challenges. *International Journal of Food Safety, Nutrition and Public Health*, 4(1), 4. <https://doi.org/10.1504/ijfsnph.2011.042571>
- Helen Todd. (1998). *Women at the center*.
- Herrero, M., Grace, D., Njuki, J., Johnson, N., Enahoro, D., Silvestri, S., & Rufino, M. C. (2013). The roles of livestock in developing countries. *Animal*, 7(SUPPL.1), 3–18. <https://doi.org/10.1017/S1751731112001954>
- High Level Panel of Experts [HLPE]. (2020). Food security and nutrition: Building a global narrative towards 2030. *High Level Panel of Experts*, 112. <http://www.fao.org/3/ca9731en/ca9731en.pdf>

- Hohenberger. (2017). Women's empowerment through food security interventions: a secondary data analysis. *Field Exchange - Emergency Nutrition Network ENN*, 2011(54 PG-25–26), 25–26. email: emhohenberger@ucdavis.edu NS -
- Humanitarian Policy group [HPG]. (2009). Pastoralism, policies and practice in the Horn and East Africa: A review of current trends (synthesis Paper). *Humanitarian Policy Group, April*, 4. <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/4315.pdf>
- Hunt, A; Samman, E. (2016). *Womens economic empowerment. Navigating enablers and constraints. September.*
- Ickowitz, L., B., A., M., A.L.M., S., P., B., D., G., K.B., M., & E.A., S. (2021). Collection and consumption of wild forest fruits in rural Zambia. *Collection and Consumption of Wild Forest Fruits in Rural Zambia*, 324, 1–8. <https://doi.org/10.17528/cifor/008086>
- Independent Evaluation Group [IEG]. (2008). *Women's empowerment in rural community- driven development projects.*
- International Baby Food Action Network [IBFAN]. (2017). *Food security and nutrition assessment in Karamoja Sub-region Napak district report. July.*
- International Centre for Research on Women [ICRW]. (2016). *Building effective womens economic empowerment strategies.*
- International Centre for Research on Women [ICRW]. (2018). *Gender Equity Y and Male Engagement : It Only Work S When.*
- International Fund for Agricultural Development [IFAD]. (2009). Agriculture and rural development; Gender in agriculture. In *Klinicka Onkologie* (Vol. 14, Issue 6).
- International Fund for Agricultural Dvelopment [IFAD]. (2018). *How to do engaging*

- with pastoralists –a holistic development approach.*
- International Labour Organization [ILO]. (2009). Identification of economic opportunities for women’s groups and communities. *Gender and Employment*, 154.
- International Labour Organization [ILO]. (2014). *Engaging men in women’s economic empowerment and entrepreneurship development interventions: An ILO-WED issue brief*. 1–12.
- International Organization for Migration [IOM]. (2014). *Child migration in Karamoja*.
- International Union for Conservation of Nature and Natural Resources [IUCN]. (2016). *A rangelands management framework for Karamoja; A handbook for local government partners*. 4(1), 1–23.
- Ipsos. (2019). *Re-conceptualizing empowerment : Ipsos ’ approach to understanding & measuring women ’s empowerment*.
- Iyer, P., & M. M. (2017). *Looking for work: Wage labor, employment, and migration in Karamoja, Uganda*. Kampala: Karamoja Resilience Support Unit, USAID/Uganda. August.
- James, L. (2012). The role of women in food security. *The Oxford Handbook of Byzantine Studies*, 1. <https://doi.org/10.1093/oxfordhb/9780199252466.013.0059>
- Jenet, A., Buono, N., Di Lello, S., Gomarasca, M., Heine, C., Mason, S., Nori, M., Saavedra, R., & Van Troos, K. (2021). The path to greener pastures: Pastoralism, the backbone of the world’s drylands. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3888381>
- John. W. Creswell. (2014). *Research design qualitative, quantitative and mixed methods approaches*.

- Kileteny, T., & Wakhungu, J. W. (2019). Influence of livelihoods on household food security in pastoral areas of Narok County, Kenya. *International Journal of Research -GRANTHAALAYAH*, 7(9), 351–381.
<https://doi.org/10.29121/granthaalayah.v7.i9.2019.618>
- Kinati, W., & Mulema, A. A. (2019). Gender issues in livestock production systems in Ethiopia: A literature review. *Journal of Livestock Science*, 10(2), 66–80.
<https://doi.org/10.33259/jlivestsci.2019.66-80>
- Krätli, S. (2016). Preface : Karamoja wiht the rest of UgandaK : Disarmament as Development for Karamoja : A new chapter in dismantling pastoral production in Uganda. *Nomadic Peoples*, 14(2), 3–23.
- Laborde, D., Lallemand, T., McDougal, K., Smaller, C., & Traore, F. (2019). *Transforming agriculture in Africa & Asia: September*.
<http://www.jstor.org/stable/resrep22022>
- Lakidi, P. (2020). *Assesing and measuring the gender gap in land rights under communal land associations in Karamoja*.
- Livingstone, J., & Ruhindi, E. (2011). *Economic empowerment for pastoralist women : A comparative look at program experience in Uganda , Somaliland and Sudan global land grabbing*. April.
- MacQueen, K. M., McLellan, E., Metzger, D. S., Kegeles, S., Strauss, R. P., Scotti, R., Blanchard, L., & Trotter, R. T. (2001). What is community? An evidence-based definition for participatory public health. *American Journal of Public Health*, 91(12), 1929–1938. <https://doi.org/10.2105/AJPH.91.12.1929>
- Majumdar, A. (2021). Thematic analysis in qualitative research. *Research Anthology on Innovative Research Methodologies and Utilization across Multiple Disciplines*,

- 604–622. <https://doi.org/10.4018/978-1-6684-3881-7.ch031>
- Majumder, J., & Shah, P. (2017). Mapping the role of women in Indian agriculture. *Annals of Anthropological Practiceractice*, 41(2), 46–54.
<https://doi.org/10.1111/napa.12112>
- Mbolanyi, B., Egeru, A., & Mfitumukiza, D. (2016). Contribution of rangelands to household food basket and income in a pastoral area in Uganda. *Journal of Food Security*, 4(3), 68–75. <https://doi.org/10.12691/jfs-4-3-3>
- Megel, M. E., & Heermann, J. A. (1994). Methods of data collection. *Plastic Surgical Nursing*, 14(2), 109–110. <https://doi.org/10.1097/00006527-199406000-00014>
- Millenium Development Goal Achievement Fund [MDGF]. (2015). *Gender equality and Women 's empowerment*.
- Miller, A. (2008). Changing responsibilities and collective action: Examining early North African pastoralism. *Archeological Papers of the American Anthropological Association*, 18(1), 76–86. <https://doi.org/10.1111/j.1551-8248.2008.00006.x>
- Mills, S., White, M., Wrieden, W., Brown, H., Stead, M., & Adams, J. (2017). Home food preparation practices, experiences and perceptions: A qualitative interview study with photo-elicitation. *Plos One*, 12(8), 1–18.
<https://doi.org/10.1371/journal.pone.0182842>
- Moisio, R., Arnould, E. J., & Price, L. L. (2004). Between mothers and markets: Constructing family identity through homemade food. *Journal of Consumer Culture*, 4(3), 361–384. <https://doi.org/10.1177/1469540504046523>
- Morsy, H. (2020). Access to finance: Why aren't women leaning in? *Finance & Development*, 57(1), 52–53.
- Mosebo, M. (2015). *Development among pastoralists in Uganda; Livelihood of*

- pastoral peoples is challenged by wrong assumptions. June.*
- Moyo, S. (2016). *Family farming in sub-Saharan Africa: its contribution to agriculture, food security and rural development* (Issue 150). www.ipc-undp.org and [subscriptions can be requested by email to ipc@ipc-undp.org](mailto:ipc@ipc-undp.org). %0A www.ipc-undp.org and [subscriptions can be requested by email to ipc@ipc-undp.org](mailto:ipc@ipc-undp.org). %0A www.fao.org/publications
- Mugerwa, W. K. (1992). *Rangeland tenure and resource management: An overview of pastoralism in Uganda*. 41.
- Murthy, PV; Chandrasekarayya, T. (2009). Male's attitude on women's empowerment and men as supportive partners in promotion of RCH: A study among slum dwellers in Andhra Pradesh, India. *Asia-Pacific Journal of Social Sciences*, 1(2), 144–153. <http://www.isaps-india.org/APJSS/index.htm> %5Cn <http://search.ebscohost.com/login.aspx?direct=true&db=ecn&AN=1281079&site=ehost-live&scope=site>
- Napoli, M., Muro, P. P. De, & Mazziotta, P. M. (2011). *Towards a Food Insecurity Multidimensional Index (FIMI)*. 1–72.
- Nicholson, C., & Monterrosa, E. (2021). *Assessing the impacts of potential interventions on vegetable consumption in urban Kenya using participatory systems modelling*.
- Njuki, J., Kihyo, M., O'kingati, O., & Place, F. (2004). *Male versus female labour in an agroforestry system in the Central highlands of Kenya: Correcting the misconception. International Journal of Agricultural Resources, Governance and Ecology* 3(1–2):154–170. 20, 34.

- Njuki, Jemimah. (2019). Women's economic empowerment for promoting food security and nutrition. *International Livestock Research Institute*.
<http://www.un.org/womenwatch/daw/csw/csw56/panels/panel1-presentation-Njuki.pdf>
- Okali, C. (2011). Notes on livestock, food security and gender equity. In *Animal Production and Health working paper No. 3. Rome*.
- Organization for Economic Co-operation and Development [OECD]. (2012). Women's economic empowerment : The OECD DAC network on gender equality. *Poverty Reduction and Pro-Poor Growth: The Role of Empowerment*, 9789264168(April), 79–104. <https://doi.org/10.1787/9789264168350-6-en>
- Oxford Committee for Famine Relief [OXFAM]. (2012). *The right to land and justice for women in Africa. June*. <https://www.africaportal.org/publications/the-right-to-land-and-justice-for-women-in-africa-african-womens-land-rights-conference/>
- Peretomode, V. F., & Ikoya, P. (2019). Mentorship: A strategic technique for achieving excellence, manpower development and nation building? *Mediterranean Journal of Social Sciences*, 10(2), 17–24. <https://doi.org/10.2478/mjss-2019-0019>
- Rawlins, R., Pimkina, S., Barrett, C. B., Pedersen, S., & Wydick, B. (2014). Got milk? The impact of Heifer International's livestock donation programs in Rwanda on nutritional outcomes. *Food Policy*, 44, 202–213.
<https://doi.org/10.1016/j.foodpol.2013.12.003>
- Rieutort, L. (2009). *Agrarian system - Hypergéó*. 1–2.
<http://www.hypergeo.eu/spip.php?article569>
- SAFERWORLD. (2013). *Uganda 's mining sector key considerations for conflict-sensitive investment in Karamoja*.

- Saldana, J. (2020). The coding manual for qualitative researchers. *The Art of Coding*, 7–86. <https://doi.org/10.1201/b22094-2>
- Salehuddin, M., Zahari, M., & Teknologi, U. (2016). *The working women : Home versus convenience cooking practices*. JANUARY 2014.
- Schelling, E. (2013). *Enhanced enrolment of pastoralists in the implementation and evaluation of the UNICEF-FAO-WFP resilience strategy in Somalia*. June, 32.
- Smith, J., Crookston, B., Gray, B., Aleson, E., Barham, S., Ricks, R., Schenk, C., Sheranian, E., & Taylor, M. (2021). Evidence review on the role of male engagement in women’s economic empowerment programs. *FinDev Gateway*. <https://www.findevgateway.org/paper/2021/06/evidence-review-role-male-engagement-womens-economic-empowerment-programs>
- Ssenkaaba, J. (2015). *The changing livelihood of the Karamojong people of North-Eastern Uganda and its impact on the survival of their traditional gender roles*. May. <https://munin.uit.no/bitstream/handle/10037/7782/thesis.pdf?sequence=2&isAllowed=y>
- Stites, E., Howe, K., Redda, T., & Akabwai, D. (2016). *Strengthening the humanity and dignity of people in crisis through knowledge and practice. “ A Better Balance :” Revitalized Pastoral Livelihoods in Karamoja , Uganda*. 1–60.
- Stulina, G. V. (2015). Role of women in the irrigated agriculture sector in the Fergana Valley: Findings of field surveys. *Irrigation and Drainage*, 64(4), 491–500. <https://doi.org/10.1002/ird.1919>
- Sumbadze, N. (2020). Gender equality and food security: Women’s empowerment as a tool against hunger. In *Gender in Georgia*. <https://doi.org/10.2307/j.ctvw04d83.16>

- Taffesse, S., & Tsakok, I. (2019). Agricultural transformation and inclusive growth: The Malaysian experience. *Agricultural Transformation and Inclusive Growth*, November, 1–140.
- Trivelli, C., Villanueva, C., Marincioni, M., Pels, J., Sachetti, F. C., Robino, C., Walbey, H., Martinez, L., & Magnelli, M. (2018). *Financial inclusion for women: A way forward*. 1–19. <https://www.g20-insights.org/wp-content/uploads/2019/10/Financial-Inclusion-for-Women-Final.pdf>
- Turner, N. J., Cuerrier, A., & Joseph, L. (2022). Well grounded: Indigenous peoples' knowledge, ethnobiology and sustainability. *People and Nature*, October 2020, 1–25. <https://doi.org/10.1002/pan3.10321>
- Uganda Bureau of Statistics [UBOS]. (2017). *National population and housing census 2014 area specific profiles*. April.
- United Nations [UN]. (2021). *Strategy for gender equality and the empowerment of women (2018–2021)*.
- United Nations Childrens Fund [UNICEF]. (2019). *Napak district local government nutrition, WASH, and health status*.
- United States Agency for International Development [USAID]. (2013). Livelihood dynamics in Northern Karamoja. A participatory baseline study for the growth health and governance program. *Agriculture*, May, 1–64. <https://fic.tufts.edu/publication-item/livelihood-dynamics-in-northern-karamoja/>
- United States Agency for International Development [USAID]. (2014). *Resiliency through wealth , agriculture , and nutrition in Karamoja (RWANU) annual results report fiscal year 2014.202*.

- United States Agency for International Development [USAID]. (2019). Boost women's economic empowerment. *Policy Brief*.
- United States Agency for International Development [USAID]. (2020). *Gender equality and women's empowerment 2020 Policy*.
- Vaismoradi, M., & Snelgrove, S. (2019). Theme in qualitative content analysis and thematic analysis. *Forum Qualitative Sozialforschung*, 20(3).
<https://doi.org/10.17169/fqs-20.3.3376>
- Valuanatos, E. G. (2010). Agrarian reform. *New Solutions*, 7(1), 18–20.
<https://doi.org/10.2190/ns7.1.f>
- Vicars, M., Steinberg, S., McKenna, T., & Cacciattolo, M. (2015). Ethical considerations in research. *The Praxis of English Language Teaching and Learning (PELT): Beyond the Binaries: Researching Critically in EFL Classrooms*, November, 1–162. <https://doi.org/10.1007/978-94-6300-112-0>
- Wamahiu. (2018). *Achieving food security for pastoral and agro-pastoral communities in Kenya – a gender perspective Presentation outline background*. 1–21.
- Welt Hunger Hilfe [WHH]. (2019). *Handwashing : Napak makes strides in hand washing*. 12.
- Wylęgała, L. (2010). *A phenomenological study of the attitudes and perceptions of middle school students towards Character, Advocacy, Remediation, Enrichment and School Spirit (CARES) Program*. 2005, 1–12.
- Zhang, Q. (2018). Pastoralism in Uganda; Theory, practice and policy. *Industry and Higher Education*, 32(2), 80–92.
<https://doi.org/10.1177/0950422218761500>