

**SOCIO-CULTURAL DRIVERS OF FOODWAYS AND THEIR IMPLICATION
ON HOUSEHOLD FOOD SECURITY IN RARIEDA SUB-COUNTY, SIAYA
COUNTY**

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DECLARATION

I declare that this thesis is my original work and has not been presented in any institution or university for award of degree

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DEDICATION

To my daughter, Deborah Ndinda, my parents, Joyce Mwongeli, Stephen Musyoka and my siblings for their unwavering support, sacrifices and encouragement.

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GLOSSARY

Local name	English/common name	Scientific name
Ododo/mchicha	Pig weed	<i>Amaranthus graceizane/dubuis</i>
Apoth/mrenda	Jute/Jews mallow	<i>Corchorus oltorius</i>
Mitoo	Slender leaves	<i>Crotalaria ochroleuca/brevidens</i>
Boo	Cow peas leaves	<i>Vigria unguiculata</i>
Atipa	Asystasia	<i>Asystasia gangetica</i>
Odiel Odiel	Wandering jew	<i>Commelinaceae benghalensis</i>
Osuga	African night shade or wonderberry	<i>Solanum scabrum/nigrum</i>
Dek	Spiderplant	<i>Cleome gynandra</i>
Moringa	Benzoil/horseradish/drumstick tree	<i>Moringa oleifera</i>
Omena	Sardine	<i>Rastrineobola argentea</i>
Ningu		<i>Labeo gregorii</i>
Ndero		
Fulu/Wia		<i>Haplocromis</i>
Sirwa		
Suma		<i>Mormmyrus kanume</i>
Ondilo		
Mumi	Catfish	<i>Clarias gariepinus</i>
Kamongo	Lungfish	<i>Protopterus aethiopicus</i>
Okunga		<i>Mastacembelus victoriae</i>
Sewu/seu		<i>Bagrus docmak</i>
Osoga		<i>Alestes nurse</i>
Chiemo	Food	
Kuon	Ugali (cooked bread from pounded maize flour, millet flour)	
Nyoyo	Boiled beans and maize	
Nyuka	Porridge made from (mixture of millet, maize, cassava , sorghum) flour	
Aliya	Dried meat stored in a pot called <i>dege</i>	

Da kol	Huge pot/guard in which milk was mixed with urine and stored for fermentation	
Chiem gi wadu	Eat with your neighbor	
Busaa	Traditional brew	
Simba wa rangi	Local cheap alcoholic brew	
Yadh hera en chiemo	The medicine of love is food	
Jikos	Improved cooking machines that use gas, electricity or charcoal	
Mihadho	Food taken without Ugali-incomplete dish	
Duol	A central fire place where men converge in the evening to sit and chat	
Amekalia mume wake	A swahili phrase to mean a woman who overtakes men's roles or a man who performs women roles.	
Dholuo	Vernacular language spoken by the Luo people	
Njaa Marufuku Kenya	Eradicate hunger kenya	

ABSTRACT

Food being more than just a source of nutrition is embedded in many aspects of the culture of a community. What we eat, how we acquire and prepare it, how we eat, who we eat with and when we eat reflect the complexity of wide cultural arrangements around foodways. How these factors shape local diets, food preferences, household food distribution, child feeding practices and preparation techniques their implication on household food security present a knowledge gap. This study sought to understand existing socio-cultural aspects of foodways and establish their implication of household food security. An exploratory-qualitative study consisting of 37 informant interviews and 6 focus group discussions was conducted. Thematic analysis was carried out to establish, interpret patterns and relationships from emerging themes and presented through verbatim approach. The study used entitlement theory as its theoretical framework. Study findings indicate that increased access to productive resources that speak to food availability and access, especially by women, does not imply equal rights and power to convert such to food or means of getting food, since, strict patriarchal rules still to place men as the household heads and major decision makers. The study results further show that local customary and religious beliefs and practices categorize foods into food prescriptions and proscriptions (food rules) with animal source foods (ASFs) being the most proscribed foods. Women, girls and children are the most affected by these proscriptions hence putting them at a nutritional disadvantage in terms of food access and utilization, even when food is available. This study concludes that inflexible gender and social norms promote male favoritism in food resource control and food allocation leaving other household members vulnerable and food insecure. Customary food rules promote not only food reallocation and dietary diversification but also food inaccessibility, particularly ASFs, indicating why simply enhanced food supply models may not translate to individual food security at the household. This study therefore recommends on nutrition and food security intervention models and policies that take in cognizance of local level realities and contexts of foodways. Implementing gender transformative approaches and policies to shape gender norms through community dialogues and trainings among other avenues is also recommended.

ABBREVIATIONS AND ACRONYMS

ASFs-	Animal Source Foods
AWSC-	African women's Study Center
CAB-	Community Advisory Board
CBOs-	Community Based Organizations
FAO-	Food and Agriculture Organization
FBOs-	Faith Based Organizations
GoK-	Government of Kenya
KNBS-	Kenya National Bureau of Statistic
NACOSTI-	National Commission for Science, Technology and Innovation
NGOs-	Non-governmental Organizations
SDG-	Sustainable Development Goals
SIDS-	Society for International Development
UN-	United Nations
USAID-	United States Agency for International Development
WFP-	World Food Programme
WHO-	World Health Organization
GHI-	Global Hunger Index

CHAPTER ONE: BACKGROUND OF THE STUDY

1.1 Introduction

Food is not only a human right but also a basic need for human survival. The intake of the 'right types of food' can promote good health, good nutrition and curb ailments and diseases brought about by consumption of inadequate or unbalanced diet. As a social marker, food promotes social cohesion and cultural or personal identities (Crowther, 2013). Despite the wide recognition of food as a human right that promotes dignified and healthy life, the world population is still hungry and malnourished a situation that thwarts achievement of sustainable development goals -2 (SDG-2) in 2030 Agenda. According to FAO and ECA (2018:3), 821 million people over the world were undernourished in 2017, with a reported increase of 34.5 million people as compared to 2015. In Africa alone, 257 million people are undernourished, with 237 million in Sub-Saharan Africa and 20 million in North Africa (FAO & ECA, 2018: 4).

According to FAO et al., (2019: 20) reports, an equivalent of 2 billion people of world population suffer from severe and moderate levels of food insecurity. With reference to SDG indicators of childhood overweight, stunting and wasting, the same report indicated that, in 2018 Africa and Asia recorded the highest number of all forms of malnutrition accounting to approximately 39.5% and 54.9% correspondingly (FAO et al., 2019: 28). The rising levels of food insecurity and nutrition have been attributed to high poverty levels, land shortages, high seasonal food production, declining soil fertility, global economic shocks and slowdowns, environmental degradations, conflicts and political instabilities and climate change (FAO et al., 2019; FAO & ECA, 2018; Olum et al., 2017). The economic shocks and slowdown are critically associated with increasing unemployment rates that negatively affect income levels and wages hence impeding on economic access of not only food but other social amenities (FAO et al., 2019).

The concept of food is however more complicated to be subjected to environmental and economic determinants because whatever is termed as food in one culture is seen as non-food or poison in another (Helman, 2007; Crowther, 2013). This is based not on food nutritional significance but on compound ideological importance (Crowther, 2013) which are embedded in various socio-cultural factors that people relate to when it comes to food

and other societal aspects. These complex factors generally involve attitudes, beliefs and practices, knowledge and skills and any other social institutions that influence peoples' foodways. Piatti-Farnell (2011) asserts that the foodways of a people (what they eat, where they get it, mode of preparation, when they eat and with whom, what it means to them) depend on their social and cultural arrangements. These social and cultural also determine selects the food to be eaten, who prepares, who serves and to whom, how and where and the order of such dishes (Piatti-Farnel, 2011).

Therefore, Cultural influences on food results to differences in habitual consumption of certain food substances as well as food proscriptions or taboos. For instance, work done by Oniang'o and Komokoti (1999:94 cited in Edelstein, 2010) indicate that some communities in western Kenya have traditionally inhibited pregnant women from eating eggs even when produced in masses. Some of the reasons are that, traditionally, chicken meat is reserved for men and visitors in these communities. Further, it was argued that there would be no chicken if women and children were allowed to eat eggs an indication that physical availability of food does not mandate food and nutrition security to all household members. Consequently, Alonso (2015) argues such food avoidances or prohibitions by gender may prevent a particular gender from consuming available food through limited access hence reduced food security and gradually malnutrition.

A Sierra Leone study conducted in 2014 revealed that culture has critical influence on individual household member access to food through intra-household food distribution. The study found out that food distribution within the household is based on perceived nature of work and responsibilities bestowed within an individual member (Denney et al., 2014). Additionally, the study also stipulated that, within the household food is served based on cultural value placed on different food types. The above findings were confirmed by an Asian study, conducted by Harris-Fry et al., (2017) which found out that women, particularly the pregnant women were disadvantaged against food distribution within the households. This was on the basis that they tend to eat last and the least amounts particularly on the prestigious and high-nutrient foods. Such was attributed to the assertion that women in the region view their men as their gods as deserving to be served first and the best share. Recent research indicate that such preferential household food distribution

leaves the less valued members food insecure and at risk of pangs of malnutrition (Alonso, 2015; Oloo, 2013).

Intra-household allocation, control and access to resources are also culture bound. Personal endowments and entitlements that are or can be converted to food are, to a greater extent, determined by strict cultural rules. For example, a Kenyan report by AWSC (2014) on women experiences on food security stipulate that strict cultural rules deny women the right to own and keep property inherited or obtained during marriage particularly land. The report further indicates that such unequal access to land among other resources limits food production by women (AWSC, 2014 cited in Ng'ang'a, 2015: 10) who according to FAO (2013) would contribute 20 to 30% increase in food production with equal access to resources as their male counterparts.

Mohajan (2014: 33) stipulates that in Kenya, food security is viewed as an equivalent of maize security. At the household level, recent studies assert that a food secure household is one that has the capability to sustainably satisfy over 80% of its individual members with nutrition essentials (Mohajan, 2014; Hamad & Khashroum, 2016). However, this remains a challenge in Kenya, especially the rural areas due to increased food prices, high levels of poverty and adverse weather conditions affecting agriculture which is the major social and economic mainstay (Mohajan, 2014). Moreover, FAO reports (2009) state that households are the locus for the expression of socio-cultural aspects relating to food. The cultural rules of what is and is not food as well as intra-household dynamics influence household food security situation. The reports further argue that in situations of food prohibitions, some members of the household are deprived of important nutritional foods leading to severe health issues and increased malnutrition cases (Stephen, 2015).

There has been a blind eye turned on the strong influence culture has on foodways of African people and this has seen failures of many well intentioned programmes such as Eradicate Hunger Kenya (Njaa Marufuku-Kenya), developed by the ministry of Agriculture (MoA) to help achieve SDG-2 9 (Njoroge et al., 2013; Kilonzo, 2019). In light of these, development planners and agencies as well as governments realizes the prerequisites of placing culture at the center of any development plan and with such, there is need of a deeper understanding on how culture shapes local diets, food preferences, intra-

household food distribution patterns, child feeding practices, food acquisition and preparation techniques and health and sanitation practices and how all these interplay with food security at the household levels (Olum et al., 2017; Alonso et al., 2018).

1.2 Problem statement

Kenya continues to suffer from serious levels of hunger (a score of 23.2 in GHI) currently ranking at 77 out of 119 countries according to the 2018 Global Hunger Index. The number of food insecure Kenyans with limited access to safe, nutritious and adequate food stood at 36% (over 17 million) in 2016/17 compared to 32% (15 million) in 2014/15 (Nation NewsPlex, 2019). This situation, like in most African countries is attributed to Kenya's dependence on food imports, food relief aids (Sasson, 2012) and high poverty levels, land shortages, seasonal food production due to changing rainfall patterns, food price inflations and environmental degradation (FAO & ECA, 2018; FAO et al., 2019).

Recent food security reports have also shown that the superficial focus of policies and development programs in Kenya in the last decade such as '*Njaa Marufuku Kenya*' and 'accelerated input agricultural access programme fail to consider the local level realities and end up benefiting the elites and the middle class citizens (Kilonzo, 2019). The author argues that the failure of these policies and programme to consider women realities as bearers of effects of hunger and feeding the nation, locks them out of support and access to policy resources and programme (Kilonzo, 2019). Such gaps in capturing multi-faceted local realities and worldviews of both men and women in relation to foodways present as impediments to achievement of the sustainable development goal 2 (SDG-2) in line with vision 2030.

Previous studies show that food is embedded in culture whereas culture is considered an integral part of food security (Helman, 2007; Kittler et al., 2011). To support this, other studies and development reports (WFP, 2012; Keding et al., 2013, Alonso et al., 2018) postulate that understanding and integrating culture as a driver of food security is a prerequisite to not only effective food programme, but also accepted, improved, sustainable and health diets of a people.

Whereas there has been a wide recognition of the role of culture, most food security studies and intervention programme focus on the ecological and socio-economic levels and causes of food security (Mohajan, 2014; Kassie et al., 2014;). Despite there being numerous multidisciplinary studies focusing on relationship of culture and food security, discussions remain only at the policy making and research levels (Oloo et al., 2013; Olum et al., 2017; Alonso et al., 2018). There is limited documentation on how different power relations within household, decision making and intra-household resource allocation and use interplay with cultural rules and practices to influence household food security.

Alonso et al., (2018) notes that development agencies and food security frameworks have stressed the importance of placing culture at the center of development however they do not clarify on the specific ways and the extent to which culture and other related factors influences food security situation at all (UN, 2013; Alonso et al., 2018). This implies that there is a dearth of knowledge on how cultures shape local diets, food preferences, intra-household food distribution patterns, breastfeeding practices, food acquisition and preparations and health and sanitation practices and how all these interplay with food security. With such realization, the study sought to establish the socio-cultural drivers of foodways and their implication on household food security in Rarieda sub-county, Siaya County. To achieve its overall objective, the study was guided by the following research questions:

- i. What are the intra-household dynamics that influence decision-making in relation to foodways in Rarieda sub-county?
- ii. What are the food prescriptions and proscriptions in Rarieda sub-county?
- iii. What are the implications of food prescriptions and proscriptions on household food security in Rarieda sub-county?

1.3 Objectives of the Study

1.3.1 Overall Objective

To establish the socio-cultural drivers of foodways and their implication on household food security in Rarieda Sub-county, Siaya County.

1.3.2 Specific Objectives

- i. To assess the intra-household dynamics in decision-making in relation to foodways in Rarieda sub-county.
- ii. To explore food prescriptions and proscriptions (food rules) in Rarieda sub-county.
- iii. To examine the implications of food prescriptions and proscriptions on household food security in Rarieda Sub-county

1.4 Justification of the study

Although much has been done to establish causes of malnutrition and food insecurity (Obiero, 2013; Oloo et al. 2013, Kassie et al., 2014; Stephen, 2015; Olum et al., 2017), little, if any, has been done on the socio-cultural aspects of foodways and how they influence food security. The findings of this study are, hence, vital increasing the understanding on the intra-household dynamics and other socio-cultural factors that determine food proscriptions and prescriptions.

Additionally, the findings of this study could be useful in aiding the government, NGOs and Community Based Organizations (CBOs) to come up with sound policy frameworks that put into consideration the different cultural backgrounds in Kenya. Policies and programme developed by the government such ‘Njaa Marufuku Kenya’ translated to ‘Eradicate hunger Kenya’ (Kilonzo, 2019; Njoroge et al., 2013) to achieve the sustainable development goal 2 (SDG-2), which later become a white elephant can be updated for better performance using the findings of this study. The local people and the school going may benefit from such well-informed programme and policies through provision of enough, available and socially accessible and acceptable foods (Njoroge et al., 2013).

Rio+ 20, FAO, World Food Programmes (WFP) and other international bodies have strived to improve the food security in the world through incorporation of culture as a key driver of food security (UN, 2013; USAID, 2009). Despite such efforts, the issues of malnutrition and food insecurity have always persisted and have had massive impacts on the victims. The results of this study adds to useful information that will build on the local, regional and global body of knowledge required in the implementation of strategies aimed at reducing effects food insecurity such as the double tragedy of malnutrition.

Moreover, the study findings will add on to the academic knowledge to scholars and others with interest in food security. Specific interest will be mostly on how cultural and social behaviors of food determines what is palatable or not and how this in turn implicates on food security as well as how the resultant dietary rules affect food security situations.

1.5 Scope and Limitations of the study

The study was carried out in Rarieda Sub-county of Siaya County. It concentrated on socio-cultural drivers of foodways and their implication on food security at the household level. The study established intra-household dynamics in decision making, the various beliefs, norms, attitude, knowledge and practices of foodways and their overall influence on household food security.

The study was limited to one of the driest part of Siaya sub-county and hence did not delve into understanding food security situations of household in the surrounding sub-counties. The study also, did not delve deeply into other drivers of food security like natural resources, inflation and food prices and food policies. In addition, foodways of a people are area-specific due to diverse cultural backgrounds and hence, the findings of this study cannot be generalized to populations outside Siaya County. However, the study results can be used to inform food security interventions and programs in other areas, by giving socio-cultural aspects of foodways the required intensity.

A limitation of this study was the lack of quantitative data that allows comparisons and establishment of trends and patterns of crucial aspects in food security such as income, education and employment. However, being a purely qualitative study, different qualitative data collection methods were used not only to cross-validate data but also capture various dimensions of culture and food security using the research questions as lenses.

An additional limitation of this study was the entitlement theory inability to adequately address objective two. During the study it was established that, in dealing with food prescriptions and prescriptions, the theory did not adequately delve into the deeper symbolic meaning and use of food in religious and cultural rituals as well as group dynamics of food choice.

1.6 Definition of Terms

Food- Any substance or item considered by a group of as palatable either through eating or drinking with a purpose of maintaining life.

Foodways- In this study, it is the people's categorization of food items as edible or inedible, methods/ways of food production and selection, processing and preparation. Also includes how food is distributed and consumption patterns within a household.

Household- A person or group of persons residing in the same compound, answerable to the same head and sharing a common cooking arrangement.

Household head- A person who is considered as main decision maker or most responsible in a household.

Household food security- In this study, a household is food secure when every household member has constant, continual supply of adequate and preferred acceptable foods throughout the year.

Socio-cultural drivers- This includes all aspects of social relationships and networks that influence food behaviors from production to consumption. Also includes attitudes, beliefs, activities, skills, practices, knowledge and institutions of a society that inform people's behavior.

Intra-household dynamics – All the dialogues that occur within the household for a decision to be made. These dialogues occur in relation to household resources.

Food proscriptions and prescriptions -All food substances or items that a culture/ society permits or prohibits people from use either temporarily or permanently. These are regarded as food rules in this study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents review of the literature on the implications of socio-cultural drivers of foodways on household food and nutrition security. It begins examining the dimensions of food security and a global overview of household food security. It reviews Luo customary practices on food and food consumption and delineates the major socio-cultural of food proscription and prescription. The chapter ends with a discussion of the theoretical framework used and its relevance to the study.

2.2 Dimensions of food security

According to Zhou *et al.* 2017, food security means the provision and access to nutritionally sufficient and culturally accepted food by each member of the household for healthy life. According to United nation, food security exists when all people at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs, food preferences for a health and active life (FAO, 2009). Household food security is viewed as a function in which the household combines its time and bought-in-the-market commodities to produce tangible and non-tangible goods that ultimately enters its utility function (Zhou et al., 2017).

FAO (2009) describes four central parts of the food security; food availability, accessibility, utilization and stability. Food availability refers to the extent to which food is within reach of the household in the contexts of sufficient quality and quantity (FAO, 2009). It is determined, superlatively, by domestic food production, commercial food imports, and food aid. These are, in turn, influenced by domestic policies regarding food production that focus on self-sufficiency or food self-reliance (Pieters *et al.* 2013). Physical availability refers to what is available for consumption in the community/household, depending on access to arable land and the ability of a household to obtain food through production. Therefore, unavailability or shortages of staple food mainly maize are present as the pressing nutritional problems among the rural poor.

Food access is understood as the ability of a nation and its households to secure sufficient food on a viable basis. Generally, it refers to whether the available food can be obtained, and includes households that have the resources, ability, and knowledge to produce or

procure food (FAO, 2009). A study done by Stephen (2015) postulates that access to food arises from opportunities to produce food directly or to exchange other commodities for food. Access to stable and sustainable food supply is a precondition for the establishment of food security at the household level. Sustainable farming systems and crop yields improve on the potential of households to access adequate and diversified diet. However, despite the improved agricultural systems in Kenya and related government policies and subsidies, a national economic survey done in 2008, indicated that 51% of Kenyan population lacked access to adequate food (Kassie et al., 2014).

Food utilization is a biological perspective of food security that encompasses the capability of the human body to ingest and metabolize food (Pinstrup-Andersen, 2009). Good care and feeding practices, food preparation, a diverse diet and good intra-household distribution of food affect the individual's nutritional intake (FAO, 2009). Food utilization includes also non-food parameters such as care practices including clean water to drink and other uses, health and general sanitation (Pinstrup-Andersen, 2009). On non-food parameters, WHO (2010) asserts that the sub-Saharan African region has also shown massive improvement over the past two decades, for instance, drinking water coverage is said to have increased to 61%, a 12% increase from 1990 to 2010, and sanitation coverage reporting a 4% increase in a period between 1990 and 2010 (WHO, 2010)

Food stability, the fourth dimension of food security, refers to the concept of access to adequate food at all times, or not being at risk of losing access to food due to seasonal food insecurity or sudden shocks such as economic or climatic crises (FAO, 2009). Hence, stability includes both the availability and accessibility dimensions of food security. In this regard, food production and food price capriciousness as momentous components of food stability are incorporated in the food availability and food accessibility analysis sections of thesis.

2.3 A Global Overview of Household Food Security

The challenge of food security in the world has remained elusive, stubbornly high and very widespread despite the fact that the world produces enough food to feed everyone (FAO, 2016). Although thousands of global interventions have attempted to address the challenge, the situation remains wanting as some of these efforts have failed to consider adequately

the complexity of the issue as well as the locally driven problems and their possible solutions. According to FAO and ECA (2018), 821 million people all over the world were undernourished in 2017, with a reported increase of 34.5 million people compared to 2015.

Globally, food security will remain of great concern for a very long time. According to FAO report 2019, an estimated 26.4% (an equivalent of 2 billion people) of world population suffer from severe and moderate levels of food insecurity (FAO et al., 2019). The rising levels of food insecurity and nutrition have been attributed to high poverty levels, land shortages, high seasonal food production, declining soil fertility, global economic shocks and slowdowns, environmental degradations, conflicts and political instabilities aggravated further by climate change and severe droughts (FAO et al., 2019; FAO & ECA, 2018; Olum et al., 2017). Decline in agricultural productivity, a major contributor to the world's food security status, has increased due to water inadequacy, few related research works and low investment levels in the field. According to Rosegrant and Cline (2013), the high epidemics of HIV/AIDS and other terminal diseases still pose a challenge to the attaining of global food security and, specifically, in sub-Saharan Africa.

In definition, food security exists when all people at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2009). Two concepts in the definition make the aspect of food security very complex and multidimensional. 'Safe and nutritious' handles the aspect of food safety and nutrition security, while 'food preferences' changes the notion of food security from just access to food to access to the food preferred (Pinstrup-Anderson, 2009). This is to imply that people may have equal access to food, but varying food preferences may result in different levels of food security.

The author goes on to argue that:

As long as the term 'preferences' is interpreted to mean foods that are socially and culturally acceptable and consistent with religious and ethical values, rather than a broader interpretation to mean a household or individual preference for a caviar instead of sorghum, there may not be a problem with the addition of food preferences (Pinstrup-Anderson 2009:5-6).

The social and the cultural acceptability of food has obviously been overlooked by food security studies and interventions and this has contributed to the chronic survival of food security situation. This is because, the concept of food security at the global and national levels tends to focus on the supply side of food equation. The issues addressed at this level are on the availability of adequate food and if such can be translated to mean dietary energy (Pinstrup-Anderson, 2009). Recent studies relate the increased food insecurity levels in Africa, besides the climatic and economic challenges, to social and cultural categorization of food (Alonso, 2015, Alonso et al., 2018).

Africa and other developing countries have made strides to ensure zero hunger for its people. Despite such efforts, the situation of food insecurity continues to be wanting with studies indicating that in Africa alone, 257 million people are undernourished, with 237 million in Sub-Saharan Africa and 20 million in North Africa (FAO & ECA, 2018). An earlier assessment on food security done by FAO shows that about 26% of individuals above the age of 15 years in 2014/15 were hungry but did not eat or went without eating for a whole day due to lack of enough money or other resources for food (FAO, 2016). These facts present irony to the reports of agricultural production increase and economic change in Africa.

Noor and Fawzi (2016) argue that even though 160% increase of agricultural production in Africa has enabled the continent to feed its ever-growing population, it still has a long way to go since it relies on imported food to sustain livelihoods of its people. Other factors fueling this fact are due to impacts of climate change and global warming. Political strife, corruption, poverty, neocolonialism and the triple burden of malnutrition make Africa food insecure (Citation)

Burundi, a landlocked East African country, is believed to be a country where about three-quarters (73.4%) of the population is undernourished (Guy-Allen, 2014). About 10million people in this country live below the poverty line implying that access to food resources is limited (Guy-Allen, 2014). The continual displacement of the Burundians due to the ongoing war limits the capacity for people to produce their own food or obtain other food entitlements. Additionally, climate change, ethnic misunderstandings, and soil erosion

have made the country import more than its exports, translating this into more debt and economic meltdown, hence low living standards.

In Kenya, the food security situation has worsened since independence as the proportion of malnourished and food insecure people has continued to rise exponentially. For instance, USAID (2017) reports that over 3.4 million Kenyans were languishing from acute food insecurity. Saya (2019) citing the 2019 UN report stipulates that approximately 29.4% (14.6 million) of Kenyans were undernourished between 2016 and 2018. In Kenya, the strategic objective is to cut the food insecure people by 600, 000 annually. For this to happen political stability has to be attained, and food policies and interventions have to be wired according to the local context since food needs differ accordingly. This could be explained by the unfruitful efforts by the government of Kenya through the home-grown intervention –Njaa Marufuku Kenya- ‘Eradicate hunger in Kenya’ established in 2005 to help achieve the Sustainable Development Goal 2 (SDG-2). The focus of this intervention programme was/has been more on food availability other than its access and sufficient use (Njoroge et al., 2013).

Official reports attribute Kenyan food security situation to dependence on food imports, food relief aids from developed nations and the constant rise of consumer prices of the staple foods (Sasson, 2012). The author also argue that the situation at the household level is as a result of inadequate food production and the ever increasing food prices which have impacted on the ability of people to access food. This is explicit in the high number of malnourished people in the country. In western Kenya, particularly in Siaya County, the situation of food insecurity is severe. According to GoK reports (2014, 80.7% of the households in the county are food insecure.

2.4 Luo customary and cultural food practices

According to recent studies, in Luo traditions, there was a clear demarcation of roles and responsibilities in foodways. Men and women both played vital roles in acquiring food. Fishing, herding of livestock, land preparation and trade activities were carried out by men. Women's role was majorly on processing and preparing food and distributing it to family

members. Food harvesting, food purchases, fetching water and collecting firewood were within women's jurisdiction (Clinton et al., 2018).

Some of the Luo traditional staple foods have been attributed to local availability as supported by climate and soils of the area. Vegetables such as '*a lot*', '*dek*' '*Apoth*' '*Mitoo*' and '*osuga*' were highly used as they were easier to grow and harvest. Some of the wild vegetables highly consumed in the area were mushrooms '*obuoch*'. The common food crops grown that constituted most of Luo meals were: beans, millet, sorghum, sweet potatoes, and cassava and corn. Most of the wild fruits which served as food at that time included guavas, mangoes and '*ochuoga*' (Clinton et al., 2018). Fish has been a common food among the Luo people. This has been attributed to the fact that they live along the shores of major lakes and rivers in Kenya. Most people from Siaya County have access to fish from shores of Lake Victoria, River Nyando, Lake Kanyaboli, and river Yala. Fish was and still is a major part of meals among the Luo community (Clinton et al., 2018).

The most common staple food consumed by the traditional Luo people was *Kuon*- (Ugali in Swahili). This some sort of hard porridge typically prepared through mixing cassava or sorghum or maize flour with boiling water. Alternatively, it could be made by mixing boiling water with either a mixture of cassava and sorghum flour or a mixture of cassava, sorghum, and maize flour. Ugali could be served alongside fish, chicken, beef, chicken, vegetables, sour milk or cooked blood from a cow (Mboya & Achieng, 2001: 27). During times of lack, some meals were taken without Ugali, such foods were considered as '*Mihadho*' to mean the dish was incomplete and people termed this as 'skipping meals'. It is worth noting that foods taken without Ugali were not considered as full meals but just taken for pleasure or as snacks (Mboya & Achieng, 2001: 27).

Nyoyo was another common food among the Luo people. It is a mixture of boiled beans and maize which are consumed mostly after a hard working day in the Shamba. This food was commonly eaten as a snack. Another common food among the Luo was '*nyuka*', a porridge made from a mixture of maize and millet flour or a mixture of sorghum, millet and cassava flour. The most popular '*nyuka*' was mixing flour and water and letting it ferment overnight. This food was served as either morning breakfast or any meal during

the day (Clinton et al., 2018). Other foods taken in the other were sweet potatoes, pumpkins, 'Kongo' and the traditional beer- 'Busaa'.

On child feeding practices, the first food fed to a baby right before breast-feeding was sheep's milk. The child was either fed on this milk in the evening if born in the morning or fed in the morning if the baby was born at night. Such milk was stored in a reed. Mboya and Achieng (2001: 96) posit that, after this, the baby was breastfed until the first day they were taken out of the house. During this time, the baby was given cleansing medicine, thereafter fed on porridge made from finger millet mixed with dregs of 'Kongo' and cooked with soft stirred milk.

According to Mboya and Achieng (2001), traditionally Luo people had more than four meals a day. The first meal of the day, breakfast (*Ohii*) prepared between 8 and 9 o'clock consisted of previous night Ugali with its accompaniment. Previous night Ugali was prepared as there was a common belief that eating 'hot' Ugali would result in someone feeling hungry soon after consumption. These were accompanied by warm porridge, prepared the previous night. It was only baby porridge that was prepared in the morning. Porridge was also taken later in the day. At three o'clock, either 'Nyoyo' or boiled green maize was taken with porridge as an accompaniment. Ugali and its accompaniment consisted made the evening meal. After this, people would also take porridge (Mboya & Achieng, (2001: 27). Passersby who asked for water were served with porridge, 'nyoyo' or Sim-sim. Sim-sim, in particular, was preferred for passersby. It was also consumed during chat or relaxation moments.

Eating among the traditional Luo was done in groups. Eating without the rest was considered a gluttonous act and such people faced negative social sanctions of being looked down upon. Eating together was a way of sharing with the less privileged. For instance, both unmarried and married men ate from the 'Duol' and this provided an opportunity for the children of absentee mothers or bereaved to fill their stomachs (Mboya & Achieng, 2001: 28). According to Pascal (2012), food (called *chiemo* in the local language) and food consumption among the Luo is a customary activity. It monotonous, patterned and rigid, although, modernization and effects of climate change have forcefully altered the foodways globally. The Luo people consider food resources as communal and any form of selfish

behavior is controlled by social sanctions whereby the stingy people are described by expressions such as 'aching stomach' or 'the red stomach'. '*Chiem gi wadu*' is a common Luo proverb meaning 'eat with your neighbor' which stresses the community's sense of oneness and shared responsibilities (Pascal, 2012: 90).

For the Luo people, food is a medium of expression as people can use food to pass a message or exchange worldviews and opinions as they eat. Culinary skills among the Luo are concomitant with the social status of the wives and their relationship with their husbands. The relationship between the wives and husbands implies shared responsibilities, where the man should provide and sustain the family while the wife must know how to prepare the right food for the family. This is accentuated by the Luo saying '*yadh hera en chiemo*' whose literal meaning is 'the medicine of love is food' (Pascal, 2012: 91). This statement implies the shared responsibility of the couples, a man should provide and sustain the family while the wife must know how to prepare the right food for the family.

In the event of war, food was used as a purification agent. First and foremost, the warrior was given '*Awinja*' to eat to prevent them from death omen if the bereaved family placed '*Awinja*' on the dead's grave. This was then followed through the slaughtering of a chicken and he-goat. The he-goat was pierced on the side while alive and lungs removed. The warrior swallowed them when the blood was still hot. After several rituals and shaving, the warrior was given the heart of the goat to eat just as the lungs, then followed with a purification medicine (Page 23).

Traditionally, there were prohibited foods among the Luo people. Some men for instance, because of their social status as men were not allowed to eat eggs. Men were prohibited from taking any kidney of livestock. Women, for health reasons or pride, did not eat foods such as mud-fish among other foods. Traditional customary practices also forbade women from eating rabbit meat, hippo meat, chicken, drinking milk as well as taking porcupine meat among other foods. (Page 30). Food prohibitions were also based on clan systems but these were not neutralized upon clan intermarriages. Wives had a lot of influence on what their children ate depending on the clan they came from.

Foodways of the Luo people, generally, were and still are influenced by various factors. Through socialization and the imitation process girls and boys were taught how to provide food for the family and cook the right types of food well respectively. Ritual ceremonies such as cleansing, child naming, and burials determine the food choice as well as food avoidances. Age, for example, influences the type of traditional vegetables eaten by youth (who prefer vegetables with milder taste) and elderly women who take pride with bitter-tasting leafy vegetables. Spiritual beliefs restrict people from the consumption of certain foods from a graveyard and abandoned homesteads as such food are said to be possessed (Pascal, 2012: 92).

2.5 Intra-household dynamics in decision-making process around foodways

2.5.1 Gender roles

Different roles are designated to men and women in ensuring food security at the household level. According to FAO reports (2009), men spend most of their time growing crops while women are solely responsible for growing and preparing food eaten in the household as well as tending to small livestock for protein purposes. Recent studies establish a strong connection between the gender of the household head and food security. These studies indicate that male-headed households are more food secure than female-headed households (Kassie et al., 2014; Felker-Kantor & Wood, 2012 as cited in; Zhou et al., 2017). A similar study done in rural Kenya by Kassie *et al.* (2014) concluded that regardless of the household head visible characteristics, the invisible aspects are responsible for the differences in food security level.

Work done by Pieters and others (2013) recognizes the key role played by women in the production of food. According to the authors, women participate in the production of food crops and the tenure of animals and often controls the marketing and trade of the produce. In the same study, Doss, 2011 (as cited in Pieters 2013:7) argues that the share of women in the labour force has a crucial effect on national food availability and positively influences domestic food productivity. Ibnouf (2011) states that the position of women as food producers, processors and preparers place them as the most important people in food

security (Ibnouf, 2011) although the low status accorded to them inhibits their potential hence negatively affecting household food security.

Ibnouf (2011) did a study in Sudan that concluded that women, as compared to men, were more likely to positively contribute to household food security due to the seasonal and permanent migration of men to the urban area in search of white collar jobs. Despite these important function performed by women in households, the author found that women faced a lot of challenges due to gender discrimination based on traditions (Ibnouf, 2011).

2.5.2 Ownership, control and access to resources

The gender-based inequalities throughout food behaviors from farm to plate- entrammels the acquirement of food and nutrition security at the household level. According to a study done in Hon of Africa on *The Impact of Gender and Land rights on food security* women produce 50% of global agricultural output yet own only 20% of its land (Copeland & Guertin, 2013). A similar study in Kenya done by African Women's Study Center (AWSC) found out that only 20.7% of women in Kenya own land compared to 43.8% of men (AWSC, 2014 cited in; Ng'ang'a, 2015). From the same study, high-end household resources are owned by men; cattle, donkeys, goats, horses and sheep while the women own the low-end animals and birds such as rabbit and poultry. The use and control of the high-end resources requires a final say from the men.

FAO (2013) asserts that there would be 20 to 30 per cent increase in food production if women had equal access to resources as men. It is further argued that such equal access and control to resources especially land would ensure increased household agricultural production for food use and surplus sold to earn income that can supplement other household needs (Copeland & Guertin, 2013).

Decision making on those household resources is limited by the culture of patriarchy in most African societies. A study done by AWSC (2014) as cited in Ng'ang'a (2015) found that even though 38.8 per cent of women in Kenya make decisions on what to plant in the farms, men normally have the final say on when, what and how and this is decided sometimes in the absence of the women. The final farm produce is also handled by men. The difficulty of women in access to decision making and the overall cash affects

negatively food security situation at the household level. The overall control and ownership of resources deters women from access of vital aspects of food security such as credit access from agricultural organization and general information on food production, processing and utilization (citation)

2.5.3 Decision making power

According to Counihan and Esterik (2012), the power relations in food mirror the power of sexes in general. Control of money and food purchases is a key index of a husband-wife balance of power. The argument is that men wield power by controlling food purchases and claiming the authority to judge the meals women cook. They can deride the food and demand certain food dishes. Alternatively, they can refuse to eat or even refuse to provide food. In most, if not all, cases, men often legitimize wife abuse by citing meal failures (Counihan & Esterik, 2012)

According to a, Nigerian study, the decision making power of women in the household was shadowed by that of men due to patriarchal nature of many African societies (citation). The decisions taken by women are those regarding the type of food to buy, when to eat the food and the survival mechanisms during food insecure situations (Oluwatayo, 2016). A recent study reports that, female decision makers are more likely than male decision makers to distribute food in a way that increases nutritional outcomes in the household (Harris-Fry *et al.*, 2017).

According to Harris-Fry *et al.* (2017), other decisions like input acquisition, house rent, school fees and keeping as well as spending proceeds from occupation were solely the role of men. Deducing from those findings, it is very explicit that the bulk of the decisions influencing household food security are taken by men, putting women at a disadvantaged position in spite of their remarkable role in ensuring household food security. The same study reports that three-quarters of the study population echoed that women are not usually consulted by men when making decisions about the household since men tend to take the know-it-all attitude. Quisumbing and Smith (2012) further argues that, in many societies, women possess very little economic decision making authority in a household but are more likely than men to be involved in decision making regarding food purchases.

2.5.4 Income

Scholarly works on poverty and low-income levels and their relation to household food security point out that food security can be influenced by series of bad harvests. Poverty undermines a household's capability to produce, thereby leading to a situation of increased food challenges and abject poverty. African studies also state that poverty is a major problem that affects nearly all forms of socioeconomic and cultural development (Anema *et al.*, 2009).

A Study done by Bashir *et al.* (2010) found that households with a higher income rarely faced food and nutrition security issues. The argument was that with a higher and stable income households are able to equalize the imminent consumption balance. The authors further re-emphasized the role of income in annihilating food security at the household level by arguing that an increase in monthly income reduces exposure to food insecurity. Similar work by Babatunde *et al.* (2007 cited in; Bashir *et al.*, 2010) supports this position by affirming that an increase in household annual income reduces food security by 63%. For instance, recent studies have found that low income, among other factors limit the access to animal source foods (ASFs) for the 'poor' household, since most of them are very expensive (Bashir *et al.*, 2010; Carberry (2016).

Men and women spent their income differently. The reason behind this could be the societal cultural norms which assign women as gatekeepers of the family and mandate them to ensure that members are well taken care of and receive an adequate share of the available food. Growing evidence shows that income controlled by women contributes more on household food security and children's nutrition than the one controlled by men (Pieters *et al.*, 2013). However, on many occasions men, as the income providers, tend to dominate with their food preferences in terms of determining what the household should and should not eat. Subsequently, substantial evidence indicates that income in the hands of women is more likely to be spent on food and children's needs as they are responsible for food selection, preparation, care and feeding of the children (Pieters *et al.*, 2013).

The income level influences food choice to a great level. Carberry (2016) argues that food price, time spend on preparation, income level and education impact on people's food choice. Most low-income households are associated with unbalanced diet. Price is a key

factor influencing food choice and varies with the proportion of the family budget spent on food. It must not be confused that increased income does increase dietary quality; it does not, although lack of sufficient funds may hinder people from consuming key foods such as animal source foods e.g. fish, eggs, expensive pork and certain important fruits (Carberry, 2016).

2.5.5 Education

Education influences household food security through access to vital information on the best production methods, sanitation and nutrition which then improves on the production levels and the negotiation processes (Bashir & Schilizzi, 2013). According to the authors, increased years of education are correlated with better economic chances, work efficacy, more income and better decision making power.

A study by Ojogho (2010) in rural Nigeria found out that a household head with both primary and secondary education reduced food security issues at the household level by 78%. The same study found that post-secondary education reduced food security issues by 92%. However, a study done in Kenya on women experiences with food security showed that, despite their crucial roles in household food and nutrition security, they remain most uneducated with 11.9% of women had never gone to school while 35.6% had only primary education (AWSC, 2014 Cited in Ng'ang'a, 2015). The study further contends that gender-based inequalities and inequities and discrimination that hamper women's education have negative implications on their decision making, marketing capacities, production and even food inequalities at the household level.

According to FAO et al. (2012), 90% of food consumed by urban population is bought with more than 50% of income from the poor population being spend on food purchases making them more susceptible to food price escalation. With this in mind, it is argued that households with higher education levels are more likely to be food secure due to the more employment chances and access to income which increase their purchasing power (Bashir & Schilizzi, 2013).

2.6 Socio-cultural drivers of food prescription and proscription (food rules)

The dietary practices of a particular culture are usually guided by the rules of which foods are allowed and socially accepted as edible (food prescriptions) and foods which are prohibited or avoided (food proscriptions/taboos). These food rules (pros- and prescriptions) are either permanent or temporary and those who contravene are subjected to social sanctions (Alonso et al., 2018).

Food prohibitions are either selective or temporary while taboos take a more permanent form. Examples of popular taboos based on religious beliefs are the beef taboo among the Hindu people and Pork taboo among the Muslim community due to the totemic nature of those animals. Other food taboos are, for example, based on the morphological characteristics of the food species in question (Chowdhury et al. 2014).

Temporary or selective food rules are both based on the value a culture places on stages of life, states such as pregnant woman, rites of passage as well as cultural festivals and other special events. According to a study done among the Fullas in Gambia, it was reported that girls and boys are not allowed to eat pepper after circumcision as it is believed to inflict pain during urination as well as slowing the rate of recovery (Perez & Garcia, 2013; cited in Alonso, 2015).

Food rules determine a household or an individual food choice. Food choice refers to how people decide on what food to acquire, prepare and eat. This concept has over time been used interchangeably with food voice, a term introduced by Hauck-Lawson 2004 as cited in Hauck-Lawson and Deutsch in (2010). Food voice elaborates on the reasons behind what one eats or chooses not to eat due to one's identity and emotions, aspects that cannot be explained by words. The author maintains that food choices tell stories of families' resistance, migration, assimilations and general changes over time. However, the aspect of explaining why human beings eat what they eat (eating behaviors) is inherently more difficult than explaining animals from other species (Hauck-Lawson & Deutsch, 2010).

Research shows that people choose what and what not to eat based on their own and their household's available resources. In addition, experiences and events beginning in early life and continuing throughout the life course play significant roles in food choice (Neumann,

2014). Again, due to the undeniable fact that humans depend on others for their survival, they are deemed vulnerable to developing the affective relationship with food and feeders (from birth through childhood) could explain this difficult fact.

Individuals choose foods for consumption amidst of complex factors which interact in myriad ways to impact on the development and maintenance of food choices. Many academic and health fields have, for a long time, concentrated only on understanding the physiologic and psychological drivers of food choice. This implies that there has been neglect or less attention given to the social, cultural, demographic and historical aspects (Jensen, 2012).

The drivers of food choice can be grouped into two major categories: Societal-based drivers and individual-based drivers. The societal-based drivers include the social aspects, cultural aspects as well as availability, and accessibility of food. On the other hand, individual/personal-based include biological factors, the psychological and the physiological factors. However, growing evidence suggests that these factors do not operate in isolation and, thus, their interconnectivity and interchangeability should not be ignored. Other factors influencing the food choice of a people are economic, technological and environmental factors (Jensen, 2012).

2.6.1 Societal-Based Factors

2.6.1.1 Social Influences

The social influences on food choices emphasize the effect that one or more people have on the eating behaviors of a place/people. This can either be directly (for instance, buying food), indirectly (learning from peer behaviors) or consciously through the transfer of beliefs. Research explicitly indicates that the level of consumption decreases when one is eating alone and increases when people eat as a group (a familiar group), for instance, friends and family. However, studies show that even when eating alone, a person's choice of what to eat is determined by social factors because such habits and beliefs develop because of interaction with other people (Oloo *et al.* 2013).

Contemporary studies indicate that social support has a fundamental influence on health dietary modifications and food selection behaviors. The authors argue that social support

from within the household and workmates positively regulates vegetable and fruit consumption. The family takes a pivotal part in food decisions. Studies show that a home has a crucial role in shaping food choices. The household/home acts as a source of modelling and peer for eating particular foods and trying new ones. Ideally, people are prone to mirror the food behaviors of their friends, families, and workmates (Devine *et al.* 2003 cited in Bashir and Schilizzi, 2013).

The social setting has its significance in shaping the food selection mechanisms of a people especially in regards to the foods available. For example, Devine *et al* (2003 cited in; Bashir & Schilizzi, 2013) found that the environment one finds or exposes one to determine the appropriateness or the inappropriateness of the available food. Social class of an area also has an influence on what is appropriate or inappropriate for consumption. For instance Edelstein (2010:378) with regard to the culture of western Kenya argues food represents social status and generally the type of food consumed or the way it is prepared indicates a particular level of social class. In this part of Kenya, new foods are often associated with the privileged.

2.6.1.2 Cultural Influences

Cultural values lead to the development of habits when it comes to food and in traditions of preparation, consumption and in several occasions leading to proscription such as of meat and milk from the diet. Generally, people utilize classifications and rules of their specific cultures, sub-cultures, and ethnic backgrounds to decide what they term as acceptable, preferable, adequate amount and combinations of foods to select as well as what they consider appropriate or inappropriate. Acculturation also influences the food choices of a people as they tend to choose foreign foods rich in high fat and desirable flavors and tastes (Dovey, 2010).

The culture of a people shapes their attitudes, beliefs, perceptions, and values towards food, with psychosocial factors shaping their food choices. For example, people tend to have a negative perception about genetically modified foods but do not consider the risks correlated with their alternative choices or the healthy, nutrition and the safety factors of the same (Dovey, 2010).

2.6.1.3 Media and Advertising

With the advent of modern technology, the media have been used as a platform designated to convey messages and programmes about food and nutrition. Research reports that most food selection methods people make are influenced by their exposure to media and advertising and its powerful influence in the society.

The effects of food advertising on children are of great concern when it comes to the issue of household food choice. Research shows that the media increases the children's knowledge and awareness of brand names which manipulates their attitudes and perceptions towards consumption of such highly advertised snacks. This aspect, in turn, facilitates a change of beliefs and attitudes towards snacks and other advertisements by the caretakers hence increasing the usage of the same (Gunter, 2016).

A study by health psychology postulates that there is a psychological implication of food advertisement and particularly the food adverts directed towards children. This has an impact on parents and children's normative beliefs about what people should or should not eat. The advertisements always feature children who are healthy in terms of weight and energy but at the same time consuming unhealthy foods anyhow (Gunter, 2016).

According to the social learning theory, these portrayals lead viewers or listeners to conclude that children fed on that unhealthy stuff are healthy and show no negative implications of the same and, hence, these eating/food behaviors are the norm (Gunter, 2016). For example, the long and highly decorated Ribena juice advert in media and its purported importance for kids in Kenyan visual media has been overrated. Ideally, advertisements trigger people to try out new products that might otherwise go unnoticed. They encourage the belief that all thirst must be quenched from a bottle and not from a water tap.

2.6.2 Individual-Based Factors

A household will choose what to eat depending on the hunger and appetite level of each individual household member. Hunger is when the body is asking for food for it to be satisfied whereas appetite is a personal desire for a particular type of food. Each individual experiences hunger and appetite differently depending on gender, food habits and activity

level as well as body size. These innate factors are what many scholars study as biological factors (Murcott et al., 2013).

Food preferences and tastes also determine the level of food choice by a people unlike the health and safety of that food. At this level sensory stimulus, sight, smell and texture influence a person's preference for eating habits and behaviors. Many, if not all people, according to research, prefer sweet taste of food compared to those who choose sour and bitter foods. Weaning, as well as early feeding practices of taste, texture, smell, sights and emotions of children, are highly associated with their caregivers. The caregivers feeling about eating are instilled in infancy and are hard to change as children grow up (Dovey, 2010).

Psychological factors such as values and emotions can influence the type of food an individual chooses to eat. For example, the values one attaches to an animal's life can make them a vegetarian. Furthermore, emotions can be connected to events or particular times or occasions (Murcott et al., 2013).

2.7 Implications of food proscriptions and prescriptions to household food security

Food proscriptions and prescriptions have been found to affect the availability, social, cultural and economic access and sustainability of food resource use. Inherent cultural rules prohibiting consumption and production of certain foods in space and time can, for example, contribute to species preservation and protection and sustainable use, therefore contributing to food availability and access (Alonso et al., 2018). However, food prescriptions may result to over-exploitation of the targeted resources or species, hence not only affecting the household food security but the community's food security at large.

Early anthropological studies indicate that food taboos, for example those regarding dead animals, may prevent spread of diseases among populations (Alonso, 2015). A study done among the Kalenjin community of Kenya show that pregnant women are not allowed to eat a dead pregnant cow to prevent their fetus from dying. Truthful or not for this food prohibition, if the dead pregnant cow had a form of diseases, the taboo prevents it from spreading it to vulnerable human populations (Riang'a et al. 2017).

Eating-down is a common cultural rule among many African cultures on pregnant women. Women are told to eat less food to avoid increased child growth which may lead to complications during birth. Additionally, for the same purpose of increased child growth, women are prohibited from consuming highly proteinases and fatty foods like eggs and Avocado. Given the body-building and the energy requirement of this particular group of people, studies report that such prohibitions negatively affect the food security status of these household members (Alonso et al., 2018).

According to Levay et al. (2013), many studies argue that the impact of food proscriptions is limited as many of the proscribed foods are either unaffordable or unavailable and many a times they are replaced by other foods. For instance, Choudhury and Ahmed (2011) study report that women identified food prohibitions as a contributing factor to low protein intake levels. They also emphasized that the prohibited foods would not be available or accessible to such women even without the proscriptions. More argument is also on the fact that, some of these food restrictions are temporary and the effect is easily compensated after the temporary avoidance is over. Other studies, hence, infer that the widespread food shortages are due to weather unpredictability, poor purchasing power and land sizes have more impact of household food security than the food prohibitions (Choudhury & Ahmed, 2011).

Intra-household distribution of food is a common aspect that impacts on household food security negatively and positively. Many African societies display preferential food distributions to the husbands or the adult males of the household. They receive the largest quantity and the quality part of the meals, hence their food security is improved. This in turn implies that household food security for the less valued household members (young men, adult women and girls) is highly implicated. Consequently, food avoidances or preferential prescription by gender can prevent a particular gender from consuming an available food through limited access hence reduced food security and gradually, malnutrition (Alonso, 2015).

2.8 Theoretical Framework

2.8.1 Entitlement Theory

This study is guided by entitlement theory, an approach developed by Amartya Sen in 1981. This theory forms the foundational basis for studies dealing with the analysis of food security at all levels of the society. The entitlement approach rejects the notion that famine and food insecurity is based on food shortages or food unavailability and attributes such as both economic and social inequalities. According to Devereux (2001: 246), the entitlement approach shifts the paradigm of hunger and food insecurity from food supply to the capacity of people to access the food. In tandem with this, anthropologists argue that in as much as food is a basic need, it is not just for mere survival as humans assign meaning, identify with and observe norms and values attached to food and apply taboos to those foods termed as 'bad' (Hayden, 2009; Brown et al., 2017) hence impacting on peoples' food choices.

There are two major tenets of the theory are endowments and entitlements (Sen, 1981). Endowments are all the assets and resources a household owns and has control over. Devereux (2001) defines entitlements as the set of alternative commodity bundles that a person has the legal right to own and control when faced with opportunities. On entitlements, Sen (1981) categorizes them into four major parts to include: trade entitlement which refers household's capability to buy or sell something to get food and produce-based entitlement which refers to the household's or personal ability to grow or provide goods for buying food. Societies barely produce everything they need for consumption nor consume all they produce therefore demanding a need to sell surplus or buy some supplements. Lack of this ability results to both trade and produced-based food entitlement failures. To improve access of available food in a monetized world, economic anthropologists shift focus from capitalistic market exchange to reciprocity where exchange is based on mutual understanding and social obligation (Brown et al., 2020).

The third entitlement is own-labour-based entitlement which refers to the capacity for selling own skills or labour power for producing or buying food and inheritance. Labor power is and can be thwarted by-beyond physical lack of income and employment opportunities- gender norms, gendered division of labor, access and control over resources

and intra-household dynamics in decision making (Badstue et al., 2020). Besides procuring food, failure of own-labour entitlement is likely to lead to food entitlement failure for situations where perceived labour/intensity of physical work done determines food allocation within households (Harris-Fry et al., 2017). Social scientists take cognizance of how diverse cultures, households and individuals are rejecting the unitary model which prioritize an individual preferences and needs over the collective (Omolo, 2011). The social connectedness of how food is acquired to the final consumer cords in the varied roles performed by each individual contributes either to the success or failure of the three food entitlements which determine whether an individual household will have the right and means to get the available food in the acceptable and satisfying manner.

Transfer-based entitlement, the fourth and last entitlement, focuses on access to food through transfers that can be either from the government, non-governmental organization or community-based transfers (Devereux, 2001). All the four types of entitlements give the household the ability to procure food through production, exchanges, and transfers, all of which are crucial to household food security. All these food entitlements are based on two key aspects, personal endowments and entitlement mapping (Devereux, 2001). Personal endowments include all the things a person owns whether tangible or non-tangible such as a house, livestock and labour power. Entitlement mapping, on the other hand, refers to the rate at which the resources of endowment can be converted into food, thus, the endowment set and the entitlement mapping define a household's capability to get food.

2.8.2 Relevance of the Theory

Food security in the household is largely attributed to the failure of the entitlements' exchange, that is, when purchasing food is impossible due to low-income levels, and when own production does not give much to rely on. Sen's argument is that people are unable to secure food at the household because at some point they own nothing; adequate land, power to make decisions about food and income or to some extent what they own cannot be exchanged for adequate food (Sen, 1981). This, in part, can be explained by the gender inequity and inequalities that exist in many parts of African and more specifically in most parts of Western Kenya, including Siaya County.

Entitlement theory takes into account the resources or assets at the disposal of individuals either at the community or at the household level. It first recognizes that people have to own something, which during emergencies or opportunistic moments can be converted for use. Apart from the aspect of owning, the endowment set also recognizes the power individuals have on those resources, to control the use and access whenever possible. Gendered division of roles have ensured that women can access land for use but cannot make decisions on what to grow, when to harvest and the use of what has been harvested.

The entitlement theory, hence, not only demands for food security to be viewed from the economic lenses but also from social and cultural aspects. This is mainly through establishment of food accessibility through what a community terms as socially and culturally acceptable to them for consumption. Apart from palatability, the means of acquiring the food, preparation and allocation, which are also in tandem with the major tenets of this theory have to be acceptable and accessible socially to the people. The interconnectedness of food security of the households and what people own and the command they have over the ownership (food resources) makes this theory relevant to this study.

2.8.3 Conceptual Framework

The conceptual framework that guided this study is shown in figure 2.1. Household food security is a multi-dimensional concept which is affected by, among other factors, by socio-cultural factors that influence foodways of a people. This framework shows how intra-household dynamics and socio-cultural aspects of food proscriptions and prescriptions interplay to influence foodways of a people and how that affects household food security situation.

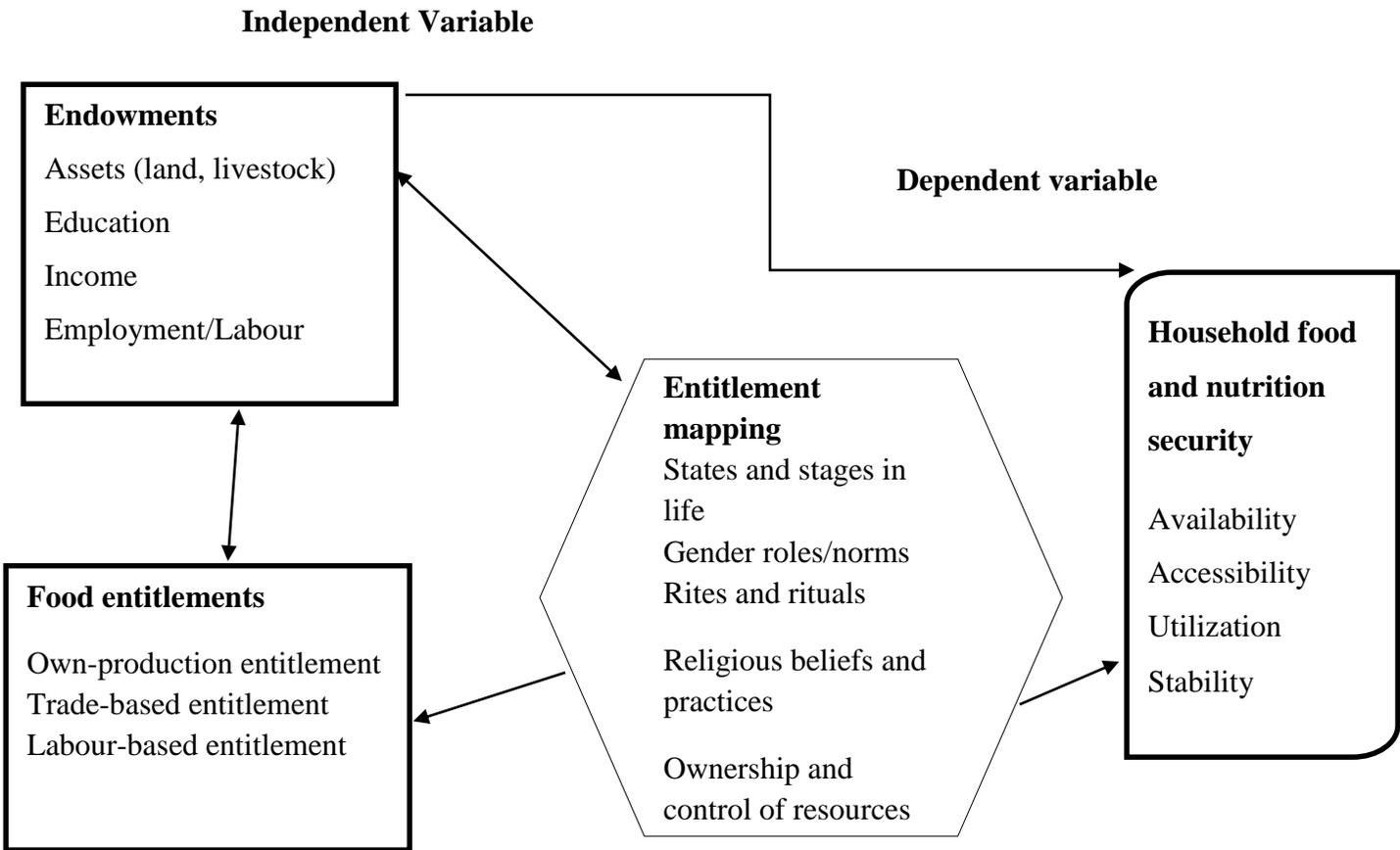


Figure 2.1: Conceptual Framework

Source: Author

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter outlines the context in which the study was carried out. It comprises of description of the research site, study design and study population, sampling population and sampling procedure. Methods of data collection, data processing and analysis are also described. The chapter concludes by discussing ethical concerns observed throughout the research process and the problems encountered during fieldwork and their solutions.

3.2 Research site

3.2.1 Location, population size and climate

The study was conducted in Rarieda Sub-county of Siaya County (Figure 3.1), which is one of the six counties in western Kenya. The sub-county covers a total area of 644km with about 399km being the land mass while 240km is covered by the waters of Lake Victoria. Rarieda sub-county lies within the latitude $0^{\circ} 26'$ to $0^{\circ} 90'$ and longitude $34^{\circ} 10'E$ and $34^{\circ} 35'E$. In 2013, the sub-county had a population of about 133, 293 living in 31,033 households with a population density of 333.6 people per square kilometer of the rural population. Out of this, about 63, 943 and 69,370 were male and female respectively. The population is extremely young as about 43,084 people are estimated to be between 15 and 34 years (KNBS & SID, 2013).

Administratively, the sub-county is divided into two divisions of Uyoma and Asembo. The two divisions are further divided into 5 locations (East and West Asembo and North, South and West Uyoma) and 23 sub-locations; 10 in Asembo and 13 in Uyoma. The sub-county is one of the driest and with minimal economic activities taking place with most of its residents living below the poverty level (KNBS & SID, 2013).

Sugarcane, millet and sorghum are some of the cash and food crops grown in the area supported by the black cotton soil in Madiany and the loam, red volcanic soils in Rarieda division (KNBS & SID, 2013). Despite its nearness one of largest fresh water lakes in the world, the sub-county is dry in most times of the year as it experiences short rains between September and December and long rains between March and June ranging between 1800-2000mm per annum (KNBS & SID, 2013).

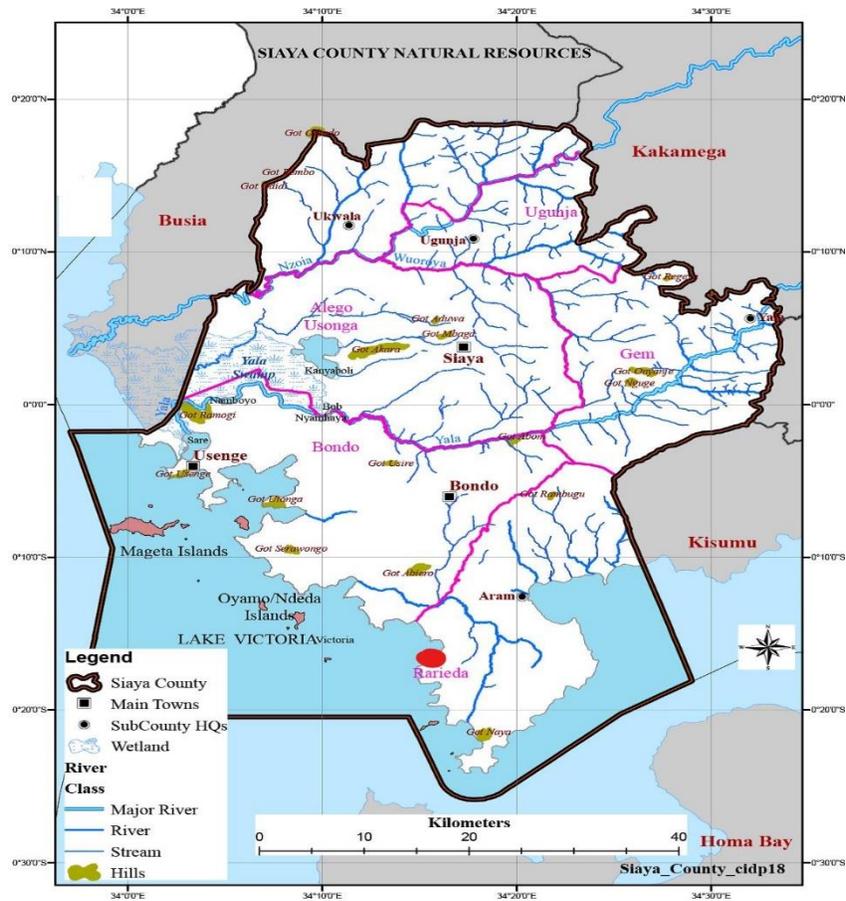


Figure 3.1: A map of Siaya County showing location of the study site

Source: Siaya County Integrated Plan 2018-22

3.2.2 Livelihoods and food beliefs and practices of the people

The most dominant tribe in Rarieda sub-County is the Luo, a Nilotic speaking group accounting for about 5 million people of the Kenyan population (KNBS, 2019). *Dholuo* (translated mouth of the Luo) is the language of the Luo people whose daily life from naming system, crop production, food habits to burial practices are dictated by culture. Maize, rice and millet are the major carbohydrates grown by the Luo while *kwon*- known in Swahili as Ugali (a common type of bread/hard porridge which commonly served with fish, vegetables, stew or with meat) is their staple food. The Luo are known for their love of fish which is in plenty due to their proximity to the lake and affordability, hence, Ugali and fish form the common dish for the people (Clinton et al., 2018). The common food drinks include porridge (made of maize flour, mixture of millet, cassava and sorghum

flour) taken as breakfast) and *Busaa* (made from dried and fermented sorghum and maize flour) an alcoholic drink consumed using tree straws called *Oseke* in celebratory occasions (Clinton et al., 2018).

Agriculture is the main economic activity in the region with the main food crops grown being; maize and cassava (staple foods), millet, sorghum, sweet potatoes and cotton (Clinton et al., 2018) and emerging food crops such as irrigated rice, grain amaranth and passion fruits (Muga, 2008). The main cash crops grown are; ground nuts, cotton and rice. Some of the fruits and vegetables grown in the area are pawpaw, mango, water melon tomatoes, kales and onions. Major livestock breeds include upgrade and pure dairy cattle, zebu, local goats and sheep, bees, donkeys with 90% of zebu forming the largest cattle population while almost 90% of all the households in the county own chicken (Thumbi et al., 2015). The area is characterized by small farm holdings whereby the small farmer has an average farm size of 1.5 ha while the large scale farmer has 7.0 ha whereby food crops cover a total area of about 15000 ha and about 2500 ha for cash crops (Muga, 2008).

Fishing, a non-farm work activity carried out in Lake Victoria, dams and fisheries aquaculture, contributes to the economic growth and social well-being of the Rarieda sub-county households (Siaya County, 2018-2022). The major fish species are Nile perch, *Omena*, *Fulu/Wiu* and the cultured species Tilapia (Siaya County, 2018-2022) Other economic activities in the region are agro-forestry and green economy, tourism and the mining activities carried on a small scale in Rarieda sub-county.

Food (called *chiemo* in the local language) and food consumption among the Luo is a customary activity (Pascal (2012). Larson and Story (2009) describes food as the conversation around a table three times a day and as the health given to our bodies from the essence of plants and animals. Among the Luo, Pascal asserts that food and food patterns are monotonous, patterned and rigid, although, modernization and effects of climate change have forcefully altered the foodways globally. The Luo people consider food resources as communal and any form of selfish behavior is controlled by social sanctions whereby the stingy people are described by expressions such as 'aching stomach' or 'the red stomach'. '*Chiem gi wadu*' is a common Luo proverb meaning 'eat with your

neighbor' which stresses the community's sense of oneness and shared responsibilities (Pascal, 2012: 90). Additionally, Clinton and others (2018) assert that food is a medium of expression as they can convey or exchange worldviews and opinions as they eat. In spite of all this, Rarieda sub-County has about 31.4% of its people living below the poverty (KNBS, 2019). Poverty is an overriding challenge when it comes to achieving food security and Siaya county records food poverty of 34% (GoK, 2020) at the household level affecting nearly all forms of socio-economic and cultural development (Anema et al., 2009).

3.3 Research Design

The study was exploratory in nature employing qualitative methods of data collection. According to Given (2008) an exploratory design seeks to understand and describe social relations and processes, facts, beliefs and belief systems found in situation, groups, activities or processes under study whose little information is known or has not been thorough investigated. This design was appropriate for gaining more insights on the specific ways in which socio-cultural aspects influence foodways of a people. This study was conducted for 3 months in two phases, all complementing each other to guarantee high data quality. The period spanned from October, 2018 to December 2018.

The first phase began with conducting of semi-structured in-depth interviews with informants. This provided insights on the level of food security in households as well as key determinants. Data obtained through probes was useful in amending the data collection instruments to include what was not envisaged during inception level of the proposal. Key informant interviews were conducted, during the first phase, with the relevant food and nutrition security stakeholders and cultural custodians of to yield more in-depth insights as well as expert opinion based on research questions. In the second phase, focus group discussions (FGDs) were held to understand group dynamics, fill gaps and obtain more information and consensus on emerging themes and issues from other methods.

3.4 Study population and Unit of Analysis

The study population comprised of the households of Rarieda sub-county and other entities involved directly or indirectly in household food security. The unit analysis was an individual household. In the households, the household heads and their spouses where relevant, where interviewed.

3.5 Sampling size and Sampling procedure

The study took place in two wards (East Asembo and North Uyoma) out of five wards of Rarieda sub-county. To give equal chances to each ward, the researcher wrote down on a piece of paper the five wards and randomly selected two. Using the same procedure, ten villages were drawn from both wards. A sampling frame obtained from the local administration was used in identifying households from those villages. Purposive sampling was used to select three households in each village based on nature of households as well as socio-economic status. Thirty households were interviewed.

3.6 Data Collection Methods

The study involved collection of both primary and secondary data. The data collection methods used were as follows:

3.6.1 In-depth Interviews (IDIs)

Thirty (30) in-depth interviews were conducted to address the intra-household dynamics in decision making and socio-cultural drivers of food prescription and proscription. At the initial phase, with the help of local research assistants, three in-depth interviews were conducted to pre-test and allow any necessary modification to the interview guide before actual fieldwork. Household heads or the major decision makers in the households were the main participants in the interviews. Fifteen participants were interviewed in villages of both East Asembo and North Uyoma. Information on gender roles, ownership and control over resources as well as traditional and cultural beliefs around foodways and their implication on food production to consumption was collected. This data was obtained with the help of an in-depth interview guide (Appendix 2).

3.6.2 Focus Group Discussions (FGDs)

Focus group discussions were carried out during the last phase of the data collection in East Asembo ward. A total of six focus group discussions were conducted each comprising of between six to eight participants (Table 3.1). The participants were purposively selected by the researcher based on their knowledge about the subject matter. The FGDs aimed at using group dynamics (economic, social, and cultural) to stimulate the participants to reveal the attitudes, behaviors, perceptions, knowledge and reasons for their foodways. The discussions were also used to verify and clarify on the issues gathered from other methods.

Focus group discussions were facilitated through the aid of a FGD interview guide (Appendix 3).

Table 3.1: A summary of Focus group discussions (FGDs) conducted in Rarieda Sub-county

FGD	Village	Age range (in	No. of participants	
Mixed group	Ndwara	18-34	8	
			Male	4
			Female	4
Mixed group	Rambungu	35+	6	
			Male	3
			Female	3
Men	Ongielo	18-34	7	
Men	Sinogo	35+	6	
Women	Wangarot	35+	6	
Women	Lwak	18-34	7	

3.6.3 Key Informant Interviews (KIIs)

Key informant interviews were conducted in the first phase (between October and November) to get their expert opinion on the key themes of the study and also to facilitate a smooth entry to the community. Additionally, key informants provided objective information on the culture of the study site, food security situation and related policies and programs, food beliefs and practices. Seven key informants were purposely selected for their knowledge and position in the community. They included both state and non-state stakeholders; the sub-county nutritionist, the chief, community health volunteer (CHVs), community opinion leader, religious leader and community based organization (CBO) representatives. These interviews were conducted with the aid of a key informant guide (Appendix 4).

3.6.4 Secondary Sources

Secondary data was used in the process of proposal development to provide background information on the keys issues under investigation. It was collected from various sources; government publications and official documents, research reports from scholarly work,

peer-reviewed articles and books, and documents containing relevant information. This continued throughout the study.

3.7 Data processing and Analysis

All the Audio-recorded files in English were transcribed and files done in *dholuo* language were transcribed and translated to English. Some of the Luo terms used for emphasis or not translatable were bolded and italicized for analysis. This process was done concurrently with the data collection in order to provide constant feedback that facilitated continuous review of the data collection tools.

The transcripts were stored in Microsoft word and imported to a qualitative data software, Nvivo (version 12.0 plus). For each data set, a separate code sheet was created and open-coding performed. Thematic analysis was then carried out establish and interpret patterns and relationships from emerging themes using research objectives as lenses. To ensure that informants voice were not lost in translations, a verbatim approach for data presentation was adopted where key quotes and comments from the informants were used in explaining their lived experiences and emic perspectives of household food security situation.

3.8 Ethical Considerations

A research permit was approved and granted by the National Commission for Science, Technology and Innovation (Ref: No NACOSTI/P/18/13237/26844). During fieldwork, the study population was informed on the nature and purpose of the study. Risks, benefits and voluntary participation was explained to the study participants. After this, an informed consent was sought from all the study participants and only those agreed through signing were recruited (Appendix 1). A different consenting process was sought from all the participants before their information was digitally recorded. The participants were assured of the confidentiality of their information at all stages of the research work and their anonymity guaranteed through use of pseudonyms.

For dissemination, the study findings will be availed back to the community through local administration channels. Publications through peer reviewed journals will be made available for the scientific community and other scholarly endeavors. For academic

purposes, copies of unpublished literature in form of thesis will be availed at the University of Nairobi Library.

3.9 Problems encountered during the study and their solutions

Demand for incentives, particularly food and other household items such as bar soap by the research subjects as a pre-determinant of their participation to the study was a real threat. This was fueled by two reasons: one, the sub-county has been researched by NGOs and other development agencies that compensate the research subjects with sitting allowances or household items including food upon engaging them. Therefore, the research subjects felt it was their right to be compensated for their time, in monetary form or in kind. Secondly, most of the households live below the poverty line and meeting the basic needs was a problem. Hence, being informed that the research was about food security, one of the area's biggest challenge, the research subjects expected handouts. On the same, getting men to take part in the household interviews was a problem as they argued that all food matters were in women's domain.

These challenges were solved by adequately explaining in details that the study was purely for academic purpose. A continuous consenting process throughout the interviewing process proved rather effective in curbing this challenge. For the male participants, they were adequately explained on their overt and covert roles in food matters and by understanding that food security was more than a female domain, their participation and contribution to the study improved massively.

Time taken to conduct the household interview was another challenge as the study participants complained a lot. At the initial stages of data collection, an interview took almost an hour and half but as the research process progressed, the time reduced to fifty minutes or an hour at most. This proved rather convenient with the respondents and for those who were willing and not available at that time, convenient rescheduling was done for later in the day or the next day.

CHAPTER FOUR: INTRA-HOUSEHOLD DYNAMICS IN DECISION MAKING

4.1 Introduction

This chapter focuses on the intra-household dynamics in decision making around foodways. It centers on household members' capacity to negotiate and bargain on acquisition, access, allocation and consumption of foods. To achieve this, the chapter covers division of labour within the household and intra-household resource allocation. Discussions from relevant literature on the implication of the foregoing to foodways are presented along the study findings.

4.2 Socio-demographic characteristics of the informants

Table 4:1: A summary of Socio-demographic characteristics of the informants

CHARACTERISTIC	CATEGORY	NUMBER
Gender	Men	8
	Women	22
Age of the informants	18-30	3
	31-40	5
	41-50	7
	51-60	6
	61-70	8
	71-80	1
Education levels	No formal education	1
	Primary (complete)	10
	Primary (incomplete)	9
	Secondary (complete)	4
	Secondary (incomplete)	4
	Tertiary	0
	Don't know	2
Household heads	Male	21
	<i>De-jure</i> Female-headed	5
	Female-maintained	4
Major decision makers	Joint decision makers	3
	Male	18
	Female	7
	Other (MIL/FIL/Children)-	2
Source of income	Off-farm	4
	On-farm	10

	Both	14
	None	2

Source: Field Data

4.3 Gendered norms and division of labour

Division of labour: Household labour has for a long time been divided along gender lines in terms of food acquisition, selection, distribution and consumption. This study revealed that farm work, a major food production for households, was shared between women and men. While men were in charge of tilling and cultivating the land, women performed other major farm activities such as planting, weeding, and harvesting with men helping occasionally in food harvesting. Domestic activities including child care, elderly care, care for the sick, food purchases, processing and preparation as well as house maintenance among other tasks were within women’s jurisdiction with little help from children in water and firewood collection. Hence, tasks performed by women are more than those performed by men. This is as indicated by the interviews below;

“Men tell us what to plant, we as women do the planting and attend to livestock in that farm. When it requires a plough or a tractor, men help with land preparation. After that we take over” (IDI-3, Female 44 years).

“....sometimes I do provide for food, other times my wife brings food because she has a small business she operates” (IDI-1, Male 46 years).

Household head: This study revealed that gender of household head greatly influenced division of labour and decision making within households. Out of 30 households interviewed, 21 were male-headed households and 9 were female-headed households (5 were *de-jure* female-headed households while 4 were female-maintained households) (Table 4.1). Data showed that male-headed households had strict division of labour, man as the provider and women and children taking up all other roles of the home such as planting, weeding, harvesting, washing, cooking, and caregiving. Men, indicated that women would also support in provision if the man was not in a position to. A male informant noted:

“ The man is supposed to be the sole provider in the household because he is known to be the head of the family.....as the head I do provide for food, when am not able my wife brings food because she has a small business she operates, however, it is her duty to prepare food, she can send me to the market to get food that she has to

cook, but I don't have a say in that...this is because that is her responsibility” (IDI-1, Male 46 years).

In female-maintained households, women reported that their husbands were either sick, too old, jobless or stay-at-homes, and/or victims of excess substance use to an extent of abandoning the traditional roles and responsibilities as household heads. Two out of the four women (see Table 4.1) reported that such positions were easy on them because they had small businesses or sold casual labour to support their own. The ability to make independent decision and not be imposed on by men was cited as an enabler of the aforesaid giving them an opportunity to choose freely what to feed their families, when and how, as well as manage other household activities. As is the case for some of the *de-jure* households, the other two reported limited access to food among other resources due to work overload and minimal division of labour as husbands were not providing the basic needs. A female informant had the following to say;

“You know with my husband, even if people are hungry or going to sleep hungry, it doesn't bother him. If it bothers him a little bit, he finds means to get maize but does not provide money to grind it to flour. So I have to struggle, do casual jobs. Sometimes then money I get, I buy 'Omena' and save the rest at welfare groups for paying school fees for my children. If I am the one struggling then I will decide what they will eat, and sometimes I change what they eat because no one is giving me instructions except the money I have” (IDI-3, Female 44 years).

Decision making: Household decision making power is and can be a determinant of the way household labour is divided. This is on the basis that division of labour is related to power and control a spouse has over the other. Study results showed that household headship comes with ultimate decision making power. Out of the 21 male-headed households, eighteen had men as the major decision makers on all household matters while the remaining three had joint decision making power (Table 4.1). Men decided on important matters such as education, health, food budget, types of herds to acquire or sell and control over farm proceeds while women reported to make decisions on kitchen matters and overall household hygiene. On one end, this was regarded as a good thing as there was diversification of household labour and maximization on pool of resources. However, there was a consensus in some FGDs that women have limited participation in deciding on key issues such as food budgeting, consumption patterns, land use and farm proceeds. This is as emphasized by the interview excerpts below:

“The owner of the house who is the man makes decisions on matters concerning food acquisition, food provision, issues that require money in the household as well as farming. Payment of school fees and matters concerning treatment and the payment of the bills in case a person falls ill” (FGD-3, Male group 18-34 years).

“Men or fathers decide on issues dealing with schooling of children, provisions of funds for food and general farming matters....while women make decisions on how to furnish and maintain the house, the type of food a family should eat in a meal. Women also support families in cases where the fathers cannot provide enough” (FGD-1, Female group 35+ years).

Study findings also indicated that joint decision making power is not as consensual as the name suggests. However, it is worth noting that informants reported that joint decision making promotes a sense of belonging and voices their choices. Information from household interviews showed that women implied on giving suggestions, ideas and opinions to their husbands while discussing key issues as important part of decision making. Women’s ‘little’ involvement in decision making gave them the satisfaction of shaping informed decisions made by their husbands.

Results from the study also revealed that most men and women participants did not consider domestic chores as type of work that should receive much attention as economic labour by men. This then by implication, would explain the high attribution of lack of diversified labour in female-maintained and *de-jure* female headed households. Sikod (2007: 62) stipulates that, perceptions of domestic chores/women’s work as invaluable work explains why they are seldom involved or actively participate in crucial household decision making. Ibnouf (2011) further asserts that even with key roles in food acquisition, processing and preparation, traditions still discriminate against women putting them in vulnerable positions.

Study results also indicated that intra-household food distribution is closely linked to division of labour. An Asian study showed food distribution in the households is done in accordance to perceived intensity of household roles (Harris-Fry et al., 2017). Men and boys tend to be served more food as their work is considered more ‘intense and hard’ as compared to women and girls. Harris-fry and others (2017) suggested that such assumption based on perceived roles and responsibilities leaves some of the household members with poor feeding habits and vulnerable to food insecurity particularly children and women.

Studies have shown that household headship has strong influence on household decision making on major issues including asset control, expenditure and overall access to resources (Mikalista, 2015). Current study partly disagrees with a study done in Kenya on gender inequalities in household food security, which argues that male-headed households are generally food secure than female headed households (Kassie et al., 2014). Current study showed that, female maintained households and some *de-jure* female-headed households perform better due to relaxed cultural traditions of male dominance. This validates findings of a study done in western Kenya. The study contends that enhanced status of women in decision making and access to productive resources in female-headed households improves not only on food production but also on nutritional outcomes of household members (Mikalista, 2015). However, diversification of labour in male-headed households gives an added advantage in terms of pooling resources such as income and farm work.

4.4 Intra-household resource allocation

4.4.1 Resource ownership

4.4.1.1 Asset ownership

A persons' endowment set determines their welfare in the household. Results from this study indicated that most of the valued households' assets are owned by the men. Men own land and its proceeds, as assets brought to marriage and valued animals of the home such as goats, sheep, donkey and cattle. Women own birds such as chicken and rodents like rabbits, where kept. The ownership of the birds is however, based on who brought them to the household, if it is the man, then he claims the ownership. Research results also showed that children own resources mostly through inheritance whose control particularly land is limited as they can fully own after their father's death or when issued with title deeds. Such lack or limited ownership to resources constrains one's ability in food production. A 40 year old male informant noted;

“Land is still owned by my father and he still has power over it, he can take it away from me if he wants to, since I don't have a title deed that's the only way I can fully own the land or wait till he dies.....he however has limited control on what I plant there, that's for me to decide....I am also in charge of animals and birds in my home, since I am the one who brings them” (IDI-1, Male, 46 years).

The above allocation of resources based on the traditions was reported to have implications on the welfare of some of the household members who get less or no resources. This

follows the patriarchy nature of most of African societies where men own household resources including the people in it and assumes such control suits the preferences and needs of every other member within the home. Consistent with the findings of this study, Omolo (2011), asserts that allocation of resources that assumes such a unitary household model ends up exaggerating individual versus household welfare. This is particularly the case where intra-household distributions result to one sex or age group getting less than their counter parts. In this study, Pareto efficiency is unavoidable, as women get less than men due to the strict cultural rules that often deny them the right to own and keep property either inherited or obtained during the marriage. The rights they have to use the property, and particularly the land, are while the husbands are alive. Upon the death of their spouses, women are vulnerable to eviction as they can only use and not own the land.

Women's lack of ownership of useful resource such as land and inability to make crucial decisions on land use aligns with Sen's entitlement theory. This is as emphasized by the interview below;

“Land is the main source of food here and men inherit it from their fathers and forefathers. It is for this reason that they are the only ones with control over what happens to it. We as women don't own land as we find men with it upon marriage. So they decide on all matters of land and sometimes we just give our opinions”
(IDI-2, Female 56 years).

The aforesaid sediments align well with entitlement theory which asserts that people have to own something which in times of need can be converted for use. The theory further argues that people are unable to secure food at the household level because at some point they own nothing (Sen, 1981). Despite being the main labourer's in the land from tilling to harvesting, women have limited say on what to plant, or when to sell the land or the land proceeds. It is worth noting that lack of ownership of key production resources limits food production within the households. This is corroborated by a study done in Horn of Africa which found that women produce 50% of agricultural outputs, yet only 20% own land (Copeland & Guertin, 2013). A similar study done in Kenya found that only 20.7% of women own land compared to 43.8% of men. The same study concluded that inequality in access and control of land and other livelihood resources limit food production by women (AWSC, 2014 cited in Ng'ang'a, 2015).

4.4.1.2 Human capital

Education: Education, employment and income levels of a household are intertwined and together act influence a household's capacity to influence decisions. From this study, only 10 out of the 30 informants had completed primary level education while only 4 had completed secondary level with no tertiary education reported (Table 4.1). Information from key informant and FGDs indicated that people were aware of role of education in food production and consumption. It further showed that low education levels of adult member of the household limits their access to employment which is a prerequisite for increased income/ wages which raises food purchasing power in households.

“If you are educated you have access to employment and thus you can choose what to eat every now and then but if you are not employed you will tend to eat what you can afford. So in terms of food security I can say it is affected due to low education levels here since the people do not have secure jobs” (KII, CBO, Uyoma).

Women access to education is not an indicator of equal decision making in the households, although it increases their chances of securing jobs. From the study, women indicated to have access to primary education, some secondary education and more training on food, nutrition and hygiene through NGOs, CBOs and government programme. However, in most male-headed households, men were still in charge of major decisions on food budgeting, food production and consumption patterns. In scenarios where joint decision making was reported, some women with basic education argued on just giving their opinions and suggestions and leaving final decision to the men even when they felt that they were restricted on changing diets in the household. It is also worth noting that, in most of the female-maintained households and some of *de-Jure* female headed household, women claimed to exercise freedom in utilizing nutritional knowledge they had gathered from education.

“My husband does not care what happens to ushaving no one to dictate on what I do, I would rather cook an egg for my children other than selling it because the trainings we attend to teach us on the nutritional knowledge of these foods. I will sell that egg when I have to, since they cannot eat eggs every day, they are not that good” (IDI-3, Female 44 years).

At a general level, Bashir and Schilizzi (2013) support the findings of this study by arguing that increased years of schooling are associated with improved and better employment opportunities, decision making and disposable income. In addition, education and

particularly for women increases their fallback positions in the event of socio-cultural injustices of land ownership. Education as an alternative bundle enables women to exchange and utilize their skills in influencing household food decisions through persuasion, demand or negotiations.

Mutisya et al. (2016) suggests that women education significantly changes the balance of power in the home, making women less fatalistic and giving them greater confidence to take decisions into their own hands. The authors allude that an educated woman will allocate household resources when needed to feed and care for her children, unlike their male counterparts. However, 'doing gender' as described by Mabsout and Van Staveren (2010) limit women confidence in some male headed households to make use their education to influence decision making. The aspect of 'it's a woman role or a man's role' tend to let women leave decision making to men so as to avoid the sanctions that comes with not 'doing gender'. As a result, to retain their power as household head, men also tend to force this decision on women. Therefore, the study results revealed that access to education, does not necessarily translate to improved women's welfare in the household, particularly in decision making.

Employment: The study revealed limited employment opportunities in the area with only available temporary employment opportunities such as part time work in non-governmental organizations. Access to employment was highly attributed to education levels. Informant interviews indicated that despite increased opportunities for education, low education levels were rampant due to fishing activities and early marriages in the study area. Boys left school to engage in fishing with their fathers hence missing on education opportunities. Male fishermen were reported to leave their wives and remarry or support girls along the lakes while fishing. This is a factor that was reported to not only limit women in furthering education for their girls but their food production and purchasing power. The close correlation between education and employment opportunities and their influence on foodways in the area was emphasized on by the informant interview excerpts below:

“If you are educated, you have access to employment, thus you can choose what to eat every now and then but if you are not employed you will tend to eat what you can afford. So in terms of food security, I can say it is negatively affected in this region due to low levels of education resulting to lack of secure jobs” (KII, CBO, Uyoma).

“The only people who have constant income are teachers, those working with CDC and government workers...And most of the people around, mostly teenagers and young people around depend on fishing along Lake Victoria. The reason this group is into fishing is because they didn't get proper education due to the fishing activity which is very rampant here. After getting into fishing, they then engaged into substance use such as (Bhang), (Simba WA Rangi- a current cheap brew in the market)” (KII, CAB/Opinion leader, Asembo).

Income: Study results revealed that in Rarieda sub-county, majority of the residents depend on-farm and off-farm activities for income generation. Out of the 30 interviewed households, 10 relied solely on on-farm activities, 4 relied solely on off-farm activities and 14 mixed both on-farm and off-farm activities as source of food and income (Table 1). The study found that most 4 out of 5 (Table 1) of *de-jure* female headed households relied both on off-farm and on-farm activities. On-farm activities included both crop farming (maize, sorghum, millet, cassava, sweet and Irish potatoes, mangoes, groundnuts, water melon and vegetables), cash crop farming (sugarcane and cotton) and animal keeping such as cattle, goats, sheep and poultry. Fishing and fish mongering are also ways of income generation. The income obtained from these sources was commonly used for health purposes, education, food and any emergency. Livestock and livestock products such as milk and eggs are sold in addition to the farm produce to provide surplus income for the household.

The off-farm activities, due to minimal diversification of labour, were mostly seasonal and included; selling of charcoal, selling of casual labour such ‘*Amali*’- washing people’s clothes’, farm work, cutting and selling firewood among others. Other off-farm activities included; stone and firewood selling, gold mining and selling through middle men, building semi-permanent houses and seasonal and/or government jobs. For the government employed people, some lived on a pension of about 5,000 Kenya shillings and other household income ranging between 5,000 to 10,000 shillings. For casual labourers and businesses, there was no clear cut but study results showed an average of 100 shillings per day.

Most of the households with both on-farm and off-farm income generating activities, reported to have more women in off-farm activities than men. Besides selling of casual labour, women were part time workers as community health volunteers (CHVs), traditional birth attendants (TBAs), small business owners among several others. Only few men were

in government or NGOs positions and most of them were living on pension after retirement. The study revealed that, having a source of income gave women a position to take part in household decision making on education, food purchases or on-farm food production activities. In addition to giving suggestions, opinions and ideas on household food expenditure, women reported independent decision making on income usage on either changing household diet, taking a child to school or buying farm inputs. In most of the households with both off-farm and on-farm sources of income, women were reported to have a higher say in food production and consumption compared to only on-farm income households where women were high economic dependent on the men.

Social groupings and networks formed by friends or neighbors serves as a backup source income and total welfare improvement, when on-farm and off-farm activities are insufficient or unavailable. In the study area, these groups (merry-go round and table banking) are rampant among the middle aged women and serve as backup for food acquisition, payment of school fees and hospital bills when the household is in worse situations.

The above findings compare to a study done in Ghana that found out that poverty situation in households is aggravated by, besides land sizes, climate change, household composition, household's reliance on one source of income (Owusu et al., 2011 cited in; Osarfo et al., 2016). Off-farm activities provide fall back positions for household members to ensure their food acquisition and consumption. This position is supported by Fox (2015), a research study which asserts that households that combine off-farm and on-farm income generating activities adapt better to livelihood shocks. They also have an improved capacity to suave their income and household consumption patterns.

The findings of this study are partly contrary to findings from other studies which indicate that *de-jure* female-headed households without support of husbands have no off-farm income (Bjornlund et al., 2019). It however the current agrees with the previous study on such households having fewer labour resources. Maximization of income through division of labour is limited as these households tend to have mother or grandmother and children, and hence seasonality of the off-farm activities puts them at a disadvantages position. Decisions are made fairly or rather the woman has the sole decision making unless the

elderly children contribute to household income. Their improved access to off-farm activities not only improves their food production but also on food purchases choices.

The partial contribution of decision making by women validates findings of earlier studies (Antman (2014) as cited in Guvuriro &Booyen, 2018) that a household spouse (spouse to the household head) has higher chances to be included in decision making when she has an income generating activity. Joint decision making is very common among these spouses. However, information from this study showed that, as much as rules of patriarchy and socialization process limit women participation in decision making, improvements are witnessed in terms of negotiation and persuasion powers when endowed with income as a resource.

4.4.2 Access and control over resources

Food acquisition and consumption at the household level largely depends on individuals' entitlement mapping, norms and values that determine access and control over vital productive household resources. Study results through informant interviews revealed somehow equal use rights of resources between men and women. Both men and women had access to household resources such as land, livestock and poultry. Women would access the farm freely to till, plant, harvest and use food from the farm for family consumption.

However, the type of herds or poultry to keep was a male dominated sphere. Decisions on whether to slaughter an animal or sell it or lease land to improve on food availability or purchasing power or any emergency was a man's decision. The proceeds of the farm were largely controlled by men and in most cases women were given a budgeted amount for household expenditure, particularly the young/newly married. This is as emphasized by the interview excerpts below:

“You find that a woman owns the chicken but now as to whether the eggs are sold or eaten or the chicken is eaten or sold comes from the man of the house. You have to ask for permission if you want to prepare an egg or chicken for your children. In some of the households, but not all, but most of them, men decide on what is to be grown in the Shamba and what happens to farm produce and its proceeds” (KII, FBO representative, Asembo).

Land is a powerful resource not only as a key determinant on food availability and access but also on income generation. The current study revealed that men had highest access to land through inheritance, hence giving them primary rights over it. Women, access to land was based on secondary rights, majorly obtained through marriage and somehow through purchases for women with individual access to income. Access to land was compromised for the women once the husband died and this was open to wrangles to male relative wanting to control the land, an aspect that put such *de-jure* female-household at vulnerable positions in terms of food production.

In support of the above, results from this study also revealed that control over resources is highly associated with ownership and position held in the household. Men, as land owners made major land decisions such as; what to plant, farming techniques, leasing or selling land, selling farm produce as well as livestock to be reared. Besides, ownership, control over resources by men was on their hierarchical positions as household heads. Information from household interviews showed that household heads are held with high regards and respected for their perceived knowledge as leaders and making sound decisions, besides being legal owners of such resources. It is worth noting that women felt such ultimate control affects household consumption and budgeting attributing this men prioritizing use of the proceeds for individual gains other than the needs of the household. This is supported by the interview excerpts below;

“Men as household heads have what it takes to make good decisions. They have the last voice when it comes to land because women found them with possession of the land before marriage. It is the men who decide whether to sell the land or lease it and use the money as they please...” (FGD-6, mixed group, 35+ years).

“Men decide on what is grown in the Shamba, unless in female-headed households. The men mostly decide on this because they own the land ‘You came from your home to mine, so land is mine and whatever is grown is mine-even tilling’-” (KII, CBO, Uyoma).

From the study findings, bargaining power of women does not necessarily increase with access to land as they have little or no say to what they produce. Their decisions are limited to selecting food for daily consumption as well as attending to labour requirements of tilling the land, planting, weeding, harvesting and tending to livestock. The current research results validate findings on an earlier study by Bomuhangi et al., (2011) which postulates

that land, even for women, is not legally titled hence, the full lawful bundle of rights to sell, inherit or control its use is held by the men, through social norms and cultural dictates.

The research results on control over resources also resonate with entitlement theory on entitlement failure as an enabler of poor food access and utilization. In spite of women having access to productive resources such as income and education, the ability and the extent in which they can convert such into food or improve on their household bargaining ability is thwarted by existing social and cultural construction of gender. An Ethiopian study on women's bargaining power (Mabsout & Van Staveren, 2010) posits that even when women have access and command over household and individual productive resources, such have little or no impact on their overall welfare and decision making. In this study, entitlement failure is as a result of strict rules of patriarchy adhered in Rarieda sub-county.

Further, on entitlement failure, the study revealed that women were aware of the massive role they play in household food production compared to men. Women reported to be aware of their rights in decision making but even with such knowledge, they agreed to take back positions allowing men to make major decisions even when such did not favor total household welfare. It is also important to note that men acknowledged the pivotal role of women in food acquisition through social networking groups, sell of casual labour, small business as well as on farm activities. However, they argued that women had to be supervised and kept in their own place, otherwise men would lack respect in their own households. This is as evidenced below;

“We know we should make mutual agreements with fathers because they have limited contribution to farm work and the produce....but you know they are our husbands, and if you are seen to impose your things on them then you are told you are disrespecting them as heads. So we have to let them decide and just do what we do as women, support them as our husbands. We are used to doing as told anyway”
(FGD-1, female group 35+ years).

The study findings corroborate findings of a similar study done by Mabsout and Van Staveren (2010) which found out that ‘doing gender’ was the leading cause of entitlement failure and especially among women due to socialization process. The authors define doing gender as norms and habits instilled during childhood that determine womanhood and manhood of boys and girls as they grow up. They further stipulate that such disfavors some

household members, particularly women through strict patriarchy and reaffirmation of power structures (Mabsout & Van Staveren, 2010). Information from household interviews and focus groups discussion from Rarieda study reaffirms this position by arguing that, through growing up being told ‘it is a woman’s job to care for everyone in the family’ women find themselves taking up men’s role of provision and combining the same with reproductive roles without complaining. People are judged internally and externally through ‘doing gender’ and for this particular reason, women are put in situations of diminished decision making power hence individual or household food insecurity due to restrained bargaining agency.

Similar to this study, Harris-Fry et al., (2017) found that the restrained bargaining agency through and in doing gender limited the extent of freedom of particular members of the household. In the current study, women were vulnerable in securing food for their households or distributing the little available food equally or equitably. Despite increased awareness on nutritional value and repercussions of low quantities of food to a child in the study area, more food was served to the husband and the woman lowering her quantities so as to serve her children some reasonable amount. This concurs with an Asian study by Harris-Fry et al., (2017) which found out that women were disadvantaged against food distribution within the households as they ate last and the least amounts particularly on the prestigious and high-nutrient foods. Such was attributed to the assertion that women in the region view their men as their gods and as deserving to be served first and the best share.

The findings of this chapter speak to internal influencers of food availability and sustainability of the same through the tenets of the entitlement theory used in this study. Endowment set recognizes that a person has to own something. Entitlement mapping, the second tenet that implies that a person has to have right to convert that something into food. From the study findings it is evident that most of the important household resources are owned by men who in most cases tend to prioritize their needs over the household. Marriage does not increase the rights a woman has over the land other than use, and in the event of death male relatives start to reclaim the land. This results to the failure of the produced-based entitlement hence increasing chances of food unavailability through production despite agriculture being the main livelihood activity. Hence, there is a need on

improvement on the property rights for women in the area as indicated by recent studies that women's land access and ownership increases the chances of food acquisition as well as their say on major household decisions (Allendorf, 2007; cited in Doss, 2013).

Men dominate most of the important decisions within households of Rarieda. Food budgeting and expenditure patterns are highly affected especially during drought season when there are low-yields from the farm that can not only sustain the household nor be sold to provide food items. FAO (2011), notes that, where men are the major decision makers, women hold subordinate positions in terms of negotiations about supervision of household resources. This is an indication that women cannot make independent decisions on food acquisition activities contribute to household food security situation. There therefore a need to encourage women and men in the study area on the importance of improved bargaining agency within the home and how that contributes to improved food security situation. This can be done through community dialogues and sensitization programmes.

CHAPTER FIVE

SOCIO-CULTURAL DRIVERS OF FOOD RULES AND THEIR IMPLICATION ON HOUSEHOLD FOOD SECURITY

5.1 Introduction

This chapter focuses on the socio-cultural drivers of food proscriptions and prescriptions of a people's foodways and their implications on household food security. The chapter is divided into two major parts; the socio-cultural drivers of food proscriptions and prescriptions and the implications of such food rules to household food security. Discussions of the above sub-topics are also presented in relation to relevant literature.

5.2 Socio-cultural drivers of food prescription and proscription (food rules).

5.2.1 Luo customary food and food practices

Findings revealed that foods that form common diet for the people are locally available, supported by local climate and peoples' preferences. The most traditional food crops grown in the study area are: cassava, beans, groundnuts, millet, sorghum, maize (though recently affected by long droughts). Traditional vegetables such as '*Atipa*', '*Dek*', '*Mitoo*', '*Boo*' Nand '*Osuga*' (refer glossary) are commonly grown in the area. Ugali, locally known as '*Kuon*' is the staple food for the people in the region. Ugali is the culturally acceptable food for the Luo people and anything else is considered a snack. Typical Ugali consumed in the area is prepared from mixing either, maize flour or a mixture of millet, cassava, sorghum flour mixed with boiling water. It is commonly served alongside either the traditional vegetables, fish or sour milk.

Porridge, locally known as '*nyuka*', is another staple food consumed by Luo people of Rarieda sub-county. This porridge is prepared traditionally from a mixture of sorghum, millet and cassava flour or a mixture of millet and maize flour. For infants and children, more ingredients (beans, ground nuts and '*Omena*' depending on caregiver preference) are added to make it suitable for growth and development and prevention against diseases. Porridge still remains the main meal for babies and children in the area. A mixture of boiled maize and beans (*Nyoyo*) is another traditional yet common meal in the region. Study findings showed that it is consumed alongside traditional porridge especially after a hard

day at work, mostly in the early evenings or midday. This food, regardless of the quantities served, it is not considered a complete meal.

Customarily, meals patterns among the community have always varied from four to five meals a day, with three main course meals. From the findings, the first meal in most households is breakfast which comprises of porridge and previous night's leftovers of Ugali or sweet potatoes a heavy breakfast taken between eight and nine o'clock in the morning. It is also taken at noon and late afternoon with *Nyoyo* (refer glossary) while people are working. The evening meal comprises of Ugali and any other accompaniment. Porridge is taken after this meal, commonly by the elderly members in the household. The study found out that, any other meal served at night instead of Ugali was and is considered incomplete (*Mihadho*) by the community.

Food preparation and distribution within the household is and has been, for a long time, a reserve for women. Results from this study indicated that food has been served in accordance with age and gender roles or norms. Maleness is associated with heavy work and therefore, receiving bigger portions compared to their female counterparts. Based on their age, children are served smaller quantities of food such as a lot of chicken soup and wings. Women, in connection with food preparation and caregiving roles have been assumed to be the best people to serve food and best suited in knowing the food needs and customs surrounding food allocation. The above is emphasized by the discussion excerpt below;

"It will depend on the type of jobs that these men and women do. For instance meat is served in small portions to girls because they are believed to be doing lighter duties as compared to men. Men are assumed to work hard traditionally hence they need more food as compared to women who are assumed to perform home tasks which are seen as lighter duties. Even if they went to the farm and did similar tasks man is still assumed to have worked more in the farm than the woman hence he will still be served more food than a woman (FGD-5, Mixed group, 18-34 years).

Sharing of meals and with whom, remains very significant in terms of social relations and statuses among the people of Rarieda. Evidence from the study results indicated that a visitor cannot be served the normal meals people have in a typical day and if that happens, it is expected that he or she will feel disrespected and hence badmouth the household in the neighborhood. Chicken remains a food prepared for the visitors as it is seldom prepared

within the household on a typical days and this presents a chance for a dietary change for the rest of the household members. This is emphasized by the FGD excerpt below;

“Visitors increase the number of times we eat, they are also responsible for our change of diet. Visitors cannot be served sardines, they will disrespect you ‘when I visit so and so, she just cooks for me sardine’ is what they say once they leave”
(FGD-6, Male group 35+ years).

A key informant emphasized on this position by arguing that such foods do not only propel social relation in the society but also family bond and reputation. This is as stated;

Here, chicken is considered a food for the visitor. Visitors are not served vegetables. If my sister comes here and I serve her vegetables, she will go back home and destroy my name; ‘I went to my sister and she served me vegetables yet she has chicken’. That same day, everyone in the household eats chicken including the children **(KII-CHV, Uyoma).**

The findings on the cultural and social identity from cultural foods of the Luo are not unique. Research studies show that Ugali is and has been a staple food for the Luo (Clinton et al., 2018; Pascal, 2012; Mboya & Achieng, 2001) which has to be served with fish, sour milk or the local vegetables. Similar to this study, Mboya and Achieng (2001) found that any evening meal without Ugali was considered an incomplete meal, locally known as ‘*Mihadho*’ (refer glossary). Some of these incomplete meals are in instances considered as snacks.

Denney et al., (2014), similar to the findings of this study, postulates that the supposed value of different types of work and responsibilities for different for household members inherently determines who should eats what, when and what quantity. This is also emphasized in recent research works that men and boys are customarily associated with heavy tasks.

According to Kittler et al., (2011), a meal is used to define boundaries of social interaction. Pascal (2012) corroborates this by arguing that among the Luo, food is a communal resource and any form of selfishness is managed through social sanctions. Expressions such as ‘aching stomach’ or ‘the red stomach’ are used on stingy people. By sharing a chicken with the visitors or slaughtering an animal for the dead, households conform to the Luo norms of oneness and shared responsibilities.

5.2.2 Shifts in dietary behavior

The dynamic nature of culture and societies makes change in dietary behavior inevitable. The findings revealed a massive decrease of consumption and in some instances, total abandonment of the traditional foodways. Even though Ugali, still remains a staple food in the region, the processing of the flour and preparation has changed. The accompaniment is also changing from traditional vegetables to modern vegetables like kales and cabbages. Information from household interviews showed that fish consumption, although a highly valued food, has reduced due to climate change, population increase and increased prices. Other traditional foods gradually disappearing in the region include; cassava, pumpkins, mangoes, sorghum as shown in (Table 5.1).

“In the past people used to grind cassava, millet or sorghum in the mill or mortar to make flour. Those things are not available these days, we have to buy or take it to the market for the same purpose. It is easier to get the one in a packet” (IDI-4, Female 30 years).

Modification of existing traditional foods into ‘modern forms’ is a contributing factors to change in dietary behavior in the region. Study findings showed that ‘*Nyuka*’ a traditional porridge in the region is slowly disappearing as the mixture of flour originally used (cassava and maize or sorghum, millet, beans, ‘*Omena*’ among others) is industrially processed and packaged. Emergence of other processed varieties like ‘*Famila*’ made from millet or sorghum have replaced the traditional flour. Ugali is no longer made from stone pounded maize flour or sundried cassava but industrially processed and packaged flour. Based on information from informant interviews, it is worth noting that already packaged flour was reported to be easier in terms of physical access and time consumption.

Results of this study showed that is introduction on new foods in the region has contributed to shifts in foodways of the Luo people of Rarieda Sub-County. New foods introduced in the region through industrialization, globalization of food and exposure to other cultures include: Kales, Irish potatoes, packed/canned foods, grafted fruits, hybrid cattle and goats, pig-weed, Sossi soya, spaghetti, cabbage and carrots are the new foods commonly consumed in the region (Table 5.1). The economical affordability, physical availability and stable supply were reported to alter the behaviors of food providers and preparers. A specific attention was drawn to behavior change of modern mothers as shown below;

“The meat-like (Sossi soya) that are bought from the market are very common with the young mothers of today. There are very many meetings (merry-go-rounds) that have cropped up in our society today and mostly these mothers are talking about are involved. So in order for them to attend all these meetings in time and avoid the fines, they look for easier meals to cook. These things are also cheap for them, one packet costs 30ksh, they need to add one tomato worth 10ksh and make Ugali for the children. They come back from those meetings very late at night and to attend to these children they make easier meals like Sukuma wiki and Ugali, look at this diet my friend. I don’t even know if they have to cook food to its ready state (KII-FBO, Asembo).

Table 5.1: Summary of major dietary shifts in the study area

New foods	Extinct foods	Disappearing	Reasons
Sossi soya	<i>Nengu</i>	Cassava	- Changing gender roles/household structure
Soya milk	<i>Adel</i>	Mangoes	
Pig-weed (<i>Amaranthus</i>)	<i>Okunga</i>	Pumpkins	
Spaghetti	Lung fish	Sorghum	- Education & Exposure
Hybrid cattle and goats	<i>Sirwa</i>		
Grafted fruits	<i>Suma</i>		
Cabbage	<i>Oyom</i>		- Weather changes
Carrot	<i>Ndero</i>		
Kales	Natural oils		
Pepper/royco/coriander	Milk		- Overall lifestyle change
Irish potatoes			
Packed food/canned foods			
			- Increased population size

Source: Field data

Climate change and reduced land sizes were among the first ranked causes for the shifts of diet and disappearance of the local foods in the region. Cassava, beans and maize, staple foods of the people in the region, were reported of low production due to unpredictable rainfall patterns. Small land sizes due to increased population and the rule of primogeniture play a role in low farm production. However, the findings indicated that population increase and industrialization have more adverse effects on dietary change than just poor farm produce. A key informant accentuated on the adverse effects as per below interview;

“...Yes, there are some kinds of fish we used to eat in the past but they are no longer available in the lake: ‘Ningu’- a type of fish which was very nutritious but today it is not there due to water pollution from the industries

and other human activities. 'Adel' and 'Okunga' all due to water pollution. These were good for both adults and children. You can get some species towards Tanzania though in very small quantities” (KII-CAB/Opinion leader, Asembo).

Findings on influence of education, overall lifestyle change and modern technology on foodways showed a change and replacement of traditional food preservation and processing techniques. Information from household interviews showed that milk was preserved by mixing with urine from an expectant cow to prevent worms from invading the stored milk, making it last for over a month without spoilage. Informants reported to have low milk supply due to among other factors, inability to store it for a long duration. A common meat delicacy among the Luo in the study area, called 'Aliya' (refer glossary) is rapidly disappearing. This meat was preserved through intense drying. However, the traditional preservation mechanisms have been replaced by modern technology, refrigerators, which is expensive and owned by few people. This is as supported by the following interview excerpts;

“Traditionally, meat was preserved either using honey or drying to make 'Aliya'. For 'Aliya' the slaughtered meat was first air-dried or sun-dried by hanging on the roof. Salt was then added to drain all the liquid hence preventing meat from decay. Dug was put in huge pot called 'dege' and the meat added. The pot was then covered and this kind of meat is called dug-'aliya'. People now use refrigerators” (IDI-2, Male 80 years).

“Milk today is mixed with chemicals that the white people brought here then it is packaged. In the past, we preserved milk using cow's urine from cows not being milked, preferably pregnant. Such milk was stored in a pot or gourd called 'da kol' which was rinsed using the urine and upon drying, milk was poured. For fermented milk, urine was mixed with milk. Urine was to prevent worms from invading the milk and hence making it stay longer, even for a month” (FGD-6, Mixed group 35+ years).

A positive shift was associated with education and exposure to other cultures as evidenced by the interview excerpt below;

“Education has influenced people in this region to start trying new foods and abandoning the old foods which they feel are not good.... This happens mostly when we send children to school who come with new trends...we also attend academic seminars. It is good as it prompts us to eat a balanced diet, unlike before” (FGD-4, Male group 18-34 years).

An interesting aspect that emerged as contributing to dietary change in the region is time. Customarily, women are the food processors, preparers and food distributors within households in the area however, findings showed that the rise of female-headed households and increased women involvement in off-farm income generating activities affects meals and meal patterns in a household. These changing traditional gender roles implies that there is barely enough time to acquire the traditional foods, process and prepare accordingly. It is worth noting that preparing adequate and acceptable meals in terms of quality and quantity, requires time to choose, process and prepare. Method of food preparation (gas, firewood, electricity) affects the intensity of cooking with an overall implication on nutritional quality of the end product.

“People want something that can cook fast. People have modern ‘Jikos’ that cook Ugali and vegetables all at once and just for a few minutes. That kind of cooking is what people are after nowadays. Traditional vegetables require much time and cannot be prepared that way” (KII-FBO, Asembo).

“Most of the time mothers are not at home. Even those with infants or small children, they have small businesses they run. Others have to sell casual labour or leave home to search for food, especially when the men do not provide. Children are left with their elder siblings or grandmother, and if the grandmother is not in a position to find any other food item, children end up eating porridge the whole day. When mothers come back in the evening, due to exhaustion and limited time, they end up feeding children the remaining porridge and putting them to bed” (KII-CBO, Uyoma).

These findings corroborate a report written on the decline of fish stocks in Lake Victoria (Ojina, 2017) which emphasizes on industrial and human pollution in Lake Victoria which render its waters unsafe for breeding and support for aquatic life. To meet industrial needs, overfishing has also led to the extinction of some fish species hence taking away one of the cultural foods of the people. The state of lake water affects fish stock mass, composition of species, productivity, stability and the physiological conditions of indigenous species and the Dagaa species (Ojina, 2017).

Globalization brings about a paradigm shift of food as a means of socialization to the commodification of food. Earlier studies record similar findings that people are easily moving from the unprocessed traditional foods and food knowledge to industrial goods and traditional food processing and manipulation into desirable qualities is often overlooked as people want easy, convenient, cheap and trendy (Sobreira et al., 2018; Rodriguez et al.,

2016). Sobreira et al., (2018) asserts that such transition results to limited dietary diversity as well as low quality staple foods. This results to not only negative food and nutrition security implications, but loss of traditional and cultural food knowledge and practices (Sobreira et al., 2018; Rodriquez et al., 2016).

Findings from previous studies are corroborated by our study findings in that the availability and/or the unavailability of person in charge of preparing meals has a significant role in diet change. Devine et al., (2003) as cited in National Research Council (2013) asserts that female-headed households are prone to time poverty. In such households, women bear the burden of balancing the economic role of provision and caregiving roles through provision and other domestic chores. In addition, National Research Council (2013) claims that the amount of time spent in preparing meals in a household is influenced by myriad factors. These factors include division of labour, income and household composition. Hence, this study, in agreement with the above studies concludes that time is a valuable resource in determining a choice of a meal, meal preparation and whether it is home-made or ready-made from the markets.

5.2.3 Food prescriptions and proscriptions

Cultural rules and classification of food in the form of food proscription and prescription govern how food is acquired, selected, prepared, distributed and consumed. Findings from this study categorized food proscriptions and prescriptions in terms of the different states and stages of life, age and gender, religious beliefs and practices as well as occasions and traditional ceremonies that endorse or enhance social networks with animal source foods (ASFs) being the most proscribed (temporary/permanent) foods.

States and stages of life

Pregnant and breastfeeding women: The study revealed that different states and stages of life exposed women and children to temporary or permanent food prescriptions and proscriptions. Specifically pregnant women were more prone to transitory food prohibitions than the prescriptions. Findings on food prescriptions revealed that pregnant women were allowed to eat family foods such as; Jute mallow which is believed to smoothen digestion

for the mother, which is ultimately, is good for the growing fetus and fish especially Nile perch which is associated with giving birth to a clever child.

Findings also showed that eating in extremely low quantities or total avoidance of some foods such as Avocados, eggs, bananas and sugarcane (Table 5.2) is a common food belief among the Luo of Rarieda Sub-county. Informants reported that these foods are ‘too strong’ and ‘too heavy’ hence make the fetus grow too big and fat bringing complications to the mother during delivery. This is evidenced by the interview excerpt below;

“.... Avocados and eggs have prohibited here. People here be like ‘you are taking these foods in this state, wait till the delivery time and you will see fire’, such statements make people refrain from eating such foods...”

INT: Is there truth to this?

Oh yes, this is very true actually you know avocados and eggs just are too strong and add more fat to the body which are consumed by the fetus and considering the size of the birth canal then it becomes difficult” (KII, FBO, Asembo).

A community health volunteer further added that such prohibitions are also to protect the fetus against harm and negative health effects. For instance, eating eggs and sugarcane during pregnancy are believed to slow speech for a child once born or a child to have skin rash or be ‘dumb’ with overflowing saliva respectively. This is as shown below;

“Pregnant women are not supposed to eat eggs, if they do they are told they will give birth to dumb child. They are also told not to take bananas in large quantities as they will make the baby too big” “Again, sugarcane is also prohibited as it is said that the child will have overflowing saliva through his mouth all the time” (KII, CHV, Asembo).

Beliefs surrounding death and bearers of life showed that pregnant women are not allowed to consume dead carcass of a pregnant cow or a deformed animal as it can lead to a miscarriage, death after birth or giving birth to a deformed child due to consumption of aforesaid animals.

“For the Luo people, a pregnant woman is not allowed to eat a carcass of a pregnant cow regardless of the cause of the death of the animal. I did not ask my grandmother why this was the case. Well in my opinion, the pregnant cow died while pregnant and probably during delivery, this woman is also pregnant and will also deliver, what does that tell you? That is she eats the dead carcass the same fate is likely to befall her” (KII-FBO, Asembo).

Results from this study showed that several foods, especially locally produced vegetables; ‘Mchicha’, ‘Apoth’, ‘Atipa’ (refer glossary) and green peas (Table 5.2) were the most prescribed foods for breastfeeding women. These foods are associated with high milk production sufficient for the baby and energy restoration for the mother.

“Chicken is preferred for the nursing mothers. Traditional vegetables are also included because they prevent them from acquiring some diseases. Meat is preferred for energy restoration although it is not easily available” (FGD-4, Male group 18-34 years).

The only reported prohibited food for this group was cow peas leaves (Table 5.2), as it was believed to dry up milk production from the mammary glands.

Age: Findings from this study showed that most food prescriptions for babies and children were on promoting good health, proper growth and development as well as protection against evil eye and diseases. The most common prescribed foods for babies (from two weeks after birth) were diluted cow’s milk, mashed potatoes, and Avocado as well as jute mallow (Table 5.2). The common belief for the early weaning is that these babies are not satisfied by breast milk as their mothers are assumed to starve them, especially by the grandmothers. Jute mallow and a special porridge (mixture of pounded beans, millet, maize, groundnuts and cassava) are the most prescribed for all the babies and children as they allegedly very healthy foods, ensures proper growth and prevents against diseases. This is emphasized by FGD excerpt below;

They can be fed on smashed avocado and bananas, milk is mixed with a little water, porridge flour is also mixed with water then sieved. Babies are fed on these for a while....they are not given eggs because it makes the tongue of the baby heavy for speech and meat because their intestines are not yet developed to digest meat (FGD-4, Male group 18-34 years old FGD).

A key informant also stated as follows;

“If we want the children to grow very fast, we give them ‘Mrenda’, ‘Omena’ soup, and a special porridge (mixture of pounded cassava, millet, beans and ‘Omena’). This kind of porridge has a foul smell when cooked due to the mixture and so if not introduced early to the children then they tend to refuse eating it” (KII-FBO, Asembo).

Immature digestion system and protection against harm (choking) were reported as the most key factors for prohibition of ASFs such as meat and fish for babies and children

under the age of three. So while the rest of the household members ate fish or meat, either a separate meal of vegetables or soup is served to this group of people. Eggs, although served to children above three years, they are prohibited for babies as are believed to slow their speech (Table 5.2)

Table 5.2: Food prescriptions and proscriptions for different states and stages in life

Category	Food type	Reason (s)
Food prescriptions		
Pregnant mothers	Jute mallow (<i>Mrenda</i>)	Smoothens digestion for the mother which is good
	Fish (Particularly Nile perch)	Associated with giving birth to a clever child
Lactating mothers	Green peas- <i>Ulayo</i>	Believed to increase breast milk supply
	Mixture of <i>Omena</i> and milk	
	Jute malow (<i>Apoth/Mrenda</i>)	
	<i>Mchicha</i>	
	<i>Atipa</i>	
	Cabbage	
Babies 3 years and below	Diluted cow milk, sieved porridge (Mixture of <i>Omena</i> , millet, sorghum, cassava, maize, groundnuts and beans flour), mashed potatoes/Avocado/ bananas	Easily digestible considered as ‘soft foods’
	Jute Mallow (<i>Mrenda/Apoth</i>)	
Children over 3 years	Head of a fish or chicken	The children will be clever
	Chicken ribs/wings/necks/legs	The other parts are meant for the man of the house
	Jute Mallow/porridge	Prevents children from diseases/ promotes good
	‘Omena’ soup	Promotes fast and healthy growth
Food proscriptions		
Pregnant women	Carcass of a pregnant cow	Associated with miscarriage or the death of the
	Sugarcane	The baby will have overflowing saliva throughout
	Bananas	Makes the fetus big which can bring complications during delivery
	Eggs	
	Avocado	Contain a lot of fat and oils
Breastfeeding	Cow peas leaves	It dries up milk
Babies	Eggs	Delayed speech or teeth cannot grow
	Meat and Fish	The babies will choke due to immature digestion

Gender

The study results revealed differential food prescriptions and prohibition for men and women and mostly from foods of animal origin (Table 5.3). Findings showed that for prestigious foods like chicken, certain parts were only made for the men as sign of respect. Women, girls and children ate the less prestigious parts like the neck, wings, legs and soup with the allegation that if they ate parts such as the back of a chicken (*locally known as Sundu*) or the gizzard, they would die or their backs would break. Customarily, women are not allowed to eat chicken and eggs as it is said that they finish eggs hence thwarting production process. This is indicated by the interview excerpt below;

“Women are not allowed to eat chicken and eggs. In the past, people felt that chicken rearing would not be maximized because women, who rear them, like eating nice things. They argued that a woman wouldn’t want to eat vegetables, while there was a chicken available. Given such freedom, a homestead would be left with no chicken”. (IDI-5, Male, 80 years)

In a focus group, both men and women confirmed this belief as indicated in the interview extract below;

“In the past women were not allowed to eat any chicken parts, and there was a reason behind this, women could eat the chicken including the eggs, there’s no one who has cravings such as mothers. That is why chicken are few nowadays and in the past it was plenty” (FGD-6, female participant, mixed group, 35+ years).

Based on traditional beliefs of ‘who should be strong’, study results revealed that women and girls are prohibited from eating foods such as Rabbit. The rabbit is believed to have lot of blood which allegedly makes women and girls, who are also believed to have a lot of blood, very strong. This is as accentuated by the interview below;

“Rabbit was not eaten by both the girls and the women. It is because rabbit has a lot of blood and girls were assumed to have a lot of blood so mixing the two would make the girls very strong” (FGD-4, Male group 18-34 years).

Study results revealed temporary gendered food restrictions for men/boys and women/girls. Girls specifically, were prohibited from taking the head of a fish as it is considered as the sweetest and the hardest part to consume. However, this part is consumed by adult men and adult women in the absence of the men. Young boys who are herders are

allowed to eat ribs of goat or cattle but not grown men. They are also prohibited from taking cows tongue but can eat this as grown men.

“Young boys were not allowed to eat the tongue of a cow but upon reaching adulthood then they can eat it. Some parts of chicken are not eaten by young boys but upon attaining adulthood then they can eat it (FGD-4, Male group 18-34 years).

Table 5.3: A summary of food prescriptions and proscriptions by gender

Gender	Food type	Reason(s)
Food prescriptions		
Men	(<i>Sundu</i>), drum stick, gizzard	Always been reserved for men as a sign of respect
Women	Chicken ribs, wings, neck, head, and legs	The rest of the parts are meant for the men and if a woman eats they will be denying men their rights. She might die
Girls	Kidney (cow)	No specific reason it is just designated for them
Food proscriptions		
Men	Catfish	Upon circumcision (where practiced)
Women	Some parts of the Squirrel	Male elders found out that chicken is a Results to death
	Rabbit	Rabbit has a lot of blood and so are women and girls, mixing the two will make women and girls very strong
Girls	Head of a fish	Reserved for men, if not eaten by the elderly women as sign of respect.
	Rabbit	Rabbit has a lot of blood and so are women and girls, mixing the two will make women and girls very strong
Boys	Cows tongue	Eaten by adult men only

Source: Field data

Similar to the findings of this study, a study done in Kenya among pregnant women in Kalenjin community established that eggs, bananas and Avocados were strong food items, believed to make the fetus grow excessively big and result to complications during birth (Riang’a et al., 2017). General mother and child health protection and child/baby welfare

emerged as two important aspects these food proscriptions for pregnant and lactating mothers in Rarieda. The primary reason for this prohibitions is to ensure that both the mother and the child do not go through any harm. A study in Zambia established that physical malformation and mental abnormality of the unborn children was the greatest fear among the Zambians (Malmbolwa et al., 2003; cited in Riang'a et al., 2017).

In comparison with this study findings, studies done in Gambia and Ethiopia established that cultural food prescriptions or proscriptions of breastfeeding and pregnant mothers are all wired towards protection of the total well-being and health of the mother and the child before and after birth (Perez & Garcia, 2013; Zepro, 2015). Such food rules can, however, affect the wellbeing and overall health negatively especially when the diets of these groups of people continuously lack key nutritional components such as fats and proteins, as is the case in the study area where most of the prohibited foods for these group are proteinases foods.

The above findings realigns with a similar study in western Kenya by Oniang'o and Komokoti (1999 cited in; Edelstein, 2010) who reported that some communities in western Kenya have traditionally inhibited pregnant women from eating eggs even when in plenty. The authors noted that traditionally, chicken meat is reserved for men and visitors in these communities while also arguing that there would be no chicken if women and children were allowed to eat eggs.

Religious beliefs and practices

Religious beliefs and practices promotes consumption of specific foods particularly in religious related events that require food rituals. From undisclosed denomination, the study revealed that during baptism and birth of a new baby, a sheep has to be slaughtered for cleansing and incorporating the members to the church. Further, in event of death of a husband, foods such as '*Mitoo*' (refer glossary) and chapatti are prepared while the wife to the dead is shaved and cleansed using the aforementioned foods. After, the foods are shared strictly between the church members and the bereaved woman. This is as noted by the interview excerpt below;

“Chicken and sheep are most preferred when a child is born or during baptism. These two are associated with sacrifices, rituals and for cleansing these members before they become part of us” (FGD-5, Mixed group 18-34 years).

Religion and religious beliefs have a bearing on food rules of what is considered edible or inedible among the Luo of Rarieda sub county. Information from informant interviews and FDGs showed strict adherence to church and biblical teachings on food choice. For instance, members of seventh day Adventist (SDA) a dominant religion in the region, reported that they are prohibited from eating fish with no scales and fins, herbivores without cloven hoof (donkeys and horses) and rodents such as rabbit. Members of Lergio Maria church also reported food restricted such as eating goats, Nile perch, ‘Omena’ and cowpeas leaves. Informants reported that whoever defies such is detected immediately and warned. This is as accentuated by the interview below;

“For the church there are foods written in that bible that are not supposed to be eaten. We are not supposed to eat duck or turkey because their legs are crossed together. Donkeys are wild animals that are not supposed to be eaten. There are also some fish that we are not supposed to eat, those with no scales” (FGD-6, Mixed group, 35+ years).

It is worth noting that such religious beliefs and practices focus on purity, danger, palatability and profanity of such foods. These findings are in tandem with recent studies (Moskala, 2011; Davis, 2017) which posits that the eleventh chapter of the book of Leviticus of the old testament of the bible, serves as a form of teaching to the man that everything good should be reflected on before consumption. Further, Asi *et al.*, (2018) and Davis (2017) postulates that, food proscriptions that are God-given either through guidelines or commands serve, in part, to protect humans health-wise and guard them from evil. The author further argues that, those who defy the God-given guidelines suffer emotional consequences which are identifiable to the rest of the group members.

Rites and rituals

Traditional celebrations and occasions demand a change of typical daily meals and meal constituents. During burial ceremonies among the Luo of Rarieda, a cow must be slaughtered if a woman dies and a bull slaughtered if a man dies. Besides it being a sign of respect for the deceased, such foods serve to unify people in the community. If the slaughtering is not done, it was claimed by the informants that the dead comes back in form

of spirit to complain. Furthermore, research results indicated that other special foods are also prepared in such events; chicken for brothers if the deceased is man. This does not happen to the sisters, if the deceased is a woman.

“We have always done ceremonies for the dead here, if a man dies an oxen is slaughtered and for a woman a cow is slaughtered” (KII, CAB/opinion leader, Asembo)

The study revealed that different occasions promote consumption of temporary prohibited foods and promote prohibitions of every day consumed foods. Data from the study participants indicated that ‘Omena’, a daily delicacy and a food considered of low status is not prepared for visitors or during celebrations such as funerals as it is regarded as a sign of disrespect for the dead and visitors.

“Pork and ‘Omena’ are not prepared in funeral ceremonies or for visitors as they are considered to be food of low value” (FGD-5, Mixed group 18-34 years).

“If they are female visitors you look for meat and fish. If they are male you look for meat, fish and chicken. Because they are men...Yes. Because they are mothers (laughing)” (IDI-6, Female, 71 years).

In addition, the study also revealed that food taboos observed in the event of a visitation by an in-law a mother-in-law cannot prepare food for her son-in-law particularly chicken which she cannot eat in the presence of her in-laws. Other foods not to be served to the in-laws are such as sardines and duck. The duck is prohibited since all visitors’ food should be served except that ducks legs are not termed as edible. A household participant had the following to say;

“A mother is not supposed to eat chicken once her child is married. What I also know is that a married woman cannot prepare meals for her in-laws, other people have to be called. She also is also not allowed to eat the remnants of that food, particularly chicken” (IDI-7, Female 70 years).

An anthropological study by Dittler and Hayden (2010) which suggests that feast and ceremonies may be a form of traditional food reallocation for the poor households (Riang’a et al., 2017). This is the case for more prestigious and expensive foods like meat. Briones Alonso et al. (2018), however, asserts that such festivities and attachments to social allies can reduce household food stocks affecting food stability at the household level. Social alliances through merry-go-rounds in the area that require food preparation or food as payment for penalties determine ASFs consumption. The best and more prestigious ASFs

(fish, meat, milk) are eaten in these events in an attempt to retain social solidarity and interpersonal relations. While this promotes consumption for the members involved, it may also pose a strain to those left in the households, particularly children and the elderly.

5.3 Implications of food prescriptions and proscriptions to household food security

The results of this study indicated that a continuous practice of the food rules becomes assimilated and internalized to an extent that people detest some foods or prefer some to others. In addition, individual household member preferences and especially that of the food preparer influences household food prescriptions and proscriptions. These preferences are informed by one's lived experiences and particularly socialization process. This is described by the interview excerpt below;

“Like me I don't eat Nile perch, the reason is, in the past when we were still young, our grandmother used to send us to the market to buy fish, she used to instruct us not to buy the fish with big eyes. So you know I grew up knowing that fish with bright eyes is bad. Since then I do not eat it because when the eyes are so bright it is not a good fish” (IDI-8, Female 55 years).

A key informant emphasized on the above, arguing that as a staunch believer of the seventh day Adventist, there are certain foods such as fish without scales, forbidden by the church which none of the household members would consume under any circumstance. This is as stated below;

“If then that's the available fish then we result to vegetables. We cannot eat fish with scales. If the only remaining food here is fish with scales, I cannot eat it, I better starve since my religion goes against consumption of such... I would rather borrow from my neighbors the right kind of fish” (KII, CAB/Opinion leader, Asembo).

These findings show that a food secure household does not translate to an individual household member food security since availability of food is not a guarantee to food access and consumption. Helman (2007) asserts that intrinsic rules that dictate how one is supposed to feel, think, perceive and act either as female or male members of society are acquired since infancy and propagated till adulthood and recycled hence a big influence for individual and household foodways. Further, Alonso et al. (2018) asserts that the extent to which food proscriptions and prescriptions influence individual behavior has an impact on their access to food.

Cultural beliefs and practices affect breastfeeding practices among the inhabitants of Rarieda sub-county. Based on evidence from this study, discarding colostrum is highly practiced as it is associated with death. According to the Luo of Rarieda belief system, once a mother to a breastfeeding baby leaves home to the market or any other place, upon coming back she has to wash the breast first then immediately after discard the colostrum over the baby's head to neutralize any bad luck. This belief is highly practiced, numerous governmental nutrition sensitization through community based group discussions and campaigns. Another common belief is that, breast milk does not have enough nutrients to sustain a child's growth, justifying the early weaning processes in the study area.

“Breast milk does not have enough nutrients you have to introduce early food plans to babies by three months. If not, then the child growth is unhealthy and body looks weak...the child has pale skin with skin infections and malnutrition...this affects them to adulthood” (IDI-9, Female 61 years).

“My mother-in-law told me that once I leave the baby behind when going to the market, when I return I should first wash the breast and then ensure that the first foremost milk sprinkles over the baby's head to the other side (Demonstrating through breastfeeding a doll and how the process should take place)” (KII-FBO, Asembo).

Findings of this study indicated that cultural beliefs and practices have a bearing on the increased child malnutrition rates and poor feeding practices in the sub-county. Based on information from an elderly woman in a household interview, an infant crying too much shows that breast milk is not sufficient and their mothers are blamed for starving them. Hence, from the fear of being judged as bad mothers, women tend to introduce foods to babies as early as two weeks after birth. Such foods include; diluted cow milk, sieved porridge, water and mashed avocados and potatoes and are considered light foods and amenable with the immature digestive system. Before six months, other solid foods (*Ugali*) are also introduced. A key informant showed concern on the preparation of these foods and particularly porridge which is a mixture of so many food types (Table 5.2) yet with less cooking time. A household interview contrasted with the time aspect arguing that cooking food for long reduces its intended value.

“Food, there is a way that we prepare a baby's food, there are minutes that this food should take like porridge we do not boil it much so that what has been added to it does not disappear. Maybe I want to prepare a child's porridge who is five years or three or four years. I will add little beans, groundnuts and millet. When I

add these things I do not have to boil them much until their value disappears” (IDI-10, Female 63 years).

The key informant, a faith-based representative contrasted with the interview above as noted below:

“....The porridge is mixture of pounded cassava, millet, beans and ‘Omena’. This kind of porridge has a foul smell when cooked due to the mixture... if you prepare this kind of porridge in a rush then it is not well cooked and the foul smell will make children to refuse it... For proper preparation you have to boil water first, pour the smooth paste from the flour and stir until a fine mixture is achieved then let it cook at low heat until beans and ‘Omena’ smell disappears, which is approximately 40-45 minutes... however, parents here cook for 10-15 minutes. The downside of this in most cases is that children end up vomiting it immediately after and more often rushed to the hospital as they are considered sick” (KII-FBO, Asembo).

Time taken for food preparation has an effect on the food utilization aspect of food security as food safety and quality is interfered. WHO (2015) posits that food should be thoroughly cooked to the necessary temperatures in order to avert contaminations and infections that affect food quality thereby promoting good health for all household members. The above findings agree with previous studies on the implications of early weaning on young children. A study among the Lao reported that early supplementary feeding of rice is associated with stunted growth. Similarly, a report by Alonso (2015) argued that early termination of breastfeeding or early weaning of food and water has vital nutrition and health implication to a child’s growth and development process. The author further argued that a reduced intake of milk reduces the absorption of essential micronutrients and increases chances of malnutrition. Malnutrition is a widely reported phenomenon in the Rarieda sub-county and surrounding areas as evidenced by Mosites et al., (2016) who reported that 23% and 4.8% of children in Siaya County are stunted and wasted respectively

Results from the current study showed that physical lack of food among the adult mothers is also a contributing factor to early weaning, besides the local and cultural food rules. The physical lack of food is fueled by the unpredictable weather conditions of Rarieda resulting to poor farm produce and loss of domestic animals Mothers have no sufficient food to eat for milk production. Recent studies stipulate that even without permanent or transitory food proscriptions, early weaning, preferential allocation, and poor dietary diversity would still exist due several factors including; poor purchasing power, limited decision making among

others (Counihan & Van Esterik, 2012; Alonso, 2015; Olum et al., 2017; Alonso et al., 2018).

This study findings showed that women and children, more than men, suffer from cultural food prohibitions due to their productive and reproductive roles. Transitory food prohibition for pregnant or while breastfeeding are rampant and the traditional or cultural reasons given for this are to avoid harm to the mother during delivery. Children are as well prohibited from such foods at a tender age for health reasons as well as protecting them from harm. Eating down is also a common phenomenon for these women especially on fatty and proteinases foods such as eggs and Avocados. In addition, differential food allocation in the household is based on the perceived roles as noted by female participants during a focus group discussion;

“It depends on the kind of work men and women perform. For instance, meat is served in small portions to girls because they are believed to take lighter tasks as compared to boys...men are assumed to work hard traditionally hence they need more food as compared to women who perform home chores termed as lighter duties....even if they perform similar tasks, a man is still assumed to have worked more than the woman hence served more food” (FGD-5, Mixed group 18-34 years).

Denney et al., (2014) postulates that the supposed value of different types of work and responsibilities for different household members inherently sets the rules of who eats what, what amount and what time. Recent studies argue that the preferential distribution of food on perceived responsibilities on age or gender puts some household members at a nutritional disadvantage as well as limited access to available food. Evidence from this study concurs with past studies that male are often favored than their female counterparts and this negatively affects food access for girls and women in rural households (Denney et al., 2014; Alonso et al., 2018). Similar to this study, complications during delivery due to increased fetus weight has also been reported in recent studies in Nigeria and Ethiopia (Zepro, 2015; Zerfu et al., 2016; Ekwochi et al., 2016). McNamara and Wood (2019) assert that in Ethiopia, these prohibitions have direct influence on women’s limited access and allocation of enough food to support fetal development due to carbohydrate-fat limiting restrictions. In our current study, the case is the same due to protein-fat limiting prohibitions.

It is worth noting that, in the study area most of male children food prohibitions are based on stage of life they are at. Adult males suffer from only religious constraints and few, if any, cultural prohibitions. As noted later in the chapter, women and girls are more vulnerable to food rules than men and boys. Evidence from this study shows that men, through local customs tend to give the best meals, large quantities compared to the rest as well as the rare and scarce animal source foods (Table 5.3). As noted by Meyer-Rochow (2009) cited in McNamara and Wood (2019) food prohibitions are more than personal dislikes or preferences. Meyer-Rochow (2009) postulates that such permanent food prohibition (food taboos) tend to monopolize a food resource, making some household members more affected than others.

Past studies argue that not all cultural or religious food prohibitions are bad and not all prescriptions are good (Alonso, 2015; Alonso et al., 2018). The findings of this study agree with this position in that, the reliance of fish as the staple food in Rarieda and Siaya County as a whole has greatly contributed to depletion of the food resource in the region. Such is considered in the area as a factor exposing households to food insecurity situations. Reliance of maize as the staple food has resulted to the locals importing from other counties or selling other locally available foods such as animal source foods in search of maize, ignoring the nutritional and increased dietary diversity aspect. These study results closely speak to the cultural acceptability and preference of food by a certain group and its influence to food availability and access, as discussed by international bodies such as FAO, WHO and RIO+20 conferences (WHO, 2015; FAO et al., 2019).

It is also worth noting that, not all prohibitions, whether permanent or transitory are bad. This study revealed that religious prohibitions of fish without scales serve to balance the needs of population in the region even though this has been eroded by industrialization among other agents of change (Table 5.1). *Moringa*, a commonly used plant in porridge today in the study site, was prohibited before for reasons not known to the people but now it is apparently very good in nutritional and healthy development of children and people living with HIV and AIDS. This is as reported by a CBO representative in the region;

“Like Moringa people did not use it before because they were not aware of its medicinal value but now and are using it. It has been for a long time regarded as a wild inedible plant” (KII, CBO, Uyoma).

Cultural beliefs and food practices have a strong influence on food access and stability in households. This study revealed that different occasions either improved household's dietary diversity or introduced a strain in their food reserves. For instance, chicken as a meal reserved for visitors improves on the dietary diversity for household members. However, its availability does not guarantee food access for household members when need arises since it's a 'meal for visitors' hence not a typical day meal. Meat, another food availed based on occasion, is considered an expensive item in the study area making it not readily available or accessible to everyone, hence a prestigious food. This study also revealed that animal slaughtering and provision of food in large quantities during ceremonies is a way of serving the rest of the community members who cannot afford such food items. It is also worth noting that these occasions that signify social solidarity and interpersonal relations also household food stability and availability in a negative way. This is as noted by a male participant in a FGD;

“... yes we tend to cook a lot of food when we have ceremonies like a burial ceremony because we have visitors and large number of people. This means you have to have plenty of food, and if you have nothing stored, then you are forced to buy....after this ceremony you may find your family straining if you used all of your stored food or money” (FGD-4, Male group 18-34 years).

The findings of this study agree with an anthropological study by Dittler and Hayden (2010) which suggests that feast and ceremonies may actually be a form of traditional food reallocation for the less fortunate households (Dittler & Hayden, 2010 cited in; Alonso et al., 2018). These findings are similar to Peruvian study (ACF, 2010 cited in; Alonso et al., 2017: 7) where food aid directed to children was distributed in community dinners to honor new visitors in the region. Alonso et al., (2018) asserts that such festivities and attachments to social allies can reduce household food stocks affecting food stability at the household level. Social networks through merry-go-rounds in the area that require food preparation or food as payment for penalties limits household food availability and stability. Utilization aspect is also affected as the best foods and more prestigious are taken to these events in an attempt to retain social solidarity and interpersonal relations.

CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary and conclusions

This study sought to establish the socio-cultural drivers of foodways and their implication to food security in Rarieda sub-county, Siaya County. Specifically, the study set out to assess the intra-household dynamics in decision making in relation to foodways, the socio-cultural food rules and their overall implication on household food security in Rarieda sub-county.

This study found out that women as household heads or major decision makers leads to food security improved food security in the households. However, the reduced diversification of household labour and the limited legal rights to production resources due to customary laws, diminishes their capacity to ensure food security as compared to male-headed household. In such situations, access to alternative bundle resources such education and income improves their fall back positions. These alternative bundle resources provide fallback positions whose success to improving household welfare is preconditioned by gender roles and norms

The study established that diminished decision making on productive household resources especially by women contributes to food availability, access and utilization challenges. This phenomenon is fueled by strict patriarchal rules of male dominance and the socialization process of boys and girls into ‘what men do’ and ‘what women do’. Even though access to productive resources through for example purchase of land and access to human capital (education, employment/income) increased women bargaining agency, the study also revealed that ‘doing what women do’ and letting men ‘do what men do’ through doing gender led to unequal power relations hence negatively affecting foodways of households.

Shifts in dietary rules have led to relaxation of some customary food beliefs although with limited influence on religious beliefs. This has been occasioned by changing gender roles, exposure to other cultures, population increase and lifestyle change through education and globalization of foods. Additionally, combining and balancing of work life outside the home and domestic work by women puts a strain on their duties as food preparers and

distributors within the household forcing them to result to newly introduced foods in the region which are less expensive, readily available and easy to prepare. Consequently, lack of time (a crucial aspect in foodways) as a result of social network reinforcement and increased off-farm activities pull women from their crucial role in food production and utilization within the household.

Despite the shifts, this study found that food prescriptions and proscriptions are still informed by the socio-cultural norms, values and beliefs of various states or stages of life, age and gender, religious rules and practices, ceremonies that enhance social networks (rites and rituals), social relationships and networks among others. Animal source foods are the most foods subjected to both customary and religious food rules. These food rules are based on perceived function; purity, prestige, strengthening interpositional relations or nutritional and health implications. The rules whether transitory or permanent have both negative and positive influence on access to the culturally or religiously accepted food. Occasions, for instance, are known to increase food quantities served for an individual as well as variety of nutritious foods. However, they also strain the provider if purchased or reduce stocks of the produced foods, hence compromised food availability and stability.

In conclusion, intra-household dynamics in decision making have implications on household foodways. The inflexibility in societal norms and strict division of labour and gender roles have negative influence on food production and consumption. Patriarchy, for instance, is highly treasured in the region and comes with men as heads of households, major decision makers and owners of most of productive resources. This creates unequal power relations through resource allocation particularly for women who are mainly food producers and very focal in household foodways. Aligning this with entitlement theory, having limited rights and control over resources undermines women's entitlement mapping, hence failure in their food entitlements. Further, through social sanctions, patriarchy is used to reinforce strict social norms hence limiting women's bargaining agency, even when they have access to alternative bundle of resources such as education, income, employment and social networks.

Foodways are customary affair among the Luo people of Rarieda Sub-county. Culture, and in particular religious beliefs and practices, remain unaltered by agents of change as

discussed earlier in the chapter. The stringent fear and respect for Bible and church teachings on purity and palatability continue to inform people's food choices. Strong beliefs on the protection from harm, evil and general promotion of health and development by the food rules continue to guide foodways of people in the region. However, unlike religious beliefs, these cultural practices and beliefs have and are subject to gradual change through mixing of cultures, education and exposure through urbanization. Such change, from this study, has implications on meal patterns and meal constituents which in turn determine the quality and quantity of foods consumed. Such changes and religious beliefs also render available food inaccessible hence affecting household food security negatively.

It is also evident that food rules are not always permanent but specific to situations, events or states in life. This implies that when the food rules are temporary, sometimes limiting access or utilization of certain foods, the nutritional loss can be compensated when such states, pregnancy or breastfeeding are over. The permanent food rules, mostly, the tabooed ones or religious based are justified in the sense that they are to protect people from consumption of unhealthy diets or any other form of harm. This study showed that people were aware of the negative implications of the strict food taboos to the vulnerable populations' food security. Being aware of the inability to change culture rapidly, the community suggested barter trade or commercialization of the prohibited foods and replacing them with equally nutritious foods as a way of dealing with food security.

6.2 Recommendations

The research recommends the following:

- Development of direct and voluntary food and nutritional interventions and policies that focus on behavioral and social transformative behavior through community dialogues, and education and sensitization programs.
- There is a need for further research and documentation of indigenous knowledge and food technologies on food processing, preparation, preservation and storage and its role in household food security which may help relevant bodies in formulation of viable food policies
- The national and county government should enact strict legal rules and regulations safeguarding the natural resources (water bodies) that provide staple food for

people in the area which, due to industrial pollution and increased human activity, have led to extinction of nutritious seafood contributing to food insecurity in the area.

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APPENDICES

APPENDIX I: Consent form

SOCIO-CULTURAL DRIVERS OF FOODWAYS AND THEIR IMPLICATION ON HOUSEHOLD FOOD SECURITY IN RARIEDA SUB-COUNTY, SIAYA COUNTY.

Introduction

My name is Mercy Mbithe Musyoka from the University of Nairobi conducting a study on socio-cultural drivers of foodways and their implication on household food security in Rarieda sub-county, Siaya County.

Purpose

The study seeks to describe the drivers of social and the cultural aspects of food and how they influence household food security here in this region. This is through examining the intra-household dynamics in decision-making on food acquisition, selection, preparation, distribution and consumption and investigating the social drivers of food prescription and proscriptioin. It will also endeavor to establish the implications this dynamics and social factors have on household food security.

To achieve this we will be visiting several households in this region. We intent to engage the household heads, the major decision maker or any other knowledgeable member (18+ years) within the household.

Procedure

If you agree to be part of the study, you will be asked questions about your household food acquisition to consumption, the major decision makers in your household regarding food, the cultural beliefs, practices, attitudes, norms and values that surround food in your household and the community at large. The answers you give will be recorded through an audio recorder. This a device that will capture both your voice and mine during discussion. This will only be used analysis within the research team and there be assured of the safety of your information. This discussion will take approximately one (1) hour, but we can take breaks from time to time.

Risks and benefits

There are no foreseeable risks if you decide to take part in this study besides the time taken during the interview which will not be compensated. The data gathered during this process will be given to policy makers and development agencies for implementation as well as for academic purposes. However, there will be no direct benefits for you as a participant.

Voluntary participation

Participation in this study is voluntary and if you choose not to take part there will be no fear of victimization. You also have the right to refuse or withdraw at any point during the study. If you feel a question is too personal and cannot answer, feel free to skip it. However, your participation will be of great contribution to this study.

Confidentiality

The information you give will not be revealed to any other person apart from the research team. All the research materials will be kept under a lock and key and all the data will be encrypted in a computer software. During publications and report writing, there will be no use of names or any possible identifier that may lead back to you or your household.

Contact information

In case of any concern or question you have regarding this study, you may contact my supervisor Professor Bukachi at sallybukachi@yahoo.com or contact number +254726771808. If you have any question(s) about your rights as a research participant please contact the secretary KEMRI/SERU Tel: 0202722541, +254722205901 and +254733400003 or email. seru@kemri.org. Your participation will be highly appreciated.

Informant's agreement

I have understood the information that I have read/explained to me concerning the study, all my questions have been answered satisfactorily and I may ask more questions at any given time. I therefore agree to take part in this study.

Informant signature:

Date

Researcher:

Date:

Thank you

APPENDIX 2: In-depth interview schedule

Age: Education level:

Gender: Occupation:

Household head: Income:

Marital status:

Intra-household decision making around food

Food acquisition

Who is the major decision maker in the household? Who is the head of your household?

How do you acquire food? (Own-production- agriculture, purchasing, aid from formal and informal institutions, trade)

What farming practices do you use? (Why?) Can you describe land ownership and control of resources in relation to foodways? (Acquisition and selection)

What are the factors that influence decision making around food budget

Please describe how income is allocated for food budget (who allocates, why, when, is it enough?)

Food preparation and consumption

Describe to me your typical meals in a day? (Meal patterns)

What are some of the factors considered while preparing food?

Can you describe to me how food is distributed among household members? What are some of the socio-cultural factors considered when distributing food (age, gender roles, and sex?)

Socio-cultural drivers of food prescriptions and proscriptions

What are some of the norms, attitudes, beliefs and knowledge associated with food in this region?

Food prescriptions

What are some of the most prescribed foods in this area? Why? What do you think of this food items?

What are some of the food preferential allocations based on age, gender, sex, education?

Food proscriptions/taboos

Please describe the food taboos/prohibitions in Rarieda / your household? (are they selective or permanent?)

What is the cause or origin of the food taboos/prohibitions? (Stages of life (childhood); states (pregnancy, lactating, sick); rites of passage (rites of separation and incorporation); ceremonies that dramatize and reaffirm social networks (Burial/funerals, baptism, family reunion, weddings); religious rules and practices (fasting, purity, palatability); Ecological/government/local policies (threat of extinct, medicinal purposes etc

What are the gender dynamics in regard to food proscriptions?

Changing customs around food

What are some of the new foods introduced in this region?

What are your perceptions about these foods?

What are some of the changes in this area's foodways (what, why: Modernization and globalization of food and farming techniques, education levels, household sizes/income, change of power structures in the household, climate change etc.)

Household food security

What are some of the social, economic and political challenges experienced within foodways in this region?

What are the best practices that can be adopted by households to ensure food security in regard to foodways?

Implications of foodways to household food and nutrition security

How do you understand your food proscriptions and prescriptions in relation to food security?

Thank you for your time and participation

APPENDIX 3: FOCUS GROUP DISCUSSION GUIDE

Group

Age of participants:

Number of participants:

1. How do you acquire food? (Own-production- agriculture, purchasing, aid from formal and informal institutions, trade)
2. What farming practices do you use? (Why?) Can you describe land ownership and control of resources in relation to foodways? (Acquisition and selection)
3. What are the factors that influence decision making around food budget (income allocation for food budget (who allocates, why, when, is it enough?))
4. How food is prepared and distributed among household members? What are some of the socio-cultural factors considered when preparing/distributing food (age, gender roles, and sex?)
5. What are some of the norms, attitudes, beliefs and knowledge associated with food in this region?
6. What are some of the most prescribed foods in this area? Why? What do you think of this food items?
7. What are some of the food preferential allocations based on age, gender, sex, education?
8. Please describe the food taboos/prohibitions in Rarieda / your household? (Are they selective or permanent?)
9. What is the cause or origin of the food taboos/prohibitions? (Stages of life (childhood); states (pregnancy, lactating, sick); rites of passage (rites of separation and incorporation); ceremonies that dramatize and reaffirm social networks (Burial/funerals, baptism, family reunion, weddings); religious rules and practices (fasting, purity, palatability); Ecological/government/local policies (threat of extinct, medicinal purposes etc.
10. What are the gender dynamics in regard to food proscriptions?
11. What are some of the changes in this area's foodways (what, why: Modernization and globalization of food and farming techniques, education levels, household sizes/income, change of power structures in the household, climate change etc.)

12. What are some of the social, economic and political challenges experienced within foodways in this region?
13. What are the best practices that can be adopted by households to ensure food security in relation to foodways?
14. How do you understand your food proscriptions and prescriptions in relation to household food security?

Thank you for your time and participation

APPENDIX 4: KEY INFORMANT INTERVIEW GUIDE

Area:

Position:

1. What is your knowledge of food security in this region?
2. What is your view of the foodways of Rarieda people? (Acquisition, selection, preparation, distribution and consumption).
3. What would you say are some of the household food state of affairs of Rarieda in relation to their foodways? (Food proscriptions and prescriptions---availability, accessibility, utilization and stability)
4. What is the status of water in this region? (Its implication on food acquisition, selection, preparation and consumption)
5. How do you understand your food proscriptions and prescriptions in relation to food security?
6. In your opinion, what would be the best model for household to adopt to ensure their food security?

Thank you for your time and participation