GENDER DIFFERENTIALS IN ADOPTION OF ALTERNATIVE LIVELIHOOD STRATEGIES AMONG PASTORALISTS IN WEST POKOT COUNTY, KENYA

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OCTOBER, 2022

DECLARATION

Declaration by the Student

This thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

To my family and the Kenya Defence Forces (KDF) for availing resources that enabled the completion of this academic task.

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ABBREVIATIONS AND ACRONYMS

AfDB	Africa Development Bank
ALS	Alternative Livelihood Strategy
ASAL	Arid and Semi-Arid Land
AU	African Union
CBO	Community Based Organization
CECM	Chief Executive Committee Member
CVA	Capacities and Vulnerabilities Analysis
DFID	Department for International Development
ECDEC	Early Childhood Development Education Centre
ELCK	Evangelical Lutheran Church (K)
FAO	Food and Agricultural Organization
FBO	Faith Based Organization
FGD	Focus Group Discussion
FGM/C	Female Genital Mutilation and Cut
HAF	Harvard Analytical Framework
IT	Information Technology
ICT	Information and Communication Technology
IFAD	International Fund for Agriculture Development
ILRI	International Livestock Research Institute
IWGIA	International Work Group for Indigenous Affairs
KI	Key Informant
KII	Key Informant Interview
KIPPRA	Kenya Institute of Public Policy Research and Analysis

KNBS	Kenya National Bureau of Statistics
KRCS	Kenya Red Cross Society
MCA	Member of the County Assembly
NACOSTI	National Council for Science Technology and Innovation
NGAAF	National Government Affirmative Action Fund
NPGD	National Policy on Gender and Development
NSA	Non-state Actors
RoK	Republic of Kenya
SACCO	Savings and Credit Cooperatives
SDG	Sustainable Development Goal
SID	Society for International Development
SME	Small and Medium Enterprise
SPSS	Statistical Package for the Social Sciences
USAID	United States Agency for International Development
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children‟s Education Fund
WEF	Women Enterprise Fund
YEC	Youth Empowerment Centre
YEDF	Youth Enterprise Development Fund

OPERATIONAL DEFINITION OF TERMS

Alternative Livelihood Strategy (ALS): An action or activity through which a pastoralist gains means of survival and living other than traditional livestock keeping. Adoption of ALS, therefore, entails a pastoralist embracing socioeconomic activities outside livestock enterprise, such as commerce and formal employment.

Gender differentials: Disparities between pastoral men and women in adoption of ALSs in terms of the motive, perception, rate, pattern and type of ALSs adopted.

Gender Disparity: Unequal participation of men and women in adoption of ALSs in the pastoral community of West Pokot County.

Gender Equality: The non-discriminative access of opportunities and rights in adoption of ALSs, between men and women in the pastoral community.

Gender: Socially constructed socio-economic and cultural attributes, opportunities, and characteristics ascribed to women and men in the pastoral community. This is reflected in the unequal status of men and women in both pastoralism and ALSs.

Gender-responsive Strategy: An action, activity, project, policy or programme which considers and responds to the different needs and potentials of pastoral men and women in the process of adoption of ALSs.

Gender Relations: Nature of interaction between men and women in the pastoral community in the process of adoption of ALSs. This is manifested in decision-making, access to household resources prerequisite for the adoption of ALSs, allocation of responsibilities, and enjoyment of the accruing benefits and privileges.

Household: A person or persons in the pastoral community of West Pokot County, who reside in the same homestead/compound but not necessarily in the same dwelling unit, have same cooking arrangements, and are answerable to same household head.

Man: A male over eighteen years who has undergone traditional circumcision rite, or any alternative rite associated with the making of a man in the pastoral community of West Pokot County.

Pastoral/pastoralist Community: People who have adopted ALSs at different levels but depend primarily on livestock or their products for income and food and typically graze their animals on communally managed or open-access pastures and moved with them seasonally. The terms “pastoral” and “pastoralist” have the same meaning in this study and have been used interchangeably.

Woman: A female over eighteen years who has undergone traditional or alternative rites which are associated with the making of a woman in pastoral community of West Pokot County.

ABSTRACT

This study sought to investigate gender differentials in adoption of Alternative Livelihood Strategies (ALSs) among pastoralists in West Pokot County, Kenya. This is because the differentials have persisted in spite of concerted efforts to address them, thereby impeding adoption of ALSs, a process considered the best pathway out of the community‟s socioeconomic challenges. The study, specifically, endeavoured to: assess the status of adoption of ALSs by men and women; examine the factors that influence adoption of ALSs by men and women; evaluate the effects of adoption of ALSs on households and identify gender-responsive strategies that would enhance adoption of ALSs in the Pokot pastoral community. The study was guided by Structural Functionalism Theory, complemented by two gender analysis frameworks: Capacities and Vulnerabilities Analysis (CVA) and the Harvard Analytical Framework (HAF). Both quantitative and qualitative research approaches were applied. The study adopted a cross-sectional survey research design and the target population was all adult household members in West Pokot County. Multi-stage cluster sampling technique was employed to sample 371 respondents from the households while 15 key informants and nine (9) groups for FGDs were selected purposively. Data were collected using questionnaires, key informant interview schedules, and focus group discussion guides. Quantitative data were analyzed using descriptive statistics with the help of SPSS version 23. The analyzed data were presented in Tables and Charts. Thematic grouping was employed for qualitative data analysis which was presented in narrative and verbatim forms. The study findings revealed that adoption of ALSs in the pastoral community was characterized by gender differentials. Thus, women were faster and had adopted more ALSs than men. Nonetheless, men made most of the decisions to adopt ALSs and it was easier for them to access the resources needed for adoption. Further, men controlled the benefits accrued from adoption ALSs and despite being slower than women, the few ALSs they had adopted, were of higher returns. Given the necessary resources, women were more willing than men to adopt ALSs. The differentials were caused by pull and push factors that impacted men and women unequally. These included sociocultural, environmental, and technological factors as well as the development strategies applied by development agencies. The study also established that adoption of ALSs had both negative and positive effects on households. While the positive effects included narrowed gender gap and increased income streams, the negative ones were suspicions of infidelity and adultery and increased cases of spousal separation and divorce. The strategies that could bolster adoption of ASLs included the National Government‟s education and training programmes, education services by the Catholic Church and the pastoral community‟s elite-led mentorship programme, which were gender-responsive. The study concluded that huge gender differentials have slowed down adoption of ALSs. It, therefore, recommends that all development stakeholders should ensure that the strategies employed in adoption of ALSs are gender-responsive. This can be achieved through gender mainstreaming and affirmative action in ALSs projects and programmes.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Pastoralism involves the rearing of livestock as a primary economic activity (Belay, 2016). Mostly practised by nomadic and transhumant pastoralists, it is a global phenomenon that is a source of livelihood for millions of people (Dyer, 2011). According to scholars, including Kirkbride and Grahn (2008), pastoralism is more effective and viable in places with low human population densities and extensive rangelands. These conditions have, however, been affected by adverse climatic changes and a host of socio-economic factors such as rapid population growth, loss of common property resources, urbanization, and violent resource-based conflicts (Fratkin, Nathan & Roth, 2011). Consequently, pastoralism has continued to decline, become unsustainable, and is no longer a reliable source of livelihood (Dong et al., 2011). As an adaptation and survival strategy, pastoralists have adopted Alternative Livelihood Strategies (ALSs) (Belay, 2016; Blench, 2001). However, the rate of adoption is very slow, making livestock production remain the main source of livelihood for the majority of pastoralists around the world (Gulelat, 2002; Mayaram, 2014; Moritz et al., 2011). Studies show that one of the leading factors slowing down adoption of ALSs in the strongly patriarchal pastoral communities is gender differentials (Flintan, 2011; Mkutu, 2008). Apart from undermining the power of complementarity among men and women, the differentials also limit the options of ALSs they can adopt (IFAD, 2016; de Jones & Flintan, 2020).

Literature indicate that the differentials in adoption of ALSs, are mostly skewed against women who have low socioeconomic power as they face double marginalization for being pastoralists (who are mostly marginalized) and women in men-dominated societies (Eneyew & Mengistu, 2013; O‟Neil, 2011; Sherman, 2013). Consequently, as compared to men, women in most pastoral communities across the globe such as the Gujars of India (Mayaram, 2014) and Ethiopian pastoralists (Watson, 2010), have limited options and capacity for livelihood diversification. Thus, they generally lag behind men in adoption of ALSs. Similar findings have been made by studies conducted among the major pastoral groups in Kenya, including, inter alia, the Maasai (Saranta, 2013), Turkana (Wawire, 2011), Rendille (Fratkin et al., 2011) and Borana (Aregu et al., 2007). However, there are contexts where women are either equal to or have surpassed men in adoption of ALSs. For example, Farooquee and Rawat (2001) report that the level of adoption of ALSs among the Bhotiya women in the Himalayan pastoral community of India is equal to that of men. In Uganda, Stites et al. (2016) note that, in the Karamojong pastoral community, agricultural and commercial activities are mostly done by women because men are engaged more in livestock management. The involvement of women in petty trade, an important source of livelihood in pastoral communities of East Africa, has also been reported to be higher than that of men (Little, 2001). The indications that women may be equal to and/or overtaking men in adoption of ALSs in the heavily patriarchal societies, may be justifiable considering that substantial effort has been made, in the recent past, towards attainment of gender equality and women empowerment (de Jones & Flintan,

2020; RoK, 2019). This, however, calls for empirical evidence to ascertain the extent of the differences so as to appropriately inform policy formulation and development interventions.

The gender differentials in adoption of ALSs among pastoralists are due to a complex mesh of factors that interact to either pull or push men and women differentially into or out of pastoralism (Flintan, 2011). Studies note that the factors are mainly socio-cultural, and include adherence to strict gender roles (Manjur et al., 2014), early forced marriages (UNICEF, 2017), patriarchy (Sherman, 2013), and the disproportionately high premium placed on cattle (Mutsotso, 2013; Ng‟ang‟a, 2013). Researchers in other contexts identify factors such as technology (Dyer, 2012) and the changing pastoral environment (Fratkin et al., 2011; Tanyag & True, 2019). However, works by some scholars, including Craig (2010), Adan and Pkalya (2005), indicate that the state and non-state actors are the major determinants of gender differentials in adoption of ALSs in pastoral communities because they have the ability to moderate or regulate the impacts of the socio-cultural, technological and environmental factors. It is, therefore, apparent that the factors responsible for gender differentials in adoption of ALSs among pastoralists vary within and across pastoral groups and contexts. This implies that community-specific determinants of gender differentials in adoption of ALSs, are more reliable. Yet, most of the existing studies including Fratkin et al. (2011) and Manjur et al. (2014), are broad in scope.

Adoption of ALSs is generally considered by scholars and development actors to be the best pathway out of overreliance on pastoralism and the associated problems of gender inequality, conflicts, and persistently high poverty incidences among pastoralists (Archambault, 2016; Schrepfer & Caterina, 2014). As such, adoption of ALSs in some communities has resulted in increased economic stability (Moritz et al., 2011), narrowing of the gender gap (Karmeback et al., 2015; Oumer et al., 2007), improved food security (Manjur et al., 2014), better health (Fratkin, 2011) and education standards (Asmare, Oumer & Ali, 2007), and more respect and recognition for women (Aregu et al., 2007). However, in some pastoral communities, some negative impacts of adoption of ALSs have been reported. These include increased workload for the women (Flintan, 2008), nutritional declines, and strained spousal relations (Fratkin, 2011). These adverse effects corroborate the findings among some researchers including Nelson et al. (2016) that livelihood diversification does not necessarily result in improved well-being for some pastoral households. The differential impacts further reinforce the findings that, in terms of resources, institutions, culture, and adaptation patterns, pastoral communities are highly heterogeneous (Njoka et al., 2016; Tsegaye et al., 2013). This also underscores a need for community-specific studies to increase reliability of findings. Such are, however, still limited in pastoral communities (Eneyew & Mengistu, 2013).

Cognizant of the fact that women can drive change and the need to fully exploit the potentials of all, development actors have tried to initiate both general (broad) and

specific strategies to enhance equal gender participation in all spheres of life, including adoption of ALSs by pastoralists (United Nations Development Programme [UNDP], 2009). Despite the efforts, gender differentials in adoption of ALSs have continued to persist among pastoralists (Flintan, 2011; de Jones & Flintan, 2020). This casts doubt on the efficacy of the strategies applied and reinforces the standpoint by the International Fund for Agricultural Development [IFAD], (2018) and scholars, including Flintan (2008) and Kirkbride (2006), that most of the development policies and interventions strategies applied by development actors in pastoral regions are mostly misconceived, ill-advised and inappropriate. More so, IFAD observes that the policies and interventions are not gender-inclusive. There is, however, a need for context-specific data on this, considering that there has been heightened emphasis in the recent past for all development interventions to be underpinned by inclusivity and gender equality (African Union [AU], 2009; United Nations [UN], 2015b). In Kenya, the emphasis has been made through the 2010 Constitution, Vision 2030, Sustainable Development Goals (SDGs), and President Uhuru Kenyatta‟s Big Four development agenda.

To fill the gaps highlighted in the foregoing paragraphs, this study was conducted in the pastoral community of West Pokot County. The community, which is predominantly made up of the Pokot, is known for the love of cattle and adherence to strict patriarchal culture (Lolemtum, et al., 2017; Mutsotso, 2013). The community, therefore, epitomizes pastoral culture and the associated problems of gender

inequality, high poverty incidences, insecurity, and violent livestock-based conflicts as noted by studies including Brown et al. (2016) and Kamerback et al., (2015). This means that the conclusions and recommendations of the study can also be generalized to other pastoral communities in Kenya, though with caution for the earlier mentioned reason that pastoral communities in Kenya are heterogeneous. This notwithstanding, it is hoped that the conclusions and recommendations of this study would help spur adoption of ALSs and achieve general development in the hitherto marginalized and underdeveloped pastoral communities.

1.2 Statement of the Problem

As noted in the background, adoption of ALSs in pastoral communities is characterized by gender differentials. The extent of the differentials, however, differs from region to region as these are influenced by context-specific factors. While in some contexts, women lag behind men, in others they are either at par or have surpassed them. In West Pokot County, the literature indicates that pastoralists have continued to adopt ALSs differentially, hence impeding the process that is considered the best pathway out of the socio-economic challenges facing the community such as high poverty levels and livestock resource-based conflicts. This is despite a decade of renewed and sustained efforts by state and non-state development actors to bridge the gender gap. The extent of the differentials and reasons for the persistence are, however, not clear due to scanty research on gender and diversification of livelihoods. Additionally, an understanding of the impacts of the resultant disparities on

households, which are the basic units of production and consumption, remains limited. All these need to be explained so that policymakers are able to formulate gender-responsive strategies that would enhance adoption of ALSs in the pastoral community. This study filled the gap.

1.3 Objectives of the Study

The overall objective of the study was to investigate gender differentials in adoption of ALSs among pastoralists in West Pokot County. The specific objectives were:

a) Assess the status of adoption of ALSs by men and women in pastoral community of West Pokot County.
b) Examine the factors that influence adoption of ALSs by men and women in the pastoral community of West Pokot County.
c) Evaluate the effects of adoption of ALSs on households in pastoral community of West Pokot County.
d) Identify gender responsive strategies that would enhance adoption of ALSs in pastoral community of West Pokot County.

1.4 Research Questions

This study sought to answer the following research questions:

a) What is the status of adoption of ALSs by men and women in pastoral community of West Pokot County?

b) Which factors influence adoption of ALSs by men and women in the pastoral community of West Pokot County?
c) To what extent has adoption of ALSs affected households in pastoral community of West Pokot County?
d) What gender responsive strategies may be employed to enhance adoption of ALSs in pastoral community of West Pokot County?

1.5 Justification and Sigificance of the Study

This study is justified because there is a pressing need among scholars and development actors to find solutions to the persistent poverty and general underdevelopment in the pastoral community of West Pokot County. The associated menace of cattle rustling and other forms of livestock resource-based conflicts that have been associated with the community for decades should be eliminated. It is also important that pastoral men and women fully participate in the quest to attain gender equality and reduced poverty levels as envisaged in important development frameworks and policies which guide development at the global, continental, regional, national, and County levels. These include SDGs‟ goals number one and five on eradication of poverty and achievement of gender equality, respectively (UN, 2015a), and goal 17 of AU‟s Agenda 2063 under which full gender equality in all spheres of life in Africa is envisaged (AU, 2015). In Kenya, Article 27 (2) of the 2010 Constitution and Vision 2030 are meant to guide Kenyans toward the attainment of equal rights, opportunities, and participation of both women and men in development

initiatives (Republic of Kenya [RoK], 2013). At the County level, is the West Pokot Second County Integrated Development Plan (CIDP) for the period 2018 to 2022 which has linkages with the aforementioned national and international development Commitments (West Pokot County Government, 2018). Particularly, the CIDP aims at transforming livelihood through equitable and sustainable utilization of resources. Thus, the outcome of this study may enable the pastoral community to fully participate and benefit from these development blueprints.

This study is significant since it contributes to the existing body of knowledge in the general area of gender and diversification of livelihoods among pastoralists. It also forms a basis for future research in related areas. More importantly, the findings and recommendations of this study could enable both state and non-state actors to develop practical gender-responsive strategies to improve the adoption of ALSs, hence reducing conflicts and poverty not only in the pastoral Pokot community but also among other pastoral communities in Kenya. Specifically, state actors in planning and gender departments of both County and National Governments may use the findings and recommendations to plan and initiate gender-responsive strategies. For the same purpose, the non-state actors operating in the area of study including the World Vision-Kenya, *Sikoom* Community-Based Organizations (CBO), and Safaricom Foundation, could benefit from this study.

1.6 Scope and Limitations of the Study

The study was carried out in West Pokot County which was predominantly inhabited by pastoral Pokots. The County was selected purposively because it was rich in pastoral culture and the associated problems of gender inequality, high poverty incidences, insecurity, and resource-based conflicts (Brown et al., 2016; Kamerback et al., 2015). The study focused on gender differentials in adoption of ALSs and was carried out among Key Informants (KIs), and women and men who were Household Heads (HHs). It covered the period from 2010 to 2019; a time in which notable advances were made toward achievement of gender equality and eradication of poverty. These advances were made through progressive legal frameworks and development blueprints, including Kenya‟s 2010 Constitution, Vision 2030, Sustainable Development Goals (SDGs), and President Uhuru Kenyatta‟s Big Four development agenda. This period was, therefore, appropriate because conditions favoured enhanced adoption of ALSs by both men and women.

This study used a semi-structured questionnaire to collect data. Responding to it was quite a challenge to the largely semi-literate respondents. To surmount this limitation, the researcher and assistants spent a lot of time translating key variables to the local Pokot language, to a majority of the respondents. Another limitation was that most of the respondents, especially the men, could not be found easily because of their nomadic lifestyle. Time and extra resources were, however, spent to raise the response rate to an acceptable level. Further, the women were unwilling to fill out the

questionnaires, be interviewed, or participate in Focus Group Discussions (FGDs) for cultural reasons. Nonetheless, the researcher sought authorization from the local leaders and elders, thereby ensuring adequate participation by the women.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This Chapter reviews literature related to the study on gender differentials in adoption of Alternative Livelihood Strategies (ALSs) in the pastoral community of West Pokot County. The review is done under sub-themes formulated in accordance with the study objectives. Therefore, the Chapter discusses the status of adoption of ALSs among men and women, factors that influence these adoptions, the effects of the adoptions on households, and the gender responsiveness of the strategies used to enhance the adoptions. Chapter summary and knowledge gaps identified are also presented. It ends with theoretical and conceptual frameworks which guided the study.

2.2 Status of Adoption of ALSs by Men and Women in Pastoral Communities

With respect to the status of adoption of ALSs, Belay (2016) notes that there are three categories of pastoralists around the globe. First, there are those who still depend solely on livestock production. Moseley (2013) refers to this group as pure pastoralists and states that the majority of Fulani and Tuareg of Northern Mali are still in this category. Second, are the pastoralists who complement their livelihoods from livestock production through a diversity of alternative activities. According to Belay, the majority of pastoralists fall in this category. In the third bracket, are those who have migrated out of pastoralism into non-or marginally livestock-related activities. Stites et al. (2016) also report the existence of this category of pastoralists. In Syria, La

Rovere (2009) notes that pastoralists in the Khanasser Valley have complemented their dwindling livelihoods in livestock production by venturing into some agricultural activities and waged employment. More or less the same has happened among pastoral communities in the rangelands of China, Nepal, Afghanistan, Buthan, Pakistan, Bangladesh, and Myanmar (Verma & Khadka, 2016).

Studies in countries dominated by pastoralists in Africa, including Kima et al. (2015), Moseley (2013), and Oumer et al. (2007) reveal that adoption of ALSs especially in agriculture, have occurred to the extent that few pastoralists remain in pure pastoralism. In these adoptions, gender disparities that are skewed in favour of men, have been noted (Little, 2001). Explicitly, Little observes that the more lucrative ALSs are mainly available to men. This has been corroborated by Aregu et al. (2007), who have found out that, among the Afar and Borana pastoralists in Ethiopia, men have adopted higher value ALSs than women because they make most of the economic decisions, have more control and access to households‟ principle assets, and are more mobile.

In Kenya, Fratkin (2011) and RoK (2011b), indicate that an overwhelming majority of pastoralists have adopted ALSs, but at different levels, a fact that other studies confirm. For example, among the Isiria Maasai of Kenya, Saranta (2013) has found out that ALSs adopted include: crop cultivation, poultry rearing, beekeeping, selling of traditional crafts and ornaments, and wage employment. The Turkana of Kenya

have also ventured into crop farming, especially along River Turkwel, some commercial activities in urban areas, and the sale of honey (Wawire, 2011). In Baringo‟s East Pokot Sub-county, Mutsotso (2013) reports that pastoralists have adopted some ALSs, but mainly as a backup to the livestock enterprise which remains their main source of livelihood. In West Pokot County, though the main source of livelihood for most of the pastoralists is animal production (42%), a good number have adopted ALSs in farming (35%) and business (23%) (Lolemtum et al., 2017). Other studies such as Kamerback (2015), Kristensen and Nairesiae (2009), Magal (2016), Nyberg et al. (2015), and Lolemtum et al. (2017), also indicate that most of the pastoralists in the County still rely on livestock keeping, but have diversified their livelihoods, preferably into non-climate sensitive off-farm activities.

The reviewed literature demonstrate that pastoral communities have adopted ALSs at different levels and women generally lag behind men. However, the extent of the differentials is still not clear. Further, information on the entire continuum of adoption of ALSs in most pastoral communities is inadequate. Therefore, regarding the pastoral community of West Pokot County, existing studies hardly show whether those who still depend on pastoralism as the sole source of livelihood (pure pastoralists) and those who have dropped pastoralism entirely, exist as they do in some pastoral communities.

2.3 Factors Influencing Adoption of ALSs by Men and Women in Pastoral Communities

Globally, pastoralists are known for strict adherence to their cultural beliefs, values, norms, and practices (O‟neil, 2011). According to the literature, the influences posed by the strong adherence to culture on adoption of ALSs are significant and asymmetric in nature. On the negative side, whereas patriarchy undermines women‟s access to economic, political, and ideological resources, thereby limiting their participation, strict adherence to gender roles restricts both men and women to specific options of ALSs (Blench, 2001; Flintan, 2011). Further, in pastoral communities, gender division of labour means that women spend considerably more of their time than men on domestic tasks and have limited time for ALSs (de Jones & Flintan, 2020). This also compromises the power of complementarity between men and women in the process of adoption of ALSs (IFAD, 2016). The high cultural value placed on cattle also makes it hard for pastoralists, especially men, to trade them for other livelihoods (O‟Neil, 2011; Sherman, 2013). On the positive side of the asymmetry, some elements of pastoral culture have been found to generally promote adoption of ALSs. These include strong kinship ties, labour exchanges, and a largely intact social system and network (Sharma et al., 2003). Sharma observes that these cultural aspects avail pastoralists with both material and social capital needed for the diversification of livelihoods. Most literature, however, focus on the negative side of the asymmetry and run the risk of portraying pastoral culture as totally detrimental to adoption of ALSs.

Apart from culture, literature show that a host of other factors determine the pace and extent to which pastoral men and women adopt ALSs. For instance, in Central Asia, governmental and institutional factors such as failure by the state to support key elements of pastoralists‟ adaptive strategies, education and health services, market access, and transportation infrastructure, have impacted negatively on diversification of livelihoods (Craig, 2010). The study, however, is not clear on whether the impacts are gendered. In the Himalayan Mountains of India, varied environmental conditions cause pastoral men and women to adopt ALSs differentially, since they adapt to the conditions differently (Farooquee & Rawat, 2001). Consequently, Farooquee and Rawat observe that women are leading in the agricultural sector where they provide and make 80% of the labour and key decisions, respectively. The women, however, suffer the burden to the extent that they perform dismally in other sectors such as trade (40%).

Among East African pastoralists, studies show that a myriad of pull and push factors have either acted separately or jointly to determine the rate at which pastoral men and women have adopted ALSs. These factors are broadly climatic changes (Kirkbride & Grahn, 2008), technological (Dyer, 2012) and socioeconomic (Nelson et al., 2016; Schilling et al., 2012). Specifically, the factors identified are poorly formulated policies and development interventions that have failed to adequately address the special characteristics of pastoralists (Belay, 2016; Kirkbride, 2006) and a lack of gender-focused strategies with practical application in pastoral areas (Flintan, 2008).

Others are a pastoralist‟s place of residence (urban or rural) and wealth (Little, 2001; Lomuria & Atem, 2019), and marginalization by successive independent governments which consider pastoral regions to be incidental to core national interests (Othieno, 2014).

The reviewed literature reveal the factors responsible for the differential adoption of ALSs among men and women in pastoral communities worldwide. The factors are mainly environmental, technological, institutional/organizational and socio-cultural. This information was valuable to the current study as it shaped the scope of the investigation. The literature also reveal that pastoralists operate in different ecological, socioeconomic, and cultural environments. Therefore, there are bound to be fundamental gender differences in some aspects of their common pastoral culture. This necessitates a study that is focused on the identification of context-specific factors that determine the rate of adoption of ALSs.

2.4 Effects of Adoption of ALSs on Households in Pastoral Communities

In a comparative study of 20 pastoral societies across the globe, including the Basseri of Iran, Navajo of the USA, and Turkmen of Turkmenistan, Moritz et al. (2011) establishes that they have diversified their livelihoods. In particular, they have ventured into agricultural activities and waged employment. The outcome is that the households with more diversified livelihoods are more stable economically. However, according to the authors, there exist considerable variations in the level of stability

between and within the pastoral societies due to variations in the environments in which they operate.

In Mongolia, adoption of ALSs by pastoral nomads has resulted in increased workload among women and widespread poverty in women-headed households (Flintan, 2008). According to Flintan, women suffer heavy workloads because as men out-migrate in search of ALSs, they take up roles that would ordinarily be performed by men including livestock management, while at the same time undertaking their traditional domestic responsibilities. This limits their time and options for other gainful activities, relegating them and the households they head to extreme poverty. Similar cases have been reported among Indian and Tibetan pastoralists living in the Trans-Himalayan region (Farooquee & Rawat, 2001; Verma & Khadka, 2016).

Within the African Continent, the impacts of adoption of ALSs on pastoral households vary within and across communities. For instance, in the East and Horn of Africa, Nelson et al. (2016) note that ALSs have resulted in increased income and productivity, thereby becoming a pathway out of poverty for households. Nonetheless, depending on socio-ecological conditions, the authors observe that the uptake of ALSs do not necessarily result in improved welfare for many members of pastoral households. Those in drier areas where there are extensive rangelands are, in particular, still better off with pastoralism and not ALSs. Other studies, including Kipuri and Ridgewell (2008), and Watete et al. (2016), also underline that

there are conditions that make pastoralism more rewarding to pastoral households, than ALSs. These include contexts where science and modern technology have been applied in livestock production.

In Somalia where pastoralism is the most important agricultural enterprise, a study by Oumer et al. (2007) shows that adoption of ALSs affects households in three ways. First, there are reversals of roles where women who acquire more income because they have adopted more ALSs, including menial and low-paid jobs which men shun, take over the traditional role of men as household providers. Men‟s reaction to this situation of reversed roles is that of frustration for not being able to support their families as customs prescribe. Second, by earning an income independent of their husbands, women are making many more decisions within the households. Third, petty trading and other businesses among some Somali men and women have assured them of a small but continuous flow of money, hence improvement in household food security.

Among the Rendille and Ariaal pastoral communities in Kenya, a study by Fratkin (2011) reveals that adoption of ALSs has resulted in a more sedentarized lifestyle, especially in urban settings. This has impacted households, both negatively and positively. On the positive side, greater food security, improved health care, and increased participation of children in formal education have been realized. Women have also benefited from new opportunities which are mostly inaccessible in the male-dominated livestock economy including petty trade in milk and vegetable that afford

them a modest income. On the negative side, an inadequate supply of meat and milk due to reduced livestock production has led to nutritional declines in women and children. Additionally, some women have been forced by poverty to depend on beer brewing and prostitution to survive in an urban economy, thereby increasing their exposure to HIV/AIDS and other sexually transmitted diseases. This, according to Fratkin, strains household resources and spousal relationships.

Aregu et al. (2007) in a study on Afar and Borana pastoral communities in Northern Kenya, show that women have adopted various forms of ALSs and have been able to generate modest income to pay for the expenses of their households including school fees for their children and healthcare. Further, the study demonstrates that adoption of ALSs has promoted gender equality and increased opportunities among women. Men, on their part, are reported to have increasingly accepted that women could play an active and successful role in boosting the economic status of households. The findings of this study indicate that adoption of ALSs has increased recognition and respect for women in households. This is, however, not the case in some pastoral households where men are reported to have meted violence upon women who have been empowered by ALSs for fear of reversed roles and status (UNICEF, 2017).

The interrogated literature, in this section, have indicated that adoption of ALSs results in both negative and positive effects on pastoral households. The effects, which are mainly socio-economic, occur in the areas of gender roles, relations, and living

standards. These effects are also not uniform within and across the highly heterogeneous pastoral communities as observed by studies including Moritz et al. (2011). In all the variables, little is known concerning the pastoral community of West Pokot County for a lack of studies that focus on gender and livelihoods.

2.5 Gender Responsive Strategies to Enhance Adoption of ALSs in Pastoral Communities

Gender equality is a precursor to sustainable people-centred development and, as such, the global community is committed to achieving it through a number of international instruments, notably the 2030 Agenda for Sustainable Development which places gender equality and women‟s empowerment at the center of the global Sustainable Development Goals (SDGs) (UN, 2015a; UNDP, 2013). One strategy for achieving this is ensuring that policy frameworks and development interventions are gender-responsive. This means that they actively seek to promote gender equality by ensuring that gender norms, roles, and inequalities are considered and measures are taken to actively address them (WHO, 2006). With respect to adoption of ALSs in pastoral communities, the gender responsiveness of the strategies, which have been applied by development stakeholders, is subsequently discussed.

According to Upadhyaya (2004), the government of India has introduced dairy cooperatives for the Gujrat pastoral women. The cooperatives help achieve efficiency in the delivery of milk and collection of payments. As a result, Upadhyaya observes

that women are able to finance their basic needs and those of men. By uplifting the economic status of women to the extent that men become dependent upon them, the programme may inadvertently reinforce gender inequality. In Parwan Province of Afghanistan, Flintan (2008) notes that a robust literacy programme initiated by the United Nations International Children‟s Emergency Fund (UNICEF) has empowered women pastoralists, socially. As a result, the women and girls are able to access resources and livelihoods outside the pastoral circuit. The programme, however, targets only girls who according to Flintan, are denied access to education by the Taliban Militia. Such gender-specific programmes are gender-responsive as they help address the pressing need of the time, which is to make amends for the disproportionate loss of opportunities (Tirivanhu & van Rensburg, 2018).

Kima et al. (2015) report that, among agro-pastoralists in Burkina Faso (West Africa), it is common that youths are sent to urban areas where there are better chances of acquiring the much-needed financial capital for diversification of livelihoods. Though the study is silent about the gender outcome of the strategy, it is noteworthy that it has the potential to disadvantage the women who, in most pastoral communities, are predominantly rural dwellers and have restricted mobility (Kipuri & Ridgeways, 2008). Among the Karamojong of Northern Uganda, improvement of security is a good strategy that enables men and women to venture into agricultural activities (Stites et al., 2016). Other scholars, including Kalyango et al. (2019) and Schilling et al. (2012) also recommend that provision of security should always be prioritized in the

design and implementation of projects and programmes in pastoral areas. Without this, scholars observe that the diversification of livelihoods would be undermined by gender inequality because insecurity has differential impacts on men and women. In Somalia, Oumer et al. (2007) identify development initiatives aimed at improving the status of women who are marginalized in the patriarchal Somali community. In the interventions, the Government promotes the development of small businesses through the Women's Affairs Office where small-scale businesses and the formation of Savings and Credit Cooperatives (SACCOs) are supported. All these offer an avenue to more secure sustainable livelihoods for Somali women. It is, however, not clear how the strategies whose focus is women, influence adoption of ASLs by men. Nonetheless, the initiative compensates the women for the past losses they have suffered as a marginalized group.

In Kenya, development actors have formulated strategies to either directly or indirectly equalize opportunities for pastoral women and men in the area of adoption of ALSs. RoK (2011b) states that the Government of Kenya, through Vision 2030 Development Strategy for Northern Kenya and other Arid Lands (a region predominantly inhabited by pastoralists), aims at achieving the development of time-bound affirmative action programmes which equalize opportunities across gender, such as the use of the education system to reduce social inequalities and expansion of economic and social opportunities for women. Further, the policy aims at increasing women‟s influence and control over assets and resources; supporting women‟s income-generating

activities in order to strengthen them socio-economically, and increasing micro-finance facilities for women‟s enterprises. The 2010 Constitution of Kenya and the SDGs ratified by Kenya in 2015, are also aimed at ensuring that both men and women in Kenya enjoy equal opportunities in all spheres of life (Muchangi, 2014).

Considering the marginal status of pastoral women and girls, non-state actors, on their part, have initiated specific strategies to empower them. As such, Adan and Pkalya (2005) report that the development actors have established many schools for girls and have offered them education scholarships. They have also instituted rescue centres for girls running away from harmful cultural practices such as FGM/C and early marriages. Noting that men could be disadvantaged by the many years of emphasis on the emancipation of women, some non-state actors such as Faith-Based Organizations (FBOs) have started to focus on men in their development initiatives. Notably, the FBOs have enhanced agricultural activities among the men through capacity-building programmes, extension services, and provision of critical farm inputs (Kristensen & Nairesiae, 2009).

By and large, most strategies employed to enhance adoption of ALSs in pastoral communities have low levels of gender responsiveness because they are poorly implemented (Kipuri & Ridgewell, 2008), and are a one-size-fits-all type yet pastoralists are extremely heterogeneous (Njoka et al. 2016; Tsegaye et al. 2013). Some of the strategies are also not participatory in nature and do not consider time

poverty among the women, hence ending up overburdening them (IFAD, 2016). Further, most interventions tackle the symptoms of gender inequality rather than the underlying social norms, attitudes, behaviours, and systems which represent the root causes (Flintan, 2011). Others, miss out on gender analyses yet these are vital in assessing the gender context of a project; a process that is fundamental in the identification of capacities and vulnerabilities to be incorporated and addressed, respectively (de Johns & Flintan, 2020). Reviewed literature, however, show that a lot of progress is being made toward making development interventions in Kenya responsive to the needs of both women and men. It, therefore, becomes necessary to identify strategies that are adequately gender-responsive and, therefore, effective in enhancing equitable and inclusive adoption of ALSs among pastoralists. This study has responded to the need in regard to the pastoral community of West Pokot County.

2.6 Theoretical Framework

This study is guided by Structural Functionalism Theory, as expounded by Herbet Spencer, Emile Dhurkheim and Structural Marxists (Macionis & Gerber, 2010; Urry, 2000). The theory is complemented by two gender analysis frameworks developed by Harvard Institute for International Development: The capacities and Vulnerabilities Analysis (CVA) framework and the Harvard Analytical Framework (HAF) (March, Smyth & Mukhopadhyay, 1999).

2.6.1 Structural Functionalism Theory

Structural functionalism, or simply functionalism, is a theory that sees society as a complex system whose parts work together to promote solidarity and stability (Macionis & Gerber, 2011). Functionalism addresses society as a whole in terms of the function of its constituent elements. While structural functionalism is associated with several sociologists, the ideas of Herbet Spencer, Emile Dhurkheim and Structural Marxists have the conclusiveness that buttresses the current study.

Herbert Spencer popularized a common analogy, that presents the parts of society as “organs” which work toward the proper functioning of the “body" as a whole (Urry, 2000). Based on the metaphor above of an organism in which many parts function together to sustain the whole, Durkheim argues that complex societies are held together by organic solidarity (social bonds), based on specialization and interdependence, which are strong among members of a society (Macionis & Gerber, 2011). This theory, therefore, emphasizes the contributions that the various parts, structures, and systems of society make towards its social needs and how these structures and systems shape the behaviour of the individuals and groups within them (Muchangi, 2014).

Structural Marxists on their part argue that the decisions and actions of individuals and groups are fundamentally constrained by the structures in which they are located, and which exert influence over social, political, and economic processes. Structural

Marxist, emphasize that every pattern of activity makes a positive or negative contribution to that society (Alexander & Colomy, 1990; Maryanski & Turner, 1991, as cited in Muchangi 2014, p. 56).

The tenets of this theory have been used to explain the pastoral community of West Pokot as a complex structure with various parts (men and women), structures, and systems (physical and socioeconomic environment) that are interdependent and whose functions and interactions determine adoption of ALSs. Therefore, the roles of men and women are considered equally important in adoption of ALSs and have been investigated to determine their respective contributions. The community‟s prevailing social, economic, cultural, and political structures are also important and have the capacity to either enable or constraint adoption of ALSs. This perspective helps this study to bring to the fore the factors which influence adoption of ALSs by men and women in the community. Additionally, the concept that every pattern of activity makes a positive or negative contribution to society, guides the current study in the assessment of the effects of adoption of ALSs on households.

Structural Functionalism Theory looks at society as a whole and is, therefore, broad and general in perspective. Whereas it helps in addressing relevant variables in this study, as discussed in the foregoing paragraph, there is a need for gender analysis frameworks to clearly bring out gender differentials in adoption of ALSs in the

pastoral community. Some relevant tenets of CVA and HAF address this need as discussed below.

2.6.2 Capacities and Vulnerabilities Analysis Framework

The CVA framework is a gender analysis tool that critically considers gender and its associated roles, responsibilities, and power dynamics in a particular community and seeks to meet its social needs (Birks & Hatfield, 2016). The framework has been developed by Harvard Institute for International Development to help development agencies to plan interventions in such a way that they meet immediate needs and, at the same time, build on the strengths of people and their efforts to achieve long-term social and economic development (March et al., 1999). The authors state that the framework is based on the central idea that people's existing capacities (strengths) and vulnerabilities (weaknesses) determine the impact that a crisis has on them, as well as the way they respond to it. Therefore, interventions should aim to increase people's capacities and reduce their vulnerabilities.

CVA uses an analysis matrix tool to distinguish between three categories of capacities and vulnerabilities which are physical, social, and motivational (Birks & Hatfield, 2016). Birks and Hatfield explain that the physical or material capacities and vulnerabilities include features of the climate, land, and environment where people live, their skills, and their access to capital, and other assets. All of these are different for women and for men. The social or organizational capacities and vulnerabilities

category refers to the social fabric of a community and includes the formal political structures and the informal systems through which people make decisions, establish leadership, or organize various social and economic activities. Gender analysis in this category is crucial because women's and men's roles in these various forms of organization differ widely. The motivational or attitudinal capacities and vulnerabilities include cultural and psychological factors which may be based on religion, the community's history of the crisis, and their expectation of any interventions. According to Birks and Hatfield, the social/organizational category is the most crucial in terms of gender analysis because it examines Gender-based roles in relation to social and economic organization, decision-making, division of labour, power dynamics, and societal participation.

For the purpose of making the CVA matrix reflect reality's complexity, five other dimensions must be added to the analysis, namely: disaggregation of communities by gender; disaggregation according to other dimensions of social relations which bring stratifications in the community such as the level of wealth and age; change over time; interaction between the categories of analysis used in CVA and analysis at different scales and administrative levels of society (March et al., 1999).

All the tenets of CVA are relevant to this study. Therefore, CVA‟s gender analysis matrix has facilitated this study to establish the extent of gender differentials in adoption of ALSs. The CVA‟s analysis matrix, which categorizes capacities and

vulnerabilities into physical, social, and motivational realms, has also enabled the study to comprehensively capture the factors that influence adoption of ALSs by men and women. Additionally, the CVA includes a combination of short-term and long-term perspectives and strategies for reducing vulnerabilities and increasing capacities. This has enabled the study to identify gender-responsive strategies which could be employed to enhance adoption of ALSs, both in the short term and in the long term. Thus, the framework covers all the variables as per the study objectives. In the section that follows, HAF is presented. It has been applied because of its tools which enable a better collection of gender-disaggregated data.

2.6.3 The Harvard Analytical Framework

According to March et al. (1999), HAF was developed by researchers at the Harvard Institute for International Development in the USA. The framework is specifically designed for gender analysis and has four main components/tools. The first is an activity profile which helps users to identify all relevant productive and reproductive tasks and answers the question: who does what? The second component/tool deals with access and control of resources and benefits. The third tool concerns the influencing factors and allows users to chart factors that determine the differences in the gender division of labour, access, and control as listed in the two profiles above (Tools 1 and 2). The fourth and last tool/component of HAF is the checklist for project-cycle analysis which consists of a series of questions. March et al. (1999) state that the questions are designed to assist users to examine a project proposal or an area of

intervention from a gender perspective, using gender-disaggregated data and capturing the different effects of social change on men and women.

Whereas the first two components/tools of HAF have been used by the study to establish who, between men and women, possess more access and control of resources that are critical in adoption of ALSs, the third one has enabled the identification of the influencing factors. The fourth component/tool has also been applied by the study to comprehensively capture, from a gender perspective, the effects of adoption of ALSs on households. Overall, all four components/tools of the framework have guided this study to collect gender-disaggregated data and to also bring out clearly the extent of gender differentials in adoption of ALSs in the pastoral community.

2.7 Conceptual Framework

The Conceptual Framework shown below in Figure 2.1, illustrates the relationship between independent and dependent variables.

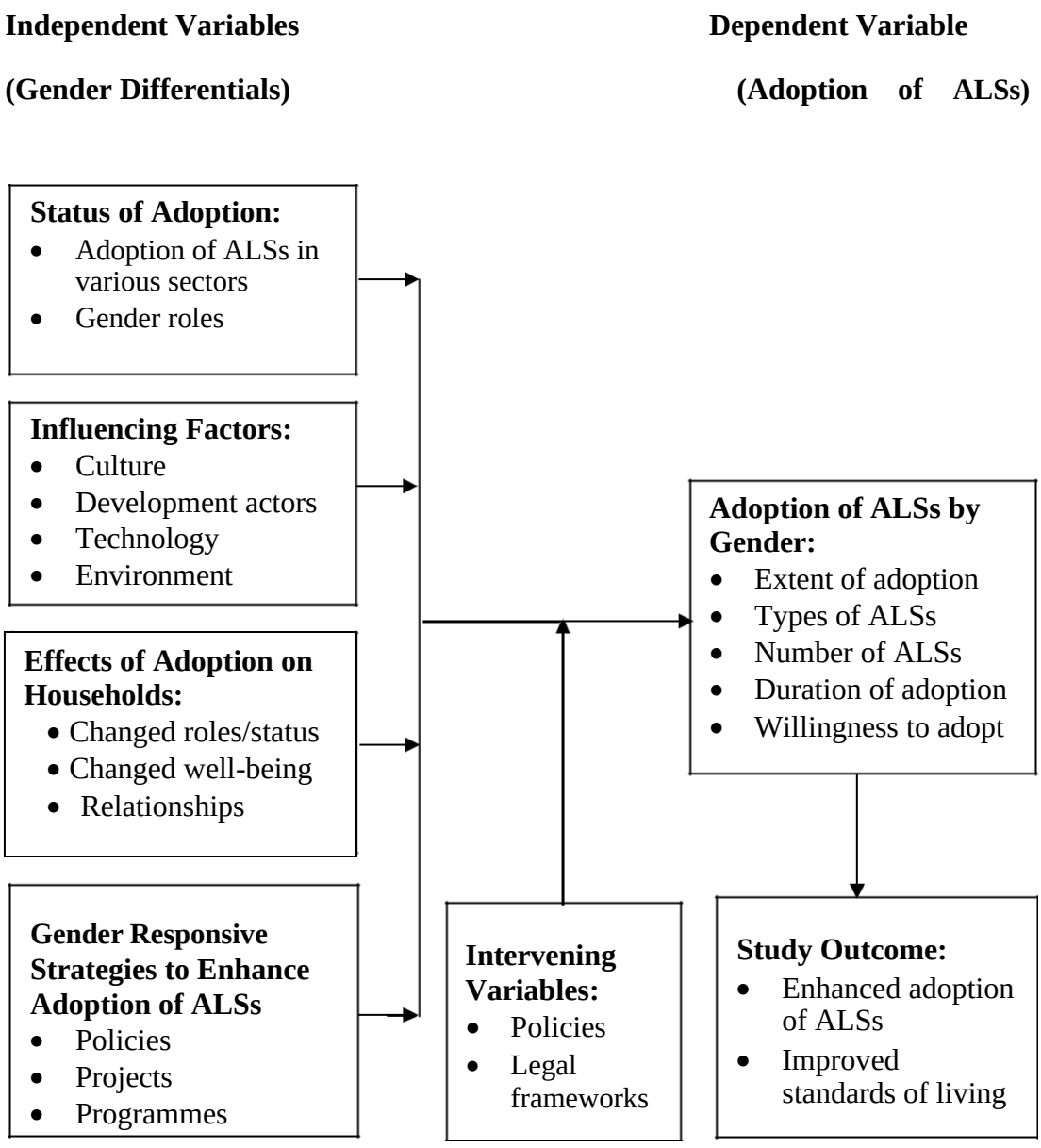

Figure 2.1: **A Conceptual Framework for the Relationship between Gender Differentials and Adoption of ALSs**
Source: **Author, 2017**

In the Conceptual Framework, independent variables are gender differentials in the status of adoption of ALSs, factors influencing adoption of ALSs, the effects of

adoption of ALSs on households, and the gender responsiveness of strategies aimed at improving adoption of ALSs. The dependent variable is adoption of ALSs by both genders as manifested by: the type and number of ALSs, the duration in which the ALSs have been adopted, and the willingness to embrace the livelihoods, given the opportunity. The study also considered legal and policy frameworks as intervening variables. The findings and recommendations of this study are expected to inspire improved adoption of ALSs by both men and women, hence reduction in pastoralism and the associated problems of gender inequality, poverty, insecurity, and conflicts.

2.8 Summary of Reviewed Literature and Knowledge Gap

This Chapter has reviewed the literature in relation to the research objectives. Thus, literature on the status of adoption of ALSs, factors influencing their adoption, the effects on households, and the gender-responsive strategies that could be employed to enhance adoption of ALSs among pastoralists across the globe have been reviewed. In all these areas, the study has made effort to capture the experiences of both men and women.

From the reviewed literature, it is apparent that the gender dimension has not been addressed adequately in the general area of diversification of livelihoods, yet it exerts considerable impact, considering that pastoral communities are highly patriarchal and with strictly marked gender roles. Most of the authors also treat pastoral communities as homogenous, yet they are diverse in terms of location, culture, economy, and social

life. Their views are, therefore, too general and may be misleading. In view of the aforesaid, there is a need to contextualize the gender dimensions of livelihoods among pastoral communities. The current study fills this gap by explaining what is unique among pastoralists in West Pokot County in regard to gender differentials in adoption of ALSs.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter presents the research methodology. It discusses the research design, a description of the study area, target population, sample size determination, sampling techniques and procedure, data collection instruments and procedures, reliability and validity of the research instruments, data analysis and presentation. It also covers the ethical considerations of the study.

3.2 Research Design

The study used a cross-sectional survey research design. This design is best suited to studies aimed at finding out the prevalence of a phenomenon, situation, attitude, or problem by taking a cross-section of the population at one time (Kumar, 2011). Thus, it sought to establish the gender differentials in adoption of Alternative Livelihood Strategies (ALSs) among sampled men and women in the pastoral Pokot community at the time of research. Both quantitative and qualitative approaches were adopted. The quantitative approach helped to generate statistical data that was easy to be systematically aggregated. The qualitative approach helped in gaining an in-depth understanding of the phenomena under study especially by generating data that was not easily translatable into numbers such as opinions, attitudes, beliefs, and perceptions (Mugenda, 2008).

3.3 Site of the Study

This study was conducted in West Pokot County which is one of the 47 Counties in Kenya. It is situated in the North Rift region along Kenya‟s Western boundary with Uganda as shown in Figure 3.1.

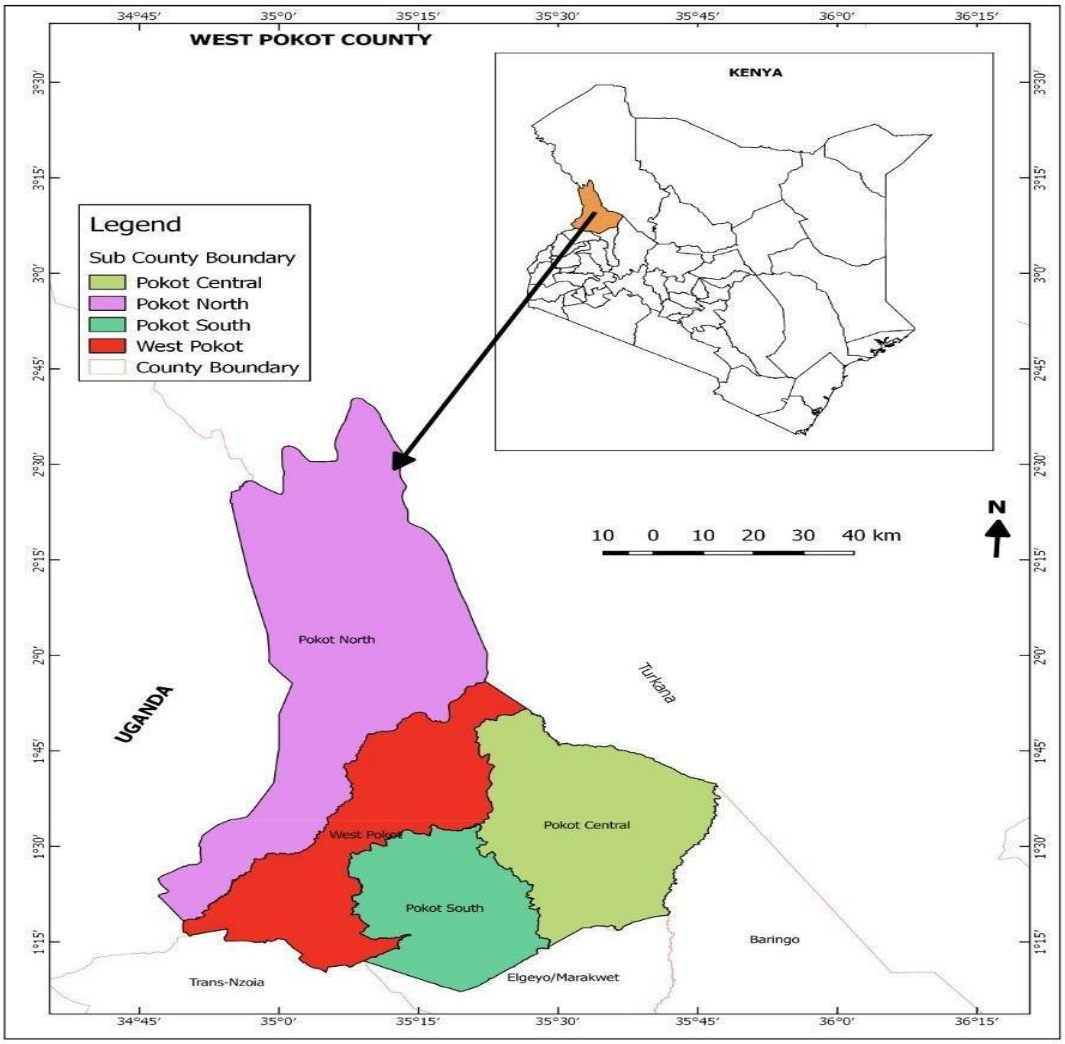

Figure 3. 1 Map of West Pokot County
Source: West Pokot County Integrated Development Plan (2018-2022)

According to the West Pokot County Government (2018), the County has four Sub-Counties which are North Pokot, Pokot Central, South Pokot, and West Pokot. The

Sub-Counties are further divided into 13 Divisions, 61 Locations, and 222 Sub-Locations. The County covers an area of approximately 9,169.4 km^2 with a population estimated at 512,690 persons as per the 2009 census. This population consists of 254,827 men and 257,863 women. The County has very varied altitudes and thereby large variations in climate and agroecological zones (Nyberg et al., 2015). The dominant livelihood system in major parts of West Pokot is pastoralism, while in the southern-central parts with higher altitudes and more rainfall, agro-pastoralism and mixed farming are common (National Drought Management Authority, 2014). In all these livelihood strategies, the West Pokot County Government reports that men play a dominant role and the proportion of individuals below the poverty line is 68.7%.

The County was selected purposively for the study because the environmental conditions are conducive to a variety of livelihood strategies. Also, the County is predominantly inhabited by the pastoral Pokots who are known for their love of cattle and adherence to strict patriarchal culture (Lolemtum, et al., 2017; Mutsotso, 2013). Therefore, the County is rich in pastoral culture and the associated problems of gender inequality, high poverty incidences, insecurity, and conflicts (Brown et al., 2016; Kamerback et al., 2015).

3.4 Target Population

The target population of the study was adult members of households in West Pokot County (KNBS, 2009). Other research participants were key informants in the County who included purposively selected opinion leaders, and officers (both state and non-

state) who were in charge of dockets that were key to livelihoods diversification. They included the County Secretary, Sub-County Commissioners, Agricultural Officers, County Women representatives, the Chief Executive Committee Member (CECM) in charge of pastoral economy, the World Vision Kenya Programmes Officer, and the West Pokot Chamber of Commerce and Industry Chairman.

3.5 Sampling Techniques and Sample Size

The study used the multi-stage cluster sampling technique. This technique is appropriate in big inquiries that cover large geographical areas such as the current one (Kothari & Garg, 2014). In this study, the Sub-Counties, Divisions, Locations, Sub-Locations, and Villages constituted the clusters. Therefore, a five-stage cluster sampling was adopted. In the first stage, North Pokot and South Pokot Sub-Counties were selected purposively. The justification for this selection was that in North Pokot, pure pastoralism was practised while in South Pokot agro-pastoralism and mixed farming were common. Therefore, the three popular categories of livelihoods in the County were well represented.

In the remaining stages, random sampling using the 10-30% criterion was applied to sample the participating Divisions, Locations, Sub-Locations, and Villages. According to Kumar (2011), from 10% to 30% of a sample frame in a similar setting is appropriate to constitute a sample. Since the number of these administrative units was small, 30% were sampled to participate in the study. To achieve this, the list of

administrative units was obtained from the Sub-County Commissioner‟s Office. Then the name of each administrative unit was written on a piece of paper, folded tightly, put in a box, and mixed and the required number (30% of the administrative units) was picked without replacement. This ensured that each of the administrative units had the same probability of being chosen (Kothari, 2008). At the final stage, all households in the sampled villages formed the sample for the study. The sampling procedure is illustrated in Table 3.1

Table 3. 1: ***Multi-stage Cluster Sampling Procedure***

Sub-County	Number of Divisions	**Sample**	Number of Locations	**Sample**	Number of Sub-Locations	**Sample**	Number of Villages	**Sample**	Number of Households	**Study Sample**
North Pokot	5	2	9	3	11	3	18	5	209	209
South Pokot	4	1	5	2	7	2	12	4	162	162
Total	**9**	**3**	**14**	**5**	**18**	**5**	**30**	**9**	**371**	**371**

As illustrated in Table 3.1, five villages in North Pokot which had 209 households participated in the study. These were Konyao, Kodich, Kanyerus, Orolwo, and Nakuyon. In Pokot South, four villages with a total of 162 households participated in the study. These were Kabichbich, Tapach, Chepareria and Parua. Therefore, the total number of households sampled to participate in the study was 371. Each of the

households produced an adult participant. To ensure gender balance, selection for participation was done in a manner that men and women alternated from household to household. The few households without men or women were skipped.

3.5.5 Sampling of Groups for Focus Group Discussions and Key Informants

This study purposively selected registered groups for men, women, and youths to participate in FGDs. The list of the registered groups was obtained at the office of Culture and Social Services in the County. The groups selected were those that had enabled members to adopt ALSs. One group was selected for each sampled village. Therefore, nine (9) FGDs were selected in such a way that the three categories (women, men, and youth) were adequately represented. In order to make the FGDs more effective, the researcher liaised with respective group leaders to ensure that each group comprised of between eight and 12 members. The researcher also liaised with the leaders of the selected youth group and ensured that gender balance in the selection of participants was achieved. Members of all these groups gave sufficient and reliable information on the topic under study because they had diverse experiences by virtue of their gender involvement in ALS and age.

A purposive sampling technique was also applied to select Key Informants (KIs) for the study. From the County Government, the County Secretary and the Chief Executive Committee Member (CECM) in charge of agriculture and pastoral economy were selected. Political leaders, officers in charge of non-state development agencies,

administration, gender, culture and social services, chamber of commerce, education, and agriculture were also selected from the sampled administrative units. In total, 15 KIs were identified and interviewed.

3.6 Research Instruments

In this study, both primary and secondary data were collected. Secondary data was obtained from libraries and e-resources. Primary data was collected using questionnaires, a Key Informant Interview (KII) schedule, and an FGD guide.

3.6.1 Questionnaires

Semi-structured questionnaire (Appendix B, p. 199) was used to collect data from adult household members. The questionnaire was selected because of the large number of respondents and to save time (Mugenda, 2008; Kothari, 2008). The researcher was assisted by trained research assistants. Since most of the respondents had minimal or no formal education, they were guided to respond to the questions. The close-ended items in the questionnaire had options to choose from while the open-ended ones had spaces where responses were recorded.

3.6.2 Key Informant Interview Schedule

In the KII schedule (Appendix C, p. 208), open-ended questions were used to collect data. This instrument yielded in-depth information through probing and clarifications. It also helped to verify the reliability of the information gathered by the questionnaires.

The interview questions were categorized to address variables as per the study objectives. A tape recorder and a notebook were used to capture information provided during the interview.

3.6.3 Focus Group Discussion Guide

This study also used the FGD guide (Appendix D, p. 209) on members (men and women) of registered groups, to collect primary data. This instrument offered an interactive setting to participants who discussed their thoughts freely, thus, enabling the researcher to explore the views of the participants and to generate answers to issues, which could have been more difficult in face-to-face interviews and questionnaires. The instrument also allowed the gathering of information even when the respondents happened to lack formal education (Kothari, 2014). Lastly, the instrument yielded detailed qualitative information from a relatively large number of participants who congregated in one place.

3.7 Validity and Reliability of Research Instruments

To achieve validity, the research instruments were constructed to capture information as per the specific objectives of the study. The triangulation method was also employed. Therefore, the study used questionnaires, interview schedules, and focused group discussion guides to form a triangulation method. Further, the research assistants were trained on the content of the instruments. Additionally, the respondents were assisted to fill out the questionnaires to ensure that they provided relevant

information as per the research objectives. To achieve reliability, the instruments were tested in Baringo East Sub-county where pastoralists bore similar attributes and characteristics to the study population in West Pokot County. The pilot data was analyzed to aid the adjustment of unclear questions. This data was not used during the analysis of the main research data. As noted above, the research assistants were also trained, adequately. This training ensured that there was no variation in data collection.

3.8 Data Collection Procedure

Before proceeding to collect data, the researcher obtained research authorization and a permit from Kenyatta University and the National Council for Science, Technology, and Innovation (NACOSTI), respectively. Thereafter, with the assistance of the local leaders and administrators, the researcher booked appointments with the sampled participants. Two research assistants were trained to assist in the conduct of the research. Since there were three instruments of data collection, the researcher started with the questionnaires and then proceeded to KIIs and FGDs. Considering that most of the respondents in the research site had minimal or no formal education, the researcher and assistants visited the sampled homesteads and guided them to fill out the questionnaires. However, a few respondents convinced the researcher and assistants that they were able to fill out the questionnaires by themselves within a period of two weeks. After this period, the two research assistants went around the villages to collect the filled questionnaires. In the case of KIIs, one-on-one interviews were conducted by the researcher at venues and times that were convenient to the

interviewees. The research assistants recorded the interviews on KII schedules, notebooks, and an audio recorder. For FGDs, meetings were held either in Church or School compounds. While the researcher moderated the discussions, the research assistants recorded the proceedings in notebooks and audio recorders. In both FGDs and KIIs, the researcher sought permission from the interviewees and discussants to record.

3.9 Data Analysis and Presentation

Quantitative data were edited, cleaned, coded, and entered in the Statistical Package for Social Sciences (SPSS) Version 23. The SPSS analysis generated descriptive statistics in form of frequencies, cross-tabulations, and percentages. The analyzed data were then presented in Tables and Charts. Qualitative data were typed (transcribed) verbatim in Excel Computer software. They were then subjected to thematic analysis and presented in narrative and verbatim forms.

3.10 Ethical Considerations

Before administering the research instruments, the researcher obtained informed consent from the respondents (Appendix A, p. 198). They were informed of the study objectives and the relevance of the findings. They were also assured of anonymity and confidentiality and no person was forced into participating in the study. At the same time, the research team ensured that all respondents and informants were treated with respect and their privacy was observed. Whilst letters of authorization were obtained

from Kenyatta University (Appendix E, p. 210) and the office of West Pokot County Commissioner (Appendix F, p. 211), the research Authorization (Appendix G, p. 212) and permit (Appendix H, p. 213) were obtained from NACOSTI.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

In this Chapter, findings are presented, discussed and interpreted in six sections as follows: response rate, demographic characteristics, status of adoption of ALSs, factors influencing adoption of ALSs, effects of adoption of ALSs on households and gender responsive strategies to enhance adoption of ALSs in the pastoral community of West Pokot County. The findings are presented in Tables and Charts and supported by explanations in prose and verbatim quotes.

4.2 Response Rates

The study targeted 371 respondents, majority of whom were assisted to fill the questionnaires. However, 292 of these had their completed questionnaires available to the research team, translating to a response rate of 78.7 percent. A higher response rate was not achieved because some of the respondents, who opted to fill the questionnaires by themselves, failed to return them. Some sampled households were also skipped because there were no men and women (the units of observation). However, the response rate of 78.7 percent was still a sufficient representation of the target population and was considered adequate for analysis and statistical reporting.

4.3 Demographic Information

The study sought to establish demographic information of the respondents regarding their gender, age, education, marital status, household leadership and employment. This was done in order to establish the extent of gender differentials in adoption of ALSs in the pastoral community of West Pokot County.

4.3.1 Distribution of Respondents by Age

This study considered age an important characteristic as it indicated the extent to which study participants were involved in adoption of ALSs. Thus, it collected data on distribution of respondents by age as portrayed in Figure 4.1.

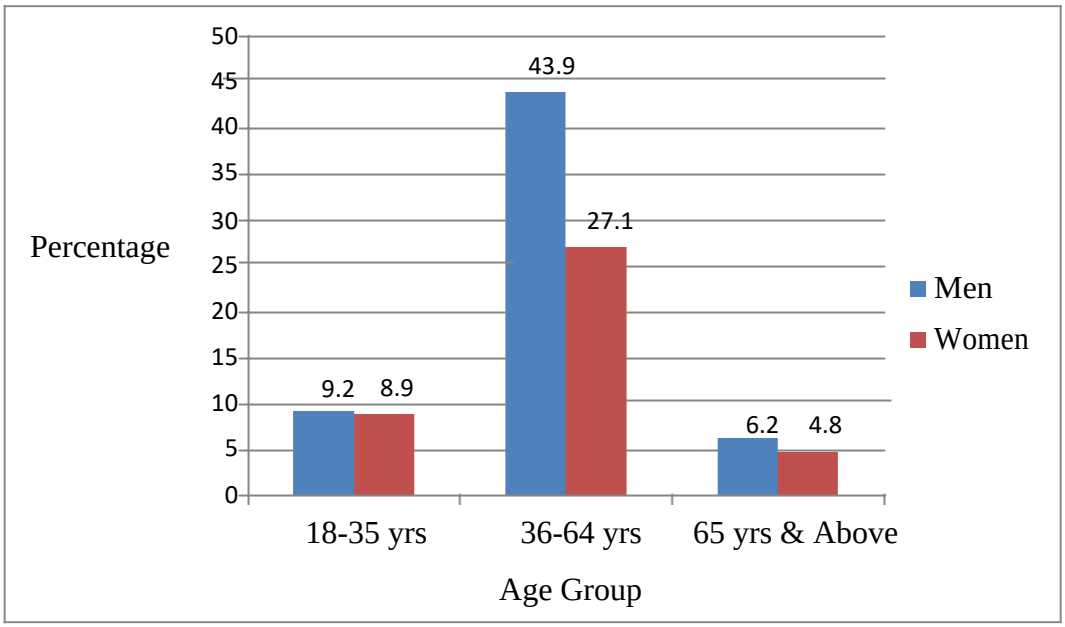

Figure 4.1: **Respondents by Age Groups**

Figure 4.1 shows that: 18.1% (men=9.2% and women=8.9%) were aged between 18 and 35 years; 71% (men=43.9% and women=27.1%) between 36 and 64 years and

11% (men=6.2% and women=4.8%), 65 and above years. Thus, most of the respondents who took part in the study were aged between 36 and 64 years (71%). This, according to the World Bank (2016), is a working age population. They were, therefore, actively involved in livelihood strategies and contributed valuable information to the study. Equally beneficial to the study, were the aging respondents who were above 65 years of age (47%) because of their many years of exposure to pastoralism and ALSs.

4.3.2 Distribution of Respondents by Gender

The study established the gender of the study participants to obtain gender relevant information in adoption of ALSs. The distribution of respondents by gender is presented in Figure 4.2.

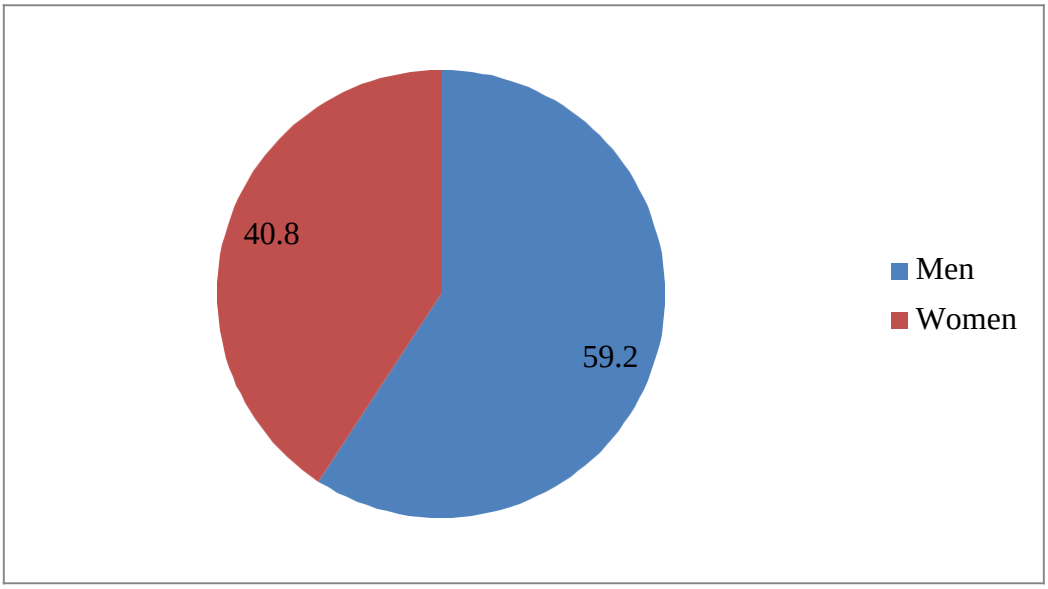

Figure 4.2: **Respondents by Gender**

Figure 4.2 indicates that out of 292 respondents who took part in the study, 173 (59.2%) were men while 119 (40.8%) were women. Despite the study‟s attempt to equalize the number of men and women, more men than women took part in the study. In the study area, similar observations have been made by Lolemtum et al. (2017) that men in the community are more willing than women to respond to questionnaires. This is a strong indicator that women‟s participation in any endeavour, outside the reproductive domain is still lower than that of men in the pastoral community. This confirms the findings by Nyberg et al. (2015) and Magal (2016) that women‟s main tasks in the pastoral community of West Pokot County are domestic, such as caring for children, fetching water and firewood.

4.3.3 Distribution of Respondents by Education

The education level of the respondents is shown in Table 4.1.

Table 4. 1: ***Distribution of Respondents by Level of Education***

Level of Education	**Men**		**Women**		**Total**	
	Count	**%**	**Count**	**%**	**Count**	**%**
No education	70	24	68	23.3	138	47.7
Dropped before KCPE	33	11.3	13	4.5	46	15.8
Primary certificate	9	3.1	10	3.4	19	6.5
Secondary certificate	26	9	13	4.4	39	13.4
Diploma/certificate	10	3.4	10	3.4	20	6.8
Bachelor‟s Degree	15	5.1	5	1.7	20	6.8
Postgraduate Degree	10	3.4	0	0	10	3.4
Total	**173**	**59.3**	**119**	**40.7**	**292**	**100**

Table 4.1 above shows that 47.3% of the respondents had no formal education, 15.8% dropped out of school before KCPE and 6.5% had primary certificate. Further, 3.4% had secondary certificate, 6.8% diploma or college certificate, 6.8% Bachelor‟s degree and 3.4% postgraduate degree. The findings show that literacy levels are low in West Pokot County, more so for the women. This has a corresponding implication on adoption of ALSs since there is a positive correlation between education and productivity (Fiske, 2012). Nonetheless, the variations in literacy among the respondents, benefitted this study since their views reflected those of the entire pastoral community where overall literacy stood at 40% with huge gender gap (women=28% and men=12%) (West Pokot County Government, 2013). Literacy levels are also extremely low among other pastoral communities in Kenya such as the Maasai, Rendile, Somali and Samburu, as has been revealed by a survey conducted by UNICEF Kenya and Anti-FGM Board of Kenya (2017), where a majority of surveyed girls, women, boys and men have only attained primary-level education or none at all. Studies by Kipuri and Ridgwell (2008) and Nelson et al. (2016) further indicate that literacy levels among pastoralists in East and Horn of Africa are also generally low, women being the most disadvantaged.

4.3.4 Distribution of Respondents by Marital Status

The marital status of the study participants is as shown in Figure 4.3.

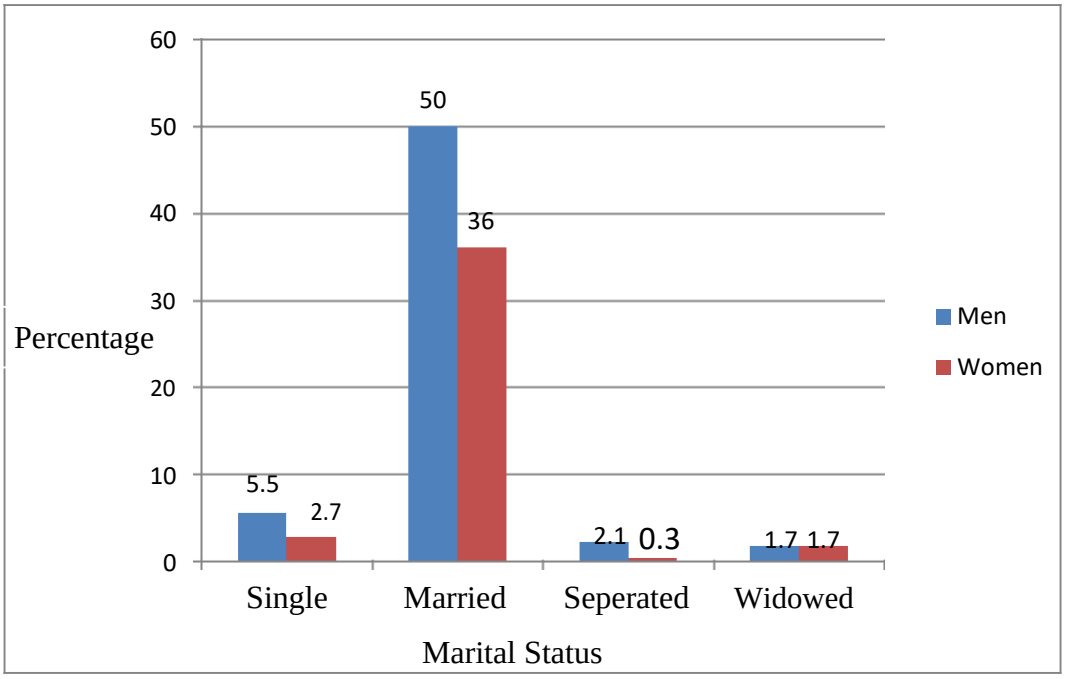

***Figure 4.3*: Distribution of Respondents by Marital Status**

On the distribution of respondents by marital status, Figure 4.3 indicates that, out of 8.2% who were single, 5.5% were men and 2.7% were women. From the 86% of the respondents who were married, 50% were men and 36% were women. In addition, 2.1% of the respondents who were separated were men and 0.3% women. Thus, 2.4% of the respondents were separated from their spouses. Also, those who were widowed were 3.4%. In this category, there was equal number of men (1.7%) and women (1.7%). The findings of the study show that most of the respondents are married, implying that marriage is highly valued in the community. This is in tandem with the observation by IWGIA (2012), and Lomuria and Atem (2019) that singlehood in pastoral communities is discouraged and shunned. This study drew valuable information from this wider array of respondents because marital status influences

one‟s perception of issues, decision making, access and control of resources, freedom of will and action, and self-development. All these are important factors in adoption of ALSs.

4.3.5 Household Leadership Status

The study sought to establish the leadership of households that were sampled for the study as summarized in Table 4.2.

Table 4. 2: ***Head of the Household***

Head of Household	**Frequency**	**Percent (%)**
Men (married couple)	232	79.5
Women (married couple)	11	3.8
Men (single, widowed, separated, divorced)	27	9.2
Women (single, widowed, separated, divorced)	10	3.4
Male child	11	3.8
Female child	1	0.3
Total	**292**	**100.0**

Table 4.2 shows that in households of married couples, 79.5% were headed by men while 3.8% were headed by women. In households of the respondents who were single/widowed/separated/divorced, 9.2% were headed by men and 3.4% by women. For the households which were child headed, 3.7% were headed by male children, while 0.3% were headed by female children. From the Table, an overwhelming majority of the households were headed by men. This confirms the finding by Mutsotso (2013) and Ng‟ang‟a (2013) that women are regarded as social minors and inferior in the Pokot community and are, therefore, rarely entrusted with household

leadership. This also common in other pastoral communities (IWGIA, 2012). This means that, adoption of ALSs in the community is skewed in favour of men who as household heads, have more control over decision-making and allocation of resources.

4.3.6 Distribution of Respondents by Family Type

The study further sought to establish the distribution of respondents by family type as depicted in Figure 4.4.

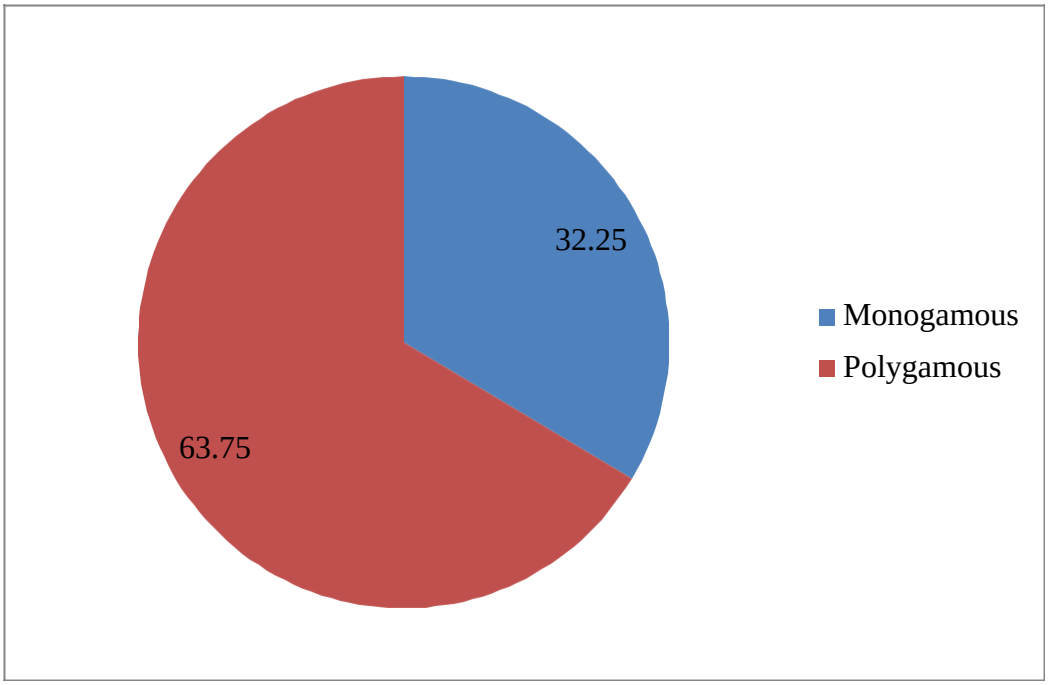

Figure 4.4: Respondents by Family Type

From Figure 4.4, while 32.25% of the respondents were from monogamous type of family, the majority at 67.25% came from polygamous type. This imply that the culture of the community encourages polygamy. This is a common trend in other pastoral communities as reported by Archambault (2016), Dyer (2012) and Dong et

al. (2011). UNICEF (2018) names polygamy among harmful cultural practices that hinder women‟s empowerment in Kenya. This imply that polygamy curtails adoption of ALSs, especially among the women. Generally, family type poses significant influence on adoption of ALSs since it provides a strong framework within which socioeconomic activities are organized and implemented in pastoral communities as alluded to by Kalyango et al. (2019).

4.3.7 Distribution of Respondents by Source of Livelihood

The distribution of the respondents by the source of livelihood is shown in Table 4.3.

Table 4. 3: ***Distribution of Respondents by Source of Livelihood***

Source of Livelihood	**Men**		**Women**		**Total**	
	Count	**%**	**Count**	**%**	**Count**	**%**
Formal employment	29	9.9	18	6.2	47	16.1
Informal/self-employment	124	42.5	100	34.2	224	76.7
Both (formal and informal)	20	6.9	1	0.3	21	7.2
Total	**173**	**59.3**	**119**	**40.7**	**292**	**100**

Table 4.3 shows that for livelihoods, few respondents (16.1%) were in formal type of employment while majorities (76.7%) were in informal or self-employment. Very few, that is, 7.2% were engaged in both formal and informal types of employment. In terms of gender, 9.9% of the respondents who were in formal employment were men and 6.2% were women. The informal/self-employment sector had 42.5% and 34.2% of the respondents being men and women, respectively. Further, 6.9% of the respondents who had embraced both formal and informal employment were men and only 0.3%,

were women. Clearly, there is an overwhelming adoption of informal employment by the members of the pastoral community. Thus, participation of the pastoralists in formal employment, a sector that is more rewarding, is low. Gender variations in employment are also evident in that more men (59.3%) than women (40.7%), are in employment. These findings resonate well with those of the UNDP (2018) that, globally, female participation in the labour market is still lower than that of men. Study findings that 76.7% of the respondents engaged in the informal sector also agree with those of the African Development Bank (AfDB, 2015) that the sector, where agriculture and businesses are the main activities, employs 70% of the population in Africa.

4.4 Status of Adoption of ALSs by Men and Women in the Pastoral Community of West Pokot County

The first objective of the study was to assess the status of adoption of ALSs by men and women in the pastoral community of West Pokot County. To achieve this objective, the central ideas of Capacities and Vulnerabilities Analysis (CVA) framework were applied in assessing the status of adoption of ALSs by gender. The findings are presented in the subsequent sections under the themes: gender disparities in adoption of ALSs; willingness to adopt ALSs; duration of adoption of ALSs and extent of adoption of ALSs.

4.4.1 Gender Disparities in Adoption of ALSs

The study sought to establish whether there were gender disparities in adoption of ALSs in the pastoral community. To this end, the respondents were asked to indicate their level of agreement on various statements related to adoption of ALSs. The responses were rated on a five-point Likert Scale (Appendix B, p. 200) where: 1-Strongly Disagree; 2-Disagree; 3-Undecided; 4-Agree and 5-Strongly Agree. The SPSS Version 23 was used to generate the Mean and Standard Deviations (SD). A mean score of 3 and above was considered significant since it was under "agree" and "strongly agree". The findings are presented in Table 4.4.

Table 4.4: ***Respondent Views on Adoption of ALSs by Men and Women***

Adoption Status	**Mean**	**SD**
Women are faster than men in adopting ALSs	3.65	1.20
Women have adopted more ALSs than men	3.52	1.18
Decision to adopt is mostly done by men	4.01	1.08
It is easier for men to get resources to adopt ALSs than women	4.00	1.10
Men had more access to and control of the benefits of adoption ALSs, than the women	3.86	1.10
Men have adopted more lucrative ALSs than women	3.51	1.04
Mean	**3.76**	**1.12**

As illustrated in Table 4.4, a high mean of 3.65 means that majority of the respondents agreed with the view that women were faster than men in adopting ALSs. Concurrence with this view during KIIs and FGDs came out very clearly from the following:

> With increase in number of children to be fed, clothed and put in school, we feel the pinch more than the men because we are mostly at home. We have,

> therefore, ventured outside livestock sector to try any idea that solves the problems (Women FGD, Kodich-North Pokot).
>
> Women are usually the first to embrace any new idea that comes to the village because they don‟t fear failure, unlike men who have ego problems and would take time to research and benchmark to ensure it succeeds and where there are grey areas, they dare not venture lest they become a laughing stock (KII 3. 12/3/2019).

The findings indicate that there were gender variations in the pace of adoption of ALSs in the pastoral community where women were faster than men. The reasons given were that, women performed most of the reproductive roles and, therefore, felt pain of not providing for the households more than the men, hence the readiness to embrace any idea which could complement the dwindling livestock resource. Another reason was that, unlike men, women did not have much of ego problems and could try any idea even when failure was imminent. These findings concur with those of Devereux (2014), who notes that women are often agents for change and adaptation within the households. This puts them at the forefront of embracing new ideas. This means that, given the opportunity and support (for example, when their capacities are enhanced and vulnerabilities eliminated), as recommended by the CVA framework, women can help the community to realize development through adoption of ALSs.

Also, the study findings in Table 4.4 show that women had adopted more ALSs than the men. The KIs were of the same opinion. As proof, they named ALSs dominated by each gender and the list as shown in Table 4.5 indicates that there were more ALSs adopted by women (17) than men (12).

Table 4.5: ***ALSs Dominated by Men and Women***

S/NO	ALSs Dominated by Women	ALSs Dominated by Men
1.	Subsistence farming	Commercial farming
2.	Food and groceries shops	Retail stores
3.	Sale of second-hand clothes	Transporting services for a fee
4.	Domestic servant-hood	Casual labour in crop cultivation
5.	Drawing and selling of firewood	Waged labour in construction sites
6.	Sale of roast maize by roadsides	Formal employment
7.	Poultry keeping	Beekeeping
8.	Specialized occupations: tailors, hairdressers in salons, etc	Specialized occupations: barbers, carpenters, mechanics, etc
9.	Craft work for sale e.g. beads	Selling/leasing of assets e.g., land
10.	Waiters/stewards in hotels/shops	Trade in Livestock
11.	Gathering/sale of wild vegetables	Sand mining and sale
12.	Gathering/sale of medicinal herbs	Mining of minerals
13.	Milk sales	
14.	Sale of domestic merchandise	
15.	Kitchen gardening	
16.	Sale of local beer/liquor/brews	
17.	Remittances and gifts	

Reasons were given by the KIs to explain why women had adopted more ALSs than men:

> More strategies for adoption of ALSs in the county target women more than men (KII 12. 9/3/2019).

> Women adopted ALSs because traditionally, they do not own anything, they are not heirs, cannot inherit property, and do not have right to own. Therefore, access to and control of cattle which are the traditional sources of wealth is limited. This makes them adopt ALSs as men stick to cattle whose numbers dwindle by the day (KII 9. 9/3/2019).

> Women are more contented than men with small or little things which required little capital to start. Consequently, they engage in the simplest of the livelihoods such as buying a maize cob at Ksh. 5 and selling it at Ksh. 10 after roasting. While women are doing these, men think only of big ventures that require a lot of money to start and sustain such as wholesale and retail stores and construction sectors (KII 8. 16/3/2019).
>
> Men in the community are socialized to rigidly adhere to traditional ways of doing things and are sort of aversive to new ideas (KII 12. 9/3/2019).
>
> My view is that, the present-day pastoral men are lazy and have negative attitude towards work. For instance, you find women with babies strapped on their backs, clearing bushes and tilling land in the scorching sun, while men enjoy the breeze under tree shades and only to return home in the evening and demand food (KII 2. 16/3/2019).

In the statement above, the reasons given to explain why women had adopted more ALSs than men were: more strategies towards adoption of ALSs in the County, targeted women; ALSs pathway was easier for women than livestock production where they were limited by cultural barriers; women were more content with small and simple ventures and did not wait to accumulate large startup capital (hard to attain considering the low socioeconomic status of the community); women were more flexible and willing to embrace new ideas and lastly, women were more industrious and had better work ethics. All these reasons imply that in adoption of ALSs, women faced more environmental and socio-cultural push and pull factors, more than the men. Some researchers have similar findings. For instance, Magal (2016) notes that in West Pokot, most of the livelihood diversification activities are practised by women as men stick to livestock production. Dometita (2017) adds that, among Rendile and Turkana pastoral communities, there is stronger resistance to shift to new roles among men and that they are very selective about which productive roles to do. Conversely, women in

these communities tend to diversify as much as possible and engage in anything just to support the families. This hints at the great potential among the women which can be tapped to promote adoption of ALSs.

The study findings illustrated in Table 4.4 further show that majority of the respondents were of the view that the decision to adopt ALSs in the households was mostly done by men (mean=4.0). This was further confirmed by participants in FGDs. For example:

> In our culture, all decisions including those of adoption of ALSs are made by the household head who is usually the man. In households that are headed by women, particularly widows, the first-born son, brother or the uncle steps in to make important decisions. However, there is an increasing number of educated and exposed women making decisions, sometimes independent of the men (Youth FGD, Kanyerus-North Pokot).

Based on above data, the study deduces that men in the community, dominated decision-making on adoption of ALSs because they were heads of households where one of their key mandate was exactly this. Writing on decision-making and participation in households‟ socioeconomic activities, among the Turkana and Rendile pastoralists, Dometita (2017) reports that the man made decisions in the household because he has the most power/privilege over the woman/wife within the household. He observes that the women in the community have accepted this position and often remain passive and dd not make independent decisions. The data also shows that women were beginning to participate in household decisions and, sometimes, made independent decisions. This is a pointer to an improved socioeconomic status among

the women. As noted by the FGD, education and exposure (probably brought by education process and business interactions) are the key factors. This trajectory, when sustained could lead to full participation of women in decision-making and this would give impetus to higher adoption of ALSs in the community.

According to Table 4.4, men had more access to and control of resources to adopt ALSs than women (mean=4.00). On this, all participants in KIIs and FGDs expressed similar views which were well captured by some of them, such as:

> Men are the household heads and decision makers. Therefore, every resource in the household is at their disposal. Therefore, it is easier for them to access resources to start a venture outside pastoralism. For us women, it is generally harder (Women FGD, Kodich-North Pokot).

> In this community, women are regarded as „children" and are therefore not trusted with important household resources (KII 14. 6/3/2019).

Thus, men in the pastoral community of West Pokot County, had more access to and control of resources to adopt ALSs than women. The reasons given by the study participants were that, household leadership and decision-making, gave men leverage to access households" resources more than other household members. The community did not also believe in the ability of women to control important household resources. Likewise, Eneyew and Mengistu (2013) has found out that, in comparison with men, women lack access and control rights over livestock, land, and income. All these are critical to securing a sustainable livelihood. The finding that women, who are faster than men in embracing change, have limited access to and control of resources, imply

that the pace and extent of adoption of ALSs in the community is impeded. Comparatively, adoption of ALSs among the women suffer the most.

Additionally, the study findings in Table 4.4 indicate that men exercised more access and control to the benefits accrued from adoption of ALSs than the women (mean=3.86). This was also the unanimous view of KIs and FGD participants. This came out clearly from one FGD:

> For those of us who are married, we surrender our earnings to the husbands as traditions demand. While some are kind enough to involve you in deciding what to do with the money, majority, do not do so. So, we are at their mercy. For those not married, their fathers would always demand to be involved yet they do not do this to unmarried men (Women FGD, Chepareria-South Pokot).

From the above, this study deduces that the benefits of all ALSs ventures were accessed and controlled more by men than the women. This was in tandem with the community‟s customs and traditions. The unequal access and control of the benefits, in the opinion of this study, denies the community the advantage that could accrue when all the constituent members (men and women) perform optimally as has been espoused by the Theory of Structural Functionalism. According to the theory, the contributions of all the various parts, structures and systems of a society are significant for attainment of its social needs and stability (Macionis & Gerber, 2011).

Another finding of the study as shown in Table 4.4 is that men had adopted more lucrative (higher value) ALSs than the women (mean=3.51). Therefore, the few ALSs they have embraced cautiously and reluctantly, as noted earlier in this section, are

more profitable than those undertaken by the women. This view was supported by KIs and FGDs participants. As an example, two KIs articulated how men had dominated the construction sector an important source of livelihoods in Kenya:

> Men dominate the construction sector as artisans, labourers, contractors and suppliers in both private and public sector projects. The few women in this sector are employed as unskilled artisans and labourers. Thus, they are paid less than their male counterparts who possess required skills, knowledge and the physical strength (KII 15. 12/03/2018).
>
> In Government construction contracts and tenders which are usually well paying, women are disadvantaged. When I was CEC Culture and Youth, I was mandated to ensure 30% of contracts go to women, the disabled and the youth, but for the four years (2014-2017), only one woman-owned company won construction contracts. On the side of the youth, eight companies won, but all belonged to male youth (KII 9. 9/03/2018).

The above statements clearly indicate that men dominated the most rewarding jobs and contracts in both the private and public construction sectors. The gap between men and women was particularly wider in the area of Government construction contracts and tenders, which were usually well paying. This happens against the backdrop of the requirement by the 2010 Constitution of Kenya that 30% of contracts and tenders must be allocated to the marginalized and vulnerable members of the society such as women and people living with disabilities (UNICEF, 2018). Other studies with similar findings that men have adopted more gainful ALSs than women include Okoti, N'gete, Ekaya and Mbuvi (2004) and Schilling et al. (2012). These findings indicate that women in the pastoral community of West Pokot, face barriers in accessing high-income ALSs. This study attributes this to women‟s lack of good education and resources which are prerequisites for securing higher value ALSs in both formal and

informal sectors. Adherence to strict gender roles where women are expected to either stay at home or work near it, in order to perform reproductive roles, could be another probable cause for women‟s marginal participation in well-paying ALSs.

4.4.2 Willingness to Adopt ALSs

This study further assessed the willingness to adopt ALSs as one of the indicators of the status of adoption of ALSs by men and women in the community. To achieve this, the respondents were asked whether they were willing at any time, given the resources, to adopt ALSs. The findings are shown in Table 4.6.

Table 4. 6: ***Willingness to adopt ALSs by Men and Women***

Responses	**Men**		**Women**	
	Count	**%**	**Count**	**%**
Yes	121	70	107	90
No	52	30	12	10
Total	**173**	**100**	**119**	**100**

As illustrated in Table 4.6 above, an overwhelming majority of respondents were willing to adopt ALSs (Men=70%; Women=90%). This, offers a unique opportunity for development actors to accelerate the transition from pastoralism to ALSs. The higher number of women willing to adopt ALSs than men, explains why women have adopted more ALSs than men as has been noted in the preceding section. It also implies that men in the community are more averse to change since they still love their cattle. In view of this, Dometita (2017) also observes that there is stronger resistance to shift to new roles among men compared with women and that men are very selective

about which reproductive roles to do. This explains why 30% of men are not willing to adopt ALSs even when adequate support is promised.

4.4.3 Duration of Adoption of ALSs

The CVA framework considers an analysis of change over time of the variable or phenomenon under consideration as one of the ways through which a true reflection of society‟s reality can best be achieved (Urry, 2000). In view of this, and in order to better understand the status of adoption of ASLs among men and women in the community, this study considered duration of adoption as an important variable. To achieve this, the respondents were asked to indicate the duration of adoption of their main ALS(s) by choosing from the category of years given: 1-15 years, 16-30 years, 31-45 years, 46-60 years, 61 and above years. Since there were five categories, 2.5 was considered the average mean which translated to between 31 and 45 years of adoption. The findings are shown in Table 4.7.

Table 4.7: ***Mean Duration of adoption of ALSs by Men and Women***

ALSs Sector	Mean (Men)	Mean (Women)	Total Mean
Crop farming	2.92	2.40	2.66
Business/Trade	1.36	1.26	1.31
Formal employment	1.43	1.24	1.34
Informal employment	2.76	2.31	2.54
Sports/Art	1.13	1.08	1.11
Poultry farming	2.12	1.71	1.92
Dairy farming	2.96	2.05	2.51
Others	1.01	1.03	1.02
Mean	**1.97**	**1.63**	**1.80**

As illustrated in Table 4.7 above, except for crop farming (mean=2.66), informal employment (mean=2.54) and dairy farming (mean=2.51), the mean duration of adoption of ALSs by men and women in all sectors was below average. This translated to less than 30 years of adoption by the time this research was conducted early 2019. ALSs in agriculture and informal sectors had been adopted for longer duration as compared to those in the formal, sports and arts sectors. By and large, the findings show that adoption of ALSs in the pastoral community is a recent phenomenon, more so for the women. Except for lack of gender dimension, similar findings are made by Kaprom (2013) and Mutsotso (2013) who singles out crop farming as the oldest ALSs to be adopted by the community. But this has happened as recent as the 1980s. The findings of Chepkangor et al. (2015) also indicate that in majority of households in West Pokot County, adoption of ALSs is between 10 and 20 years. Considering that adoption of ALSs is envisaged to end overreliance on pastoralism and its attendant problems of resource-based conflicts and poverty (Rota & Chakrabarti, 2010; Schrepfer & Caterina, 2014; Archambault, 2016), the implication of this short duration of adoption of ALSs is that, these problems might persist for a long time.

The slow rate of transition from pastoralism to ALSs has been attributed to entrenched retrogressive cultural beliefs, norms, values and practices in the community, including FGM/C, early forced marriages, patriarchy and strong attachment and value for cattle, hence negative attitude towards most of the socioeconomic activities outside the livestock sector (Mutsotso, 2013; Ng‟ang‟a, 2013). Inadequate infrastructural

development in West Pokot County, which is due to many years of neglect and marginalization by the Government, stifles meaningful adoption of ALSs (Nyariki & Amwata, 2019; Otieno, 2014).

4.4.4 Extent of Adoption of ALSs by Men and Women

In order to adequately gauge the extent of adoption of ALSs among both men and women in the community, the respondents were asked to indicate from the choices given on a Likert Scale which were assigned values from one to five (Not at all - 1, in a small way - 2, in medium way - 3, in a big way - 4 and fully - 5). Choosing "not at all" means that the respondent did not spend any of his or her working time in the ALSs, while "in a small way" implies less than half of the working time. In "a Medium way" insinuates that the respondent spent half of his/her working time doing it and in "a big way", more than half. Doing it "fully" hints that the respondent spent all her/his working time doing it, meaning it was a full-time job. The SPSS Version 23 was used to generate the mean where a mean score of 3 and above was considered significant. The findings are as shown in Table 4.8.

Table 4.8: ***Mean Extent of Adoption of ALSs by Men and Women***

ALSs Sector	Mean (Men)	Mean (Women)	Total Mean
Crop farming	2.39	2.04	2.22
Business/Trade	1.43	1.31	1.37
Formal employment	1.68	1.51	1.60
Informal employment	2.36	1.97	2.17
Sports/Art	1.15	1.07	1.11
Poultry farming	1.92	1.58	1.75

Dairy farming	2.31	1.91	2.11
Others	1.03	1.04	1.04
Mean	**1.78**	**1.55**	**1.67**

The study findings illustrated in Table 4.8 indicate that the average total mean is 1.67, implying that both men and women had adopted ALSs in a small way or not at all in some sectors. The findings also show that the extent of adoption of ALSs in agriculture (crop, poultry and dairy farming) and informal sector was higher than in other sectors. According to KIIs and FGDs, this could be attributed to high poverty and illiteracy levels and the fact that majority of pastoralists were predominantly rural dwellers. These conditions made pursuit of ALSs in other sectors, such as formal employment, business and sports/arts, difficult. This viewpoint is corroborated by World Bank‟s Report in 2016 that, 80% of the worldwide poor live in rural areas; 64% work in agriculture; and 39% have no formal education (World Bank, 2016). Similarly, Hall (2017) reports that majority of job opportunities available to Kenyans are in the informal sector.

Overall, the extent of adoption of ALSs in the community is low implying that pastoralism remains its mainstay. The findings correlate with those of Mutsotso (2013), Chepkangor et al. (2015) and Lolemtum et al. (2017) that there is a generally slow pace of diversification of livelihoods among Pokot pastoralists. Writing on the plight of pastoralists in general, Little (2001) and IWGIAS (2012) observe that diversification of livelihoods, among all pastoral communities in East Africa, is low

and slow. Clearly, gender variations in the extent of adoption of ALSs are evident in the study findings. In all sectors of ALSs adoption, women are trailing men. These findings are similar with those of Kimani and Kombo (2010), as cited in Mutuma (2017) that the men, being the undisputed heads of the households in traditional African society, mostly engage in productive activities and leave the women in reproductive tasks. The women‟s low extent of adoption of ALSs, despite being faster than men as noted earlier is indicative of the existence of barriers which affect them, disproportionately.

From the foregoing, this study notes that adoption of ALSs in the pastoral community is slow, a recent phenomenon and characterized by gender differentials. In the gender differentials, women who, despite being more aggressive and willing to adopt ALSs are more disadvantaged and lagged behind men. Livestock production, therefore, remains the major source of livelihoods in the community. Yet it is increasingly becoming unsustainable and unreliable. This study, therefore, postulates that the problems associated with pastoralism such as poverty, resource-based conflicts, patriarchy and marginalization will continue to persist, in as long as gender differentials in adoption of ALSs exist. In the next section, the factors which influence adoption of ALSs by men and women in the pastoral community, will be discussed.

4.5 Factors Influencing Adoption of ALSs by Men and Women in the Pastoral Community of West Pokot County

In the second objective, this study sought to examine factors which influence adoption of ALSs by men and women in the pastoral community of West Pokot County. This has enabled identification of factors which shape relations and determine different constraints and opportunities for men and women in the process of adoption of ALSs. Identification of these factors has further enabled this study to make practical recommendations on how to enhance adoption of ALSs from a gender perspective. To respond to this objective, the study participants were asked to indicate their level of agreement on various statements grouped under socio-cultural, environmental and technological factors. Other statements were presented under the activities of state actors, non-state actors and the pastoral community itself, meant to enhance livelihoods diversification. The responses were rated on a five-point Likert Scale where: 1-Strongly Disagree (SD); 2-Disagree (D); 3-Undecided (U); 4-Agree (A) and 5-Strongly Agree (SA). The SPSS Version 23 was used to generate the Mean and Standard Deviations (SD). A mean score of 3 and above has been considered significant since the score falls under “agree“ and “strongly agree”. The findings are presented under the aforementioned themes, in subsequent sections.

4.5.1 Socio-cultural Factors Influencing Adoption of ALSs by Men and Women

Socio-cultural factors are the social and cultural elements present in a population or group of people (March et al., 1999). March et al., states that socio-cultural factors

including norms, beliefs, social hierarchies, values and cultural practices, pose significant influence on people‟s lives in society because they shape relations and determine people‟s opportunities and constraints. This study has established how the factors, which came out very strongly in reviewed literature, influence adoption of ALSs among men and women in the pastoral community of West Pokot County. The findings are presented in Table 4.9.

Table 4.9: ***Views on how Socio-cultural Factors Influence Adoption of ALSs***

Socio-cultural Factors	**Mean**	**SD**
There are ALSs that men think are for women	3.78	1.08
There are ALSs that women think are for men	3.95	0.91
People discourage their spouses from adopting some ALSs	3.54	1.11
Most ALSs adopted by women are decided (chosen) by men	3.77	1.26
Most community members believe that women should stick to domestic chores	3.54	1.27
In the community, livestock are the most valued form of wealth	4.05	1.16
There are beliefs, norms, values and practices in the community that do not favour/encourage adoption of ALSs	3.41	0.98
There are beliefs, norms, values and practices in the community stimulating adoption of ALSs	2.64	0.93
Mean	**3.58**	**0.97**

As illustrated in Table 4.9, on whether there were ALSs that men thought were for women, the high mean rating of 3.78 imply that, most respondents agreed with the opinion. Conversely, the rating for the perception by women that there were ALSs for men was equally high (3.95), meaning that most respondents agreed with the view among women that some ALSs were just meant for men only. In support of this, one KI gave examples of ALSs shunned by either men or women:

> In this community, men associate some jobs with women and are rarely involved in them. Examples are hair dressing, tailoring, sale of groceries and serving as waiters/stewards in hotels, food kiosks and retail shops. On the other hand, women think, working as driver or tout in a public transport vehicle, trading in livestock, mining, and performing construction tasks either artisan or labourer, are just cut for men (KII 13. 16/4/2019).

This statement shows that there were commonly held perceptions which resulted in a gendered adoption of ALSs. These further narrows down the scope of adoption of ALSs to only a few options for each gender. Since men and women have different capacities, working separately imply that the power of complementarity, which could result in meaningful adoption of most ALSs, is lost.

The mean rating of 3.54, as shown in Table 4.9 on whether there were ALSs which people discouraged spouses from adopting, indicate that majority of the respondents concurred with the opinion as expressed. These ALSs and their associated shortcomings which made men and women discourage their spouses from adopting, were named by the following FGDs:

> Generally, we discourage our men against jobs such as livestock trade, bar businesses and any other that require a lot of travel or staying away from home for a long time. We fear, such may push them to have illicit intimate relationships with other women (Women FGD, Kodich-North Pokot).

> We do not like our spouses participating in ALSs that would lead to long absence from home such as military service, working in bars and public service transport. To be honest, we are not also very comfortable with our wives getting big jobs with a lot of salary as this may make them think that they can be as powerful as men (Men FGD, Tapach-South Pokot).

From the sentiments above, this study deduced that both men and women discouraged their spouses from adopting ALSs that would lead to long absence from the matrimonial home as it might cause promiscuity and infidelity. An additional fear for men was that their elevated position, both in the household and community, could be challenged if their wives took up high paying jobs and acquired "too much power" through financial and social capital. From the KIs, the observations of a 53-year-old Catholic Priest, confirmed the depth and impact of the belief that some ALSs would lead to promiscuity and infidelity:

> In Kenya, being a driver of a *Matatu* (a public service vehicle) means that one is absent at home for many hours or days. The income earned is usually comparatively good especially in a well-managed transport company. These two issues make many men to be uncomfortable with women working in the industry. In fact, in my many years of service in West Pokot County, I think I have seen only three women driving *Matatu* and two of them are not married and I hear that the third one is having a rough time in an unstable marriage because of continuous suspicion of infidelity from the husband (KII 14. 6/3/2019).

From the statement, it is evident that women who by nature of profession, earned a modest income and were mostly absent from home, were rarely married and those already married were perpetually suspected of promiscuity. Thus, there was belief in the community that some ALSs were simply not for married people. Also, the data indicted power dynamics that were skewed against women. All these, according to this study, narrows down the scope of adoption to only a few options and causes slow pace of adoption of ALSs by both married men and women.

On whether most ALSs adopted by women were decided (chosen) by men, the high mean rating of 3.77, as shown in Table 4.9, imply that the respondents affirmed the view as put. All KIs and FGDs were unanimous that this was the case in the community. For instance, women participants acknowledged:

> In this pastoral community, we never make decisions independently even when one is single, separated or widowed, because, decisions of the son, brother or uncle will always be sought. Therefore, as a woman, you cannot move at the pace and manner you think is the best even when you are more educated than the man (Women FGD, Nakuyon-North Pokot).

The data depicted lack of independence in decision-making among women and was one of the greatest impediments to their adoption of ALSs. Further, women were denied the power of discretion and latitude in decision-making. Therefore, the immense potential they possessed was not fully utilized. This could be based on the fact that most of the households are headed by men and, as a result, decision-making is one of their roles. It has also been noted that the pastoral community regard women as inferior and social minors and are, therefore, not trusted to make serious decisions such as adoption of ALSs (IWGIA, 2012). Dometita (2017) also reports that the man/husband in pastoral communities make important decisions for the woman/wife because he has power over her, „owns" her by virtue of paying dowry and is the head of the family or household. The man is also perceived to be always right and ought to be taken seriously by the women and children. According to the author, women have accepted the status and often choose to be passive in order to let men make the decisions.

Further, on whether it was believed in the community that women should stick to domestic chores, the mean rating shown in Table 4.9 is 3.54. This means that majority of the respondents agreed with the view as expressed. In concurrence, KIs and FGD participants reported that the belief was communicated and reinforced through cultural rituals and practices. For instance, during childbirth, one KI outlined how gender roles were entrenched:

> Once a child is born, the midwife would go out to announce the sex of the child using coded language and metaphors. Thus, a baby boy is called a „person of the outside" denoting that for the rest of his life, his chores will be done outside the house or the homestead. Conversely, a baby girl is referred to as the „person of the inside" meaning her life activities will mainly revolve in or around the house and homestead. Consequently, boys and men are expected to be out there in the fields, grazing, farming and providing security while girls and women are mostly in or around the houses/homesteads performing domestic and care-giving chores (KII 14. 6/3/2019).

This revelation indicate that the rituals performed during childbirth in the community were some of the means through which gender roles were inadvertently assigned. Thus, from the onset, it was firmly cemented in people"s minds that women performed most of the reproductive roles within the house or homestead, and men did the productive ones outside the homesteads. Hall (2017), who has similar findings, states that domestic duties including washing, cooking, cleaning and childcare, are all culturally expected to be performed by women. The gender role allocation negatively influences adoption of ALSs as explained by a KI:

> Women, who stick to their homes and have perfected performance of domestic chores are highly esteemed and respected in the community. In pursuit of this, many women have declined job offers that would reduce their performance of the highly valued roles as „good" women at home (KII 15. 12/03/2018).

These sentiments show the aspiration and focus of a woman in the community - to be a “good” woman at home, meaning to perform and perfect reproductive roles. This was an achievement that the entire community also valued and esteemed. This belief restricts women and men to reproductive and productive roles, respectively. It denies the community the benefits of tapping into the potential existing in women that could be utilized to spur adoption of ALSs**.**

On whether livestock were the most valued form of wealth in the community, Table 4.9 shows a high mean score of 4.05, meaning that, this belief was held by most respondents. This was supported by KIs and participants in FGDs who further gave reasons for the belief and how it had influenced adoption of ALSs. The views of the following FGDs were particularly comprehensive:

> We value livestock more than anything else because apart from helping meet basic needs, they earn one respect and position in the community so that the more they are, the higher the respect and status one is accorded. We also use them to pay dowry and reward our new brides because in this community, the first sign that a woman is officially married is the livestock she is given by the bridegroom and his kin on the morning of the first day of marriage. Therefore, without cattle, a man is poor and of low standing even when he earns good money from employment or business (Men FGD, Konyao-North Pokot).

> As women, we do not own livestock directly, but through association with the men mostly the husband for a married woman or father in the case of a spinster. There is nothing else that we can compare with these animals because through them, we feed our families, perform our ceremonies and sell to get money for other purposes such as paying fees and buying clothing. A rich man‟s wife or daughter is also respected and esteemed in the community (Women FGD, Nakuyon-North Pokot).

Therefore, in the views of the pastoral men and women, livestock, more than any other forms of wealth, were highly valued because they enabled the community to meet their most important needs. As stated, livestock were a symbol of status in the community for both men and women, and were used to pay dowry, reward new brides, and meet all basic needs and luxuries. The statements of both men and women FGDs give indications that men have access and control of the valued resource more than the women. This limits adoption of ALSs among women.

Findings of research done among the pastoral Pokot community, who are the majority in West Pokot County, the site of the current research, depict a community where livestock (especially the cattle) are the only symbol of wealth, hence endorsing the findings of this study. For example, Ng‟ang‟a (2012) writes that among the Pokot, cattle are a form of legal tender and considered a mobile bank. They gave a man prestige and wealth. Mutsotso (2013) adds that a Pokot man who has cattle, is considered wealthy and, therefore, commands a lot of respect from the community and his family is held in high esteem. Mutsotso, concludes that the Pokots have a stronger attachment to their cattle more than to anything else. It is for this reason that a substantial number of households in the pastoral community continue to engage in keeping livestock. This explains the slow pace of adoption of ALSs by the community. Further, the fact that women do not really own the cattle gives credence to the findings under Section 1.1 that women are faster than men in adoption of ALSs because they

have to survive by finding a means of earning a living outside livestock production; a sector in which they are marginalized.

This study also asked the respondents whether there were beliefs, norms, values and practices in the pastoral community of West Pokot that did not favour/encourage adoption of ALSs. As illustrated in Table 4. 9, the mean score of 3.41 indicated that most respondents agreed that they existed. Content analysis of data obtained during KIIs and FGDs revealed the commonly held beliefs. These are presented and discussed below.

(i) Lack of Belief in the Ability of Women to Perform Productive Roles

Lack of belief in the ability of women to effectively undertake productive roles in the pastoral community of West Pokot County, came out clearly from KIs, such as:

> In this community, there is an ingrained belief among both men and women that women, do not have the ability to perform tasks outside domestic and care-giving domains. This belief is so deeply rooted to the extent that women are mostly referred to as „Children". This means that not much is expected from them, just like the children. They are to remain at home to perform domestic chores which are perceived to be lighter tasks. The result is a culture where the man is expected to do everything, and the woman waits at home to only improve on what the man has brought. Look for example, the few men in the registered groups I have here, they have taken up all leadership positions because of the belief that a woman can never be a good leader. And the women themselves seem to belief so, because group leadership is never grabbed; women themselves who are the majority, elect the men meaning they have been socialized not to belief in themselves (KII 12. 9/3/2019).

Based on the KI"s views, the Pokot pastoral community did not believe in the ability of women. As a result, they were relegated to reproductive duties which were

considered less important, easier to perform and could be done by "children". The verbatim further shows that the women themselves subscribed to this stereotypic thinking and, worse still, many believed it was not their role to struggle, that is to engage in the "harder" productive tasks. Some researchers have come up with similar findings. For example, Fleischman (2012) notes that Pokot pastoralists lack faith/belief in women who they regard as inferior and social minors. Dometita (2017) has found out that, among the pastoralists of Northern Kenya, the belief is that, allowing women to take up leadership positions in society is disastrous. In leadership, for example, they are likely to make wrong decisions. According to Kasomo (2012), the traditional perceptions of women as inferior to men prevail because many people uphold cultural practices which enhance the subordination of women. Consequently, Kasomo notes that women are restricted to domestic and care-giving domains. Any other roles outside these domains, the author observes, are purely meant to either supplement what men do or just for subsistence. Clearly, this belief reinforces traditional gender roles implying that men and women do not complement each other fully in the process of adoption of ALSs.

(ii) Culture of Dowry Payment

The views of KIs and FGDs on the influences of dowry payment on adoption of ALSs were well represented by one youth FGD that had this to say:

> In our community, dowry is mainly paid by use of livestock. In fact, one of the most important reasons of owning livestock in the community is payment of dowry. Therefore, young men would desperately use any means available, to acquire them, including cattle theft or rustling. On the other hand, families

> would ensure nothing hinders them from getting the bride wealth because livestock is a symbol of status and wealth in the community. As a result, girls are „sold‟ to the highest bidder as if they are commodities. In fact, in some families, fees for boys are gotten from dowry. This practice, fuels early forced marriages, cattle rustling, FGM and dropping out of school for both boys and girls. All these, undermine education, meaning a person cannot adopt a lucrative ALS successfully. Where this culture is strong such as North Pokot, many people have nothing else except livestock which are dying at high rate because of droughts (Youth FGD, Kanyerus-North Pokot).

Thus, it is evident that dowry payment in form of livestock was a deep-rooted culture in the pastoral community of West Pokot County. It resulted in commoditization of women, cattle rustling, FGM/C and low literacy levels. All these combined to directly and indirectly slow down the pace or cause lack of adoption of ALSs, especially among the women. Scholars have written a lot in this area. For example, Ng‟ang‟a (2013) states that for a young Pokot man to marry, he must pay a lot of cattle and in case of inability to afford, he would be advised to go and raid or forget about marriage. Magal (2016) and Tulel (2013) observe that it is very hard for a man to get a wife among the Pokots without cattle, and because of the high value placed on cattle, marriage for girls is prioritized at the expense of education. The findings of these researchers concur with those of the current study that the culture of dowry payment impedes adoption of ALSs, more so among the women.

(iii) Polygamy and Wife Inheritance

Further, during KIIs and FGDs, it was observed that the culture of polygamy and wife inheritance was rampant in the community and had negative effects on adoption of ALSs. One of the women FGDs was particularly candid about this:

> Polygamy is highly practised in this community. Our men also get other wives through inheritance especially in insecurity prone areas where many men die. As a matter of fact, we get jealous, unhappy and stressed especially when we are forced to share what we have toiled for with the new co-wife or when part of it is used to pay dowry. The end state is, many women give up working hard, children do not get good education, living standards deteriorate, quarrels and fights become the order of the day. In this condition, there isn‟t much that one can do. The men are also having it rough and stressed (Women FGD, Chepareria-South Pokot).

The above sentiments show that polygamy and wife inheritance created conditions that were not conducive to adoption of ALSs for both men and women. These included additional burden occasioned by large family sizes, frequent feuds, stress, and diversion of resources to unproductive ventures such as dowry and rewards for in-laws. These findings are in line with those of Fleischman (2012) that pastoralists in West Pokot are mostly polygamous and this worsens the community‟s marital relations which are usually characterized by hostility and antagonism. Coast (2006) underscores the negative impacts of polygamy that it is an expensive undertaking because more wives mean greater number of children. This, according to Coast, reduces the likelihood of them all going to school and living quality lives. Coast further acknowledges that polygamy is prone to endless squabbles. UNICEF (2018), equally, names polygamy and wife inheritance to be among the harmful, cultural and traditional practices which hinder women‟s empowerment in Kenya.

(iv) Female Genital Mutilation and Cut

During KIIs and FGDs, Female Genital Mutilation and Cut (FGM/C), was also named as one of the harmful cultural practices impeding adoption of ALSs in the pastoral community. For example, one KI stated:

> FGM/C is a very old cultural practice in this community. When a girl is cut, it means she is ready to be married. Therefore, many of the girls end up getting married and pregnant at tender age and drop out of school. This also affects the boys, because the girls are their peers. They also marry them, though many of the girls end up in the hands of older men. Lack of good education in the long run means one cannot get a stable and well rewarding ALS (KII 2. 16/3/2019).

As noted by the KI, FGM/C was an age-old cultural practice in the community, conducted as one of the preconditions for a girl to be married. Most of the girls, however, underwent the cut at a tender age and got married to either their male peers or older men. This, according to KI, dimmed the prospects of both boys and girls attaining good education and lucrative ALSs. A report by UNICEF Kenya and the Anti-FGM Board of Kenya (2017), similarly, argue that FGM/C in West Pokot County is a rampant age-old cultural practice conducted mostly on underage girls as a sign that they are ready for marriage. In the report, the rate of prevalence of FGM/C among girls aged between 10 and 17 is 62%. Overall, UNICEF (2017) reports that 74% of girls and women in West Pokot County have undergone FGM/C, a high rate that is way above the national average of 21%. The implications of these findings are that FGM/C stifles access to quality education, especially by girls and women. It also causes early marriages, thereby predisposing girls who are mostly not emotionally, physically and physiologically ready for sexual intercourse, pregnancy, childbirth and

motherhood, to health complications. Further, the age difference, which occur when girls get married to older men, compounds men‟s control over women in the patriarchal community. Since good education (Amwata, Nyariki & Musimba, 2015; Jinghan, 2002), health (Musyoki, 2016), gender equality and women empowerment (UN, 2015a; UNDP, 2013) (all of which have been weakened by FGM/C), are critical ingredients for high productivity, this study notes that FGM/C is one of the greatest impediments to adoption of ALSs in the pastoral community of West Pokot County.

(v) Patriarchal Culture

Patriarchy is a system of society which institutionalizes male physical, social and economic power over women (Reeves & Baden, 2000). The impeding effects of patriarchy on adoption of ALSs were better articulated by women FGDs such as:

> In our community, the man is "everything" and as women, we are at their mercy to get everything we need. They are the household heads, the leaders, and owners of the land, livestock, women and the children. They can inherit property and family lineage is traced through them. This means, we cannot progress at own pace and ability. For example, in our group of 10, it is only one of us who possess a land title deed, meaning, the rest of us do not own land. The lady, who has a land title deed, is a single woman and a teacher who purchased a plot using her SACCO loan. (Women FGD, Kodich-North Pokot).

Therefore, the pastoral community of West Pokot was highly patriarchal and as indicated, wealth was passed down from father to son. Women accessed resources through men, more so their husbands. The impact of this culture could be deduced from status of land ownership among the women FGD participants where only one was reported to possess a land title deed, demonstrating that, the remaining nine did

not own land directly. This means that, women in the community find it hard to own land which is a key factor of production. By and large, the fact that “everything” revolves around men, deny women access to and control over productive resources. This is, therefore, an impediment to adoption of ALSs. O‟Neil (2011) and Sherman (2013) have also found out that pastoral communities are extremely male-dominated and patrilineal. Hence, compared to non-pastoral societies, O‟Neil and Sherman observe that, the socioeconomic and political power of most pastoralist women is very low. In Kenya, patriarchy has resulted in women traditionally having minimal right to own or inherit land, and limited access to traditional means of financial credit relative to males (Njambi & Misiani 2016; ILO & IILS 2013, as cited in Hall, 2017). This creats a significant barrier in young women‟s ability to engage in entrepreneurial activities or self-employment, as they are less likely to have such resources from which to draw. By and large, this study posits that, patriarchy reinforces inequality and is characterized by cultural and traditional beliefs and practices. These do not only undermine women‟s access to and control of resources, but hinders general progress in many areas hence a big constraint in adoption of ALSs.

The view that there were beliefs, norms, values and practices in the community which stimulated adoption of ALSs had a mean of 2.64 as indicated in Table 4.9. This mean was slightly above average, implying that the majority of the respondents supported the view, though a significant number were of the contrary opinion. These different viewpoints among the respondents were further illustrated by KIs as follows:

> I think our culture is generally anti-development. For example, we have the cattle but because of the belief that the animals are a symbol of wealth and status, we rarely dispose them to do something else like educating a child and starting a business. Personally, I do not see any aspect of our culture that supports adoption of ALSs (KII 10. 11/4/2019).
>
> In this community, it is believed that all cows belong to the entire community so they are easily donated to a person in need. Cohesion among family and clan members is also very strong in this community. Through these, survival and starting an ALS such as business is possible in the community, and this has been our strength (KII 11. 10/3/2019).

In the first statement, the community‟s culture undermined adoption of ALSs in totality. This finding is similar to what Mutsoso (2013) and Ng‟ang‟a (2012) have found out; Pokot‟s worldview revolves around cattle to which they have a fanatical attachment and as such ALSs are despised and shunned. This explains why the community‟s adoption of ALSs, is mainly a result of pull and push factors (Chepkangor et al., 2015). In the second statement, however, it is clear that there were some elements of culture such as the strong social network and communal ownership of livestock, which stimulated adoption of ALSs in the community. This supports the findings made by de Jones and Flintan (2020) and Sharma et al., (2003) that pastoral communities have strong social networks for cooperation and support which has enabled them to survive outside the livestock sector. The positive aspects of culture (strong kinship and communal support) could be leveraged to enhance adoption of ALSs in the community.

4.5.2 Environmental Factors Influencing Adoption of ALSs by Men and Women

The literature review revealed that the pastoral ecological and socio-economic environment had changed fundamentally. This study, therefore, sought to establish how the changes had influenced adoption of ALSs. The findings are presented in Table 4.10.

Table 4.10: ***Views on Environmental Factors Influencing Adoption of ALSs***

Environmental Factors	Mean	SD
Livestock related conflicts make people opt for ALSs	3.96	0.81
Insecurity and conflicts constraints adoption of ALSs	3.94	0.94
Climate and weather changes influence adoption of ALSs	3.90	0.96
Shrinking pastureland makes people opt for ALSs	3.58	0.99
Place of residence (urban or rural) influences adopting ALSs	3.66	1.25
Diversity in physiographic and natural conditions in the County, stimulate adoption of ALSs	4.13	0.67
Mean	**3.86**	**0.94**

The high mean rating of 3.96, as illustrated in Table 4.10, indicates that livestock-related conflicts pushed pastoralists to ALSs. This view was also held by all KIs and participants of FGDs. The following gave vivid descriptions of how the conflicts pushed many out of pastoralism:

> We still love the cattle, but almost all of us who were born in 1950s up to 1970s were pushed into livelihoods outside the livestock production by bloody conflicts. Cattle rustlers from Sabiny, Karamoja and Turkana communities, attacked us, killed many and made away with our livestock. Because, we did not have any other engagement apart from herding, some of us started attending adult literacy classes and many went to school. Our parents said, „instead of idling around, why not go and waste your time in this new school in the neighbourhood and also benefit from the food they provide‟. So, we went to „waste‟ time in school and enjoy good *githeri* (meal made of boiled mixed

> beans and maize). We finally became literate at various levels. Some are in stable salaried and waged employment, while some are in businesses and farming; main reason being, we lost our treasured resource and we feared more damage from subsequent attacks and conflicts as pasture and water have become scarce (Men FGD, Orolwo-North Pokot).
>
> In my view, I would use the term „force" and say that, these pastoralists have been „forced" by livestock related conflicts to adopt ALSs because they still adore their livestock especially the older generations. Through this, more men than women have adopted ALSs because of two reasons. First, since conflicts resulted in more deaths among men than the women, forced wife inheritance became common. This yielded stressed and unmotivated women, who spent most of their energies fighting over the scarce resources, mostly livestock owned by the husband. Second, in order to restock and recover from livestock losses, many households married off their daughters at tender age. In fact, it was around this time that dowry went up as high as 50 cows, 5 camels and over 100 goats. Education of girls hit rock bottom. Unfortunately, this is still happening in many remote parts of this County (KII 1.11/3/2019).

The data reveal that insecurity and bloody conflicts had pushed members of the pastoral community out of their traditional source of livelihood to ALSs. Gender-wise, this push factor had more impact on men than women. Whereas boys and men „stumbled" upon the opportunity to pursue formal education and try ALSs, girls and women got married off in order to restock the treasured livestock resource. Some of these ended up in polygamous families where most of their energies were spent in jealousy, competition, and conflicts with co-wives, instead of adoption of ALSs (productivity). This perpetuates gender inequality and slows down the process of adoption of ALSs in the community, particularly among women. Overall, the findings of this study concur with those of Chepkangor et al. (2015), Kirkbride and Grahn (2008) that pastoralists have been pushed out of traditional livestock production by increasing resource competition, which in many cases is characterized by bloody

confrontations. In this regard, Chepkangor et al., report that, among the respondents sampled in their study, 70.3% admit that they have abandoned livestock production, which is their traditional source of livelihood because it is prone to violent conflicts. In view of the above, this study underlines that insecurity and conflicts have pushed members of the pastoral community of West Pokot, more so the men, out of the livestock sector to ALSs.

Insecurity and conflicts were some of the social vices that were prevalent in pastoral areas (Sharamo, 2014; Kalyango et al., 2019). As such, this study sought to find out how they influence adoption of ALSs. The findings in Table 4.10 show that, indeed, the vices constrained adoption of ALSs by men and women in the pastoral community of West Pokot (mean=3.94). On this, the views of KIs and FGDs participants were well represented by the following:

> In this county insecurity and conflicts are very high along its borders with the neighbouring counties and Uganda. In these places, loss of lives, displacement of people, destruction of livelihoods, closure of schools and markets have been common. Clearly, adoption of ALSs is slowed down and, in many cases, completely stopped by conflicts. I have witnessed shops, mango farms and markets completely destroyed. In all these, most affected are the women because most of these ALSs are theirs and are also the ones left behind with the children and the old as able men went out to secure the environment. Some of them have been left as widows and have lost their able sons. Insecurity in the schooling environment makes access by the girls more difficult than by the boys. Thus, the prospects of adoption of good ALSs are dimmer for the girls/women (KII 1.11/3/2019).

> Although, our men and government protect us as much as they can, we suffer great losses because of conflicts and insecurity. Our men are not always at home to assist us, we have lost some of them and some of the remaining ones are nursing serious injuries. Accessing our markets, farms and schools has become a problem. More devastating is the destruction of the livelihoods we

> have earned. For example, following renewed ethnic clashes along the West Pokot and Elgeyo Marakwet Counties in May 2019, our group lost two dairy cows and five sheep to cattle thieves (Women FGD, Chepareria-South Pokot).

Evidently, insecurity and conflicts resulted in environmental conditions not conducive to adoption of ALSs. The most affected were the women because they were more vulnerable to adverse conditions that included displacement, loss of productive people through deaths and injuries, and education facilities and enterprises, for example, marketplaces and farms. This finding corroborates the County government‟s admission that insecurity and conflicts are some of the biggest challenges to socioeconomic development in the County (West Pokot County Government, 2018). Similarly, Schilling et al. (2012) establish that insecurity and conflicts are the greatest threat to socioeconomic development in pastoral areas as they result in loss of human lives and employment, strained social relationships and networks, and the closing of education facilities and enterprises such as marketplaces. Restoration of peace and security would, therefore, greatly boost adoption of ALSs in the pastoral community.

Considering the prevailing global changes in climatic conditions and the associated environmental disasters, such as severe droughts, this study endeavoured to establish how these conditions influence adoption of ALSs among men and women in the pastoral community of West Pokot County. As illustrated in Table 4.10, high mean rating of 4.13 shows most of the respondents believed that the prevailing climatic and weather conditions influenced adoption of ALSs. Supporting this view, KIs and the members of the community who participated in FGDs reported that the prevailing

adverse climatic and weather conditions had occasioned a reduction in livestock production and had necessitated adoption of ALSs among pastoralists as an adaptation strategy. Some FGDs were particularly candid about this:

> We have faced droughts which occur frequently in this arid region by keeping fewer, but more resistant and productive animals thanks to crossbreeding services that are readily available today. We have also embraced the idea of sending our children to school to gain salaried employment and engage in trade to generate income. Education for instance, does not depend on weather and therefore, the only resource we will have when weather fails us (Men FGD, Konyao-North Pokot).

> In the livestock sector, our role was mainly to water the animals especially the younger ones who usually graze around the home. With frequent droughts, this work was becoming very difficult. What has happened now is that, we have lost livestock in large numbers. This has become sort of a blessing in disguise to us women; because, we now have time to do other things such as businesses and men have also joined us. Our children have also gotten time to go to school. More importantly, the girls can go to school because the desire to marry them off in exchange of cattle is dying (Women FGD, Kodich-North Pokot).

These sentiments reveal that, with changes in climatic conditions, droughts had become frequent, especially in North Pokot, the most arid part of the County. This had made both men and women adopt ALSs as an adaptation strategy. Droughts had particularly become what in the words of the women in the FGDs “a blessing in disguise” because the dwindling livestock sector had afforded them time and energy to pursue education and modern livelihood strategies. The men had also been freed from nomadism and had joined the women. By and large, changes in climatic and weather conditions had led to a reduction in traditional livestock production and an increase in adoption of ALSs. Similarly, Geutjes (2014) has found out that pastoralists in West Pokot have spread their livelihoods from a focus on singularly keeping

animals and cultivation for feeding the family, to cultivation for the market, growing and selling fruits, selling of milk and even investments in shops, as a matter of adaptation to climate change. Fratkin et al. (2011) argue that one of the ways pastoralists have historically adapted to droughts has been livelihood diversification.

A high mean score of 3.58 as illustrated in Table 4.10 show that shrinking pastureland in West Pokot was one of the factors influencing pastoralists to adopt ALSs. This was further elucidated by KIs, such as:

> Population in West Pokot has increased exponentially, and land is becoming fragmented every other day. Trust lands and communal lands have been allocated to individuals. This means free movement of grazing animals is reducing and non-existent in some places. As a result, livestock numbers have reduced due to deaths and willful acts by the owners who have been forced to do so considering the carrying capacity of the remaining land and to also venture into other livelihoods. This migration out of pastoralism, increases from the lower and drier areas to higher and cooler areas of the County. Thus, in higher altitude areas such as Lelan in Pokot South Sub-county, where land is more fragmented and privatized, majority of the people are doing mixed farming and agropastoralism. A sizable number have migrated completely out of livestock production. In the lower and drier regions such as Alale and Masol in Pokot North and Central respectively, people still have good access to rangelands and majority are hanging on to pastoralism (KII 11. 10/3/2019).

The report by the KIs shows that rangelands in the County were diminishing as a result of a number of factors such as population increase, urbanization, land individualization, and fragmentation usually accompanied by enclosures. As a result, traditional livestock production was on the decline, and adoption of various forms of ALSs was on the increase. Comparatively, women were the biggest beneficiaries in this upward trajectory of adoption of ALSs, because the sedentary condition created

meant that they could participate fully in modern livestock production and still have time and energy to do some ALSs and attend to their domestic roles. This increase in the participation of women means that, unlike pastoralism which by nature and practice favours men, adoption of ALSs enhances gender equality. Kirkbride and Grahn (2008) have also found that a host of ecological and socioeconomic factors have led to the shrinking of rangelands in pastoral areas. This phenomenon makes physical mobility, which is a coping strategy that is common among pastoralists, impossible. Clearly, pastoralism is being edged out and it could as well be said to be on its deathbed. Probably this might be one of the reasons why policymakers and development agencies are no longer keen on channeling resources toward its development as alluded to by Kipuri and Ridgewell (2008) and Othieno (2014).

With only two major urban areas namely, Kapenguria and Cheperaria, West Pokot County was predominantly rural and remote (West Pokot County Government, 2018). Based on this, this study sought to find out whether the place of residence determined adoption of ALSs. The above-average mean score of 3.66 shown in Table 4.10 implied that most of the respondents considered the place of one‟s residence as an influencing factor. This view was maintained during KIIs and FGDs, where it was specified that people living in or near towns had higher chances of adopting ALSs than those in rural areas. On this, participants of one FGD explained:

> People living in towns have more chances of adopting ALSs than the rural folks mainly because they have better access to mobile phones, stronger internet network, cyber cafes, radios, TVs and newspapers. They also have a lot of interaction with other elites and they can easily get jobs and money.

> In terms of gender, it is harder for women than men to just leave home and proceed to try their luck in towns. The community believes town life is harder and exposes girls/women to immorality thus reducing their prospects of ever getting married. Many young women are also pinned down by childbearing and domestic chores (Youth FGD, Kabichbich-South Pokot).

The views shared in the youth FDG indicate that people living in towns had more access to information, social and financial capital, and many other resources which enhanced adoption of ALSs, compared to people in rural areas. However, girls and women did not enjoy the same freedom because they were weighed down by reproductive roles and cultural restrictions which curtailed their mobility. Geutjes (2014) also notes that, in West Pokot, there are better opportunities for ALSs in urban centres. In terms of gender, Geutjes indicates that women are disadvantaged because of the extra roles they have to perform in the absence of their men who have migrated to town in search of better ALSs. The findings of the study imply that, if the same conditions prevail whereby the resources are more available in urban areas, then adoption of ALSs among women will be affected negatively since they are predominantly rural dwellers and suffer restricted mobility.

West Pokot County enjoys diverse physical and natural conditions (Nangulu, 2001; Huho, 2012). In view of this, the study investigated how these conditions influenced adoption of ALSs. A high mean rating of 4.13, as illustrated in Table 4.10, indicates that most respondents believed the conditions stimulated adoption of ALSs. In concurrence, KIs and FGD participants, also stated that, in utilizing the potential

created by the natural environment, women faced more sociocultural and technological barriers than men. The details of this were well expressed by one key informant who stated:

> West Pokot is a land of diversity. There are the arid and drier plains of North Pokot which are good for ranching, wildlife conservation, beekeeping and irrigated agriculture. The colder highlands of South Pokot are conducive for rearing high breed dairy cows, merino sheep and growing of pyrethrum, potatoes and cabbages. There are very big permanent rivers traversing the County meaning there is ready water for hydro-power generation, irrigation and fishing. Mining is also possible, because there are areas with huge deposits of gold, ruby and limestone. The mountainous, rugged and undulating terrain offer good attraction to tourists. I mean, everything that you can do in any part of Kenya can be done in West Pokot. No wonder, many people refer to West Pokot as a County of hidden unexploited treasures. This applies to both men and women. However, harmful cultural beliefs and practices, adverse changes in climate, insecurity, inadequate socioeconomic infrastructure and modern technology, prevent the women more than the men from fully benefitting from the existing opportunities. (KII 5. 5/4/2019).

From the above comments, this study deduces that the diverse physiographic and natural conditions of West Pokot County offered immense opportunities to both men and women to adopt many ALSs in the areas of farming, tourism, mining, fishing, and beekeeping. However, this had not been realized fully because of harmful cultural beliefs and practices, adverse changes in climate, insecurity, inadequate socioeconomic infrastructure, and technology. As indicated, these posed more challenges to women than they did to men. This means that there is gender inequality in the utilization of the potential in the natural environment. Except for the lack of gender perspective, the findings of Nangulu (2001) are similar to those of the current study in that the diversity in the natural conditions of West Pokot enables adoption of a wide range of livelihoods outside the livestock sector.

The overall mean rating on environmental factors influencing adoption of ALSs is 3.86. This is evidence that the majority of the respondents believed that all the listed environmental factors influence on adoption of ALSs in the pastoral community.

4.5.3 Influence of State Actors on Adoption of ALSs by Men and Women

According to Pillay (2002), the state plays a central role in general development. Cognizant of this fact, Kenya embraced decentralization of government functions, through the 2010 Constitution, in order to achieve development in all parts of the Republic, especially in Counties that had suffered many years of marginalization such as West Pokot County. Based on this, this study sought to examine how state actors influenced adoption of ALSs in the pastoral community of West Pokot County. The findings are presented in Table 4.11.

Table 4.11: ***Views on Influences of State Actors on Adoption of ALSs***

Roles/Activities of State Actors	**Mean**	**SD**
Education by the government enables adoption of ALSs	3.91	0.84
There are awareness campaigns by state on adoption of ALSs	2.40	0.98
There are loans/funds by state to encourage adoption of ALSs	3.36	1.22
State actors encourage members of community to register groups that enable adoption of ALSs	3.70	0.88
There are government policies enabling women to adopt ALSs	2.01	1.00
There are government policies enabling men to adopt ALSs	2.19	1.00
County government plays a bigger role than national government in enabling adoption of ALSs	3.85	0.99
Mean	**3.06**	**0.99**

As shown in Table 4:11, a high mean of 3.91 indicates that education provided by the state actors enabled adoption of ALSs by men and women in the pastoral community of West Pokot County. Expressing similar views, interviewees and FGD participants further stated that access to education disproportionately favoured men, hence enabling adoption of ALSs among them more than it did for women. Notably, one interviewee observed:

> Truly, there is a correlation between education in which the government is obviously the lead provider, and adoption of ALSs, because in my own assessment, almost a 100% of those with secondary school education and above are in ALSs. But the problem is, more men than women are educated, so we can say government‟s education has enabled more men than women to adopt ALSs in this community (KII 9. 9/3/2019).

Clearly, education provided by the government had promoted adoption of ALSs among the pastoralists. However, the above statement indicates that the education process had enabled more men than women to adopt ALSs. This points to gender inequality in accessing quality education and, by extension, adoption of ALSs. This confirms the findings of a survey conducted by UNICEF (2018) that, despite the efforts by the Government of Kenya towards inclusive, equitable, and quality education, children in pastoral areas, particularly the girls, are still disadvantaged due to myriad environmental and socio-cultural challenges. These include long distances to schools and harmful cultural practices and beliefs. Even so, this study establishes that there is a positive correlation between education and adoption of ALSs. To this end, Jinghan (2002) notes that quality education leads to new methods and new techniques of production and creates self-discipline, the power to think rationally, and

to probe into the future. Without these characteristics, Jinghan reiterates that there is not much that a country could achieve in development matters. Therefore, meaningful adoption of ALSs requires pastoralists to possess these characteristics, which are acquired through inclusive and equitable access to quality education.

On whether state actors had conducted Awareness Creation among pastoralists to engage in ALSs, the mean rating shown in Table 4.11, was 2.40, implying that the majority of the respondents objected. This also emerged during KIIs and FGDs as stated by some of the participants:

> The government has not made a deliberate attempt to bring to the awareness of the pastoral community that adoption of ALSs was good for them (KII 2. 16/3/2019).
>
> Yes, the government through some fora such as the Chiefs‟ *barazas* (formal public meetings), do educate people on several issues, but rarely on the benefits of adopting ALSs (Men FGD, Konyao-North Pokot).
>
> In this village, the government reaches the people mainly through *barazas*, which are rarely attended by women. Therefore, if the government has educated people on adoption of ALSs, then the men are the main beneficiaries. For us, we are in ALSs because the church and NGOs opened our eyes (Women FGD, Nakuyon-North Pokot).

From the findings, this study infers that state actors had not done enough in creating awareness among the pastoralists regarding adoption of ALSs. Yet there were forums for doing so, such as the public *barazas*. However, the participation of women in the *barazas* was found to be low or non-existent. This implies that women in the community are marginalized. The lack of a deliberate attempt by the state to create awareness could be attributed to the general neglect and marginalization of pastoral

areas as IWGIA (2012) and Hall (2017) alludes to. Thus, awareness creation, a strategy that could enable men and women to identify and reduce their respective vulnerabilities while leveraging on the capacities as the CVA framework underlines (March et al., 1999), has not been utilized well by the government.

The mean rating on whether there were loans and funds from the government to encourage adoption of ALSs was 3.36. The above-average mean illustrated in Table 4.11 implies that state actors were providing loans and funds to residents to enable them to adopt ALSs. This was confirmed by KIs and participants of FGDs, such as:

> The government provides loans and funds to projects and enterprises especially for the women and the youth. For the women, the Women Enterprise Fund is the main funder in West Pokot. For men, there is the Uwezo Fund, though women and youth also benefit from it. However, the uptake of these loans and funds are low, because of low literacy levels and lack of awareness of the existence of the loans and funds. For the women, except in occasions where they are assisted by NGOs, access is harder for them because of many cultural barriers (KII 12. 9/3/2019).

> We are aware that the government is giving very cheap loans. But we are reluctant to apply for them because as women, we do not own properties which can be used as collateral (Women FGD, Chepareria-South Pokot).

These reports indicate that the state had availed cheap loans and funds to pastoralists with the most emphasis on women and the youth. Though their uptake was low, the financial resources had been utilized to initiate livelihoods outside the livestock sector. Gender-wise, women faced more challenges in accessing loans and funds than men. The findings of this study, corroborate the County Government‟s admission that the state has availed loans and funds that have promoted the development of projects and

enterprises such as beading, embroidery, poultry farming, goat rearing, and mango farming, among men and women in the County. Notably, the Women Enterprise Fund (WEF) and the Youth Enterprise Development Fund (YEDF) have funded 261 and 127 groups, respectively (West Pokot County Government, 2018).

The high mean rating of 3.70 in Table 4.11 also indicates that the majority of the respondents were of the view that state actors played a role in encouraging members of the community to register groups that would stimulate adoption of ALSs. There was concurrence and more elaboration among KIs, as exemplified by the following:

> Indeed, the government has promoted formation of development-oriented groups that are mainly bankrolled by government devolved funds and grants. These groups are mostly Self-Help Groups (SHGs) and are commonly formed as women, men and youth Community Based Organizations (CBOs) and Projects. They undertake economic activities such as mixed farming, table banking, capacity building, environmental conservation and other small and medium enterprises. In terms of gender, women‟s groups are more than those of men (KII 12. 9/3/2019).

Thus, state actors played a role in encouraging members of the community to register groups that would enhance adoption of ALSs in various sectors of the economy. On the basis of gender, the data indicate that women‟s groups were more than those of men. This implied that women, more than men were benefitting from the spirit of pulling together in a group. This notwithstanding, the government encouraged the formation of SHGs for both men and women, and this boosted adoption of ALSs. This information is corroborated by the West Pokot County government, which, in its 2013-2017 Development Plan, states that since 1973, a total number of 4,297 groups have

been registered. Out of these, while 1,101 belong to mixed gender, 2,204 and 992 are purely owned by women and men's groups, respectively (West Pokot County Government, 2013).

The mean score in Table 4.11, on whether there were government policies which enabled women and men to adopt ALSs were 2.19 and 2.01, respectively. These mean ratings which are below average, imply that the majority of the respondents thought that there was lack of governmental policies to guide adoption ALSs in the community. The KIs were also of the same view as noted by one of them:

> What I know is, there is no express gender focused policy from the state or its agencies that is directly meant to achieve this particular goal-adoption of ALSs. The existing policies enshrined in key policy documents such as the Constitution and Vision 2030 Development Strategy for Northern Kenya and other Arid Lands are good and can be applied to spur development in general, but are very broad in perspective and cannot address specific needs such as adoption of ALSs (KII 2. 16/3/2019).

The above statement indicates a lack of gender-focused policies to guide adoption of ALSs in the pastoral community. Secondary sources, however, reveal that the policies exist. In particular, the National Policy on Gender and Development (NPGD) came into force in the year 2000 and has since been used to guide gender mainstreaming in all sectors of development in Kenya (RoK, 2019). It is aligned to the Constitution of Kenya 2010 and details the overarching principles to be adopted and integrated into the National and County Government sectoral policies, practices and programmes and by all state and non-state actors. Literature, nonetheless, show that there is poor implementation of legal and policy frameworks in Kenya, especially in pastoral areas

(IWGIA, 2012; Kirkbride, 2006). This could be reason for the ignorance of the existence of the policies among the study respondents. Based on the aforementioned, this study underlines that NPGD and the associated legal frameworks and pragmatic initiatives, could spur meaningful adoption of ALSs by both pastoral men and women, when fully implemented at the grassroots level.

Lastly, the mean response score of 3.85 in Table 4.11 signifies that a majority of respondents were of the view that the County government played a bigger role than the national government in enabling adoption of ALSs. However, during KIIs and FGDs, it emerged that both governments had complemented each other well and were equally instrumental in enabling adoption of ALSs. This came out clearly from a KI:

> In my view, both governments have played crucial roles in trying to create an enabling environment for adoption of ALSs only that the Constitution assigned them different approaches. Whereas the national government concentrates on policy and service provision, the County government, runs departments such as agriculture, water, trade, health and early childhood education which deal with the populations directly and results in more tangible evidence on the ground (KII 9. 9/3/2019).

This statement shows that in the effort to enable adoption of ALS, the National Government mostly dealt with policy formulation and provision of services. However, the County Government ran departments that made it more visible on the ground and this might have informed the view by the respondents that it played a bigger role than its National counterpart. Nevertheless, it is evident that the state, in general, had been instrumental in trying to enable adoption of ALSs. These findings agree with those of

Pillay (2002) that the role of the state is significant as it is particularly responsible for the provision of a conducive and enabling environment for development.

The overall mean rating on state actors‟ role in adoption of ALSs in Table 4.11 is 3.06. This high mean rating indicates that the activities and roles of state actors in the County pose a significant influence on adoption of ALSs. The fact that the availability of essential political, economic, and sociocultural services and infrastructure, depended on the state cannot be overemphasized. Therefore, the low and slow uptake of ALSs, highlighted in Section 4.2 could be blamed on the state and its actors, both at the County and National levels. This means that the state had failed not only to adequately exploit the existing potential among the pastoralists, but also to effectively address the myriad technological, environmental, and socioeconomic challenges they face as has been noted by studies, including Geutjes (2014), Kaprom (2013) and Lolemtum et al., (2017). This confirms the central tenet of the CVA framework that development interventions succeed when people‟s capacities (strengths) are increased and vulnerabilities (weaknesses) are minimized (March et al., 1999).

4.5.4 Influence of Non-State Actors on Adoption of ALSs by Men and Women

There are numerous non-state development agencies operating in West Pokot County and the County Government acknowledges them as key development partners (West Pokot County Government, 2018). In view of this, the study examined the extent to

which the non-state actors influenced adoption of ALSs among men and women in the pastoral community of West Pokot County. The findings are presented in Table 4.12.

Table 4.12: ***Views on Influences of Non-State Actors on Adoption of ALSs***

Roles/Activities of Non-State Actors	**Mean**	**SD**
Education by non-state actors encourages adoption of ALSs	3.71	0.96
There is awareness creation by non-state actors for community members to engage in ALSs	3.59	1.02
Resources by non-state actors encourage adoption of ALSs	3.34	1.02
There are non-state actors strategies to enable women to adopt ALSs	3.61	0.97
There are strategies by non-state actors to enable men to adopt ALSs	3.22	0.99
Non-state actors play a bigger role than state actors in enabling adoption of ALSs	3.48	1.11
Mean		**3.491.01**

In Table 4.12, the high mean score of 3.71 on education sponsored by non-state actors, means that the initiative had encouraged adoption of ALSs among both men and women in the community. During KIIs and FGDs, this view was unanimously held. However, it was observed that the non-state actors had placed more emphasis on women because they faced more challenges than men in accessing education and adoption of ALSs. This was outlined by some participants as cited below:

> In this County, a large number of schools have been put up by the non-state actors. These include, the World Vision Kenya, the church and philanthropic individuals. Their programmes in the education sector include establishment of education infrastructure and scholarships. Rescue centres for girls escaping FGM and early marriages have also been put up. These have encouraged adoption of ALSs. Thus, most of the businesswomen, businessmen and professionals are products of these initiatives (KII 14. 6/3/2019).

> Concerning our little education, we obtained as women, and which has enabled us to earn a living outside livestock, the church and NGOs have played a bigger role than the government. For example, some of us here are graduates of the St. Catherine Girls Rescue Centre in Sook Division which is sponsored by the Catholic Church. Without this, we could not be in this group of ours, the Sayon Women Group that has made self-reliant through tailoring (Women FGD, Chepareria-South Pokot).

These statements depict that non-state actors had promoted education among the pastoralists, thus encouraging adoption of ALSs. Notably, the greatest beneficiaries of their initiatives were the most vulnerable members of the community, the women. As indicated, the church, and the World Vision, which were some of the most active non-state actors in the County, had enabled the girls to escape retrogressive cultural practices such as early marriages in order to access education and eventually earn a livelihood outside the livestock sector. This is in line with the tenets of CVA frameworks in that, the success of any interventionist strategy depends on how much it reduces the physical, social and emotional vulnerabilities that people face (March et al., 1999). Similarly, other researchers (Adan & Pkalya, 2005; Kristensen & Nairesiae, 2009) reveal the efforts made by non-state actors through educational services towards lessening the various vulnerabilities, which pastoralists (particularly girls and women) face in the processes of adoption of ALSs. Emphasizing this, Kristensen and Nairesiae observe that in some areas of North Pokot, the church is the only provider of educational services. Underscoring education as an enabler of adoption of ALSs, Coast (2006) states that educated pastoralists are more likely to diversify socio-economically.

A high mean of 3.59 shown in Table 4.12 implies that the majority of the respondents were of the view that non-state actors had participated in awareness campaigns for community members to engage in ALSs. The KIIs and FGDs participants added that, in creating awareness, the women who faced more barriers were usually prioritized. This was well outlined by a World Vision Kenya (WVK) employee:

> Because of low literacy exposure levels, awareness creation seminars, training, workshops and benchmarking tours, have become an effective tool of opening the minds of the pastoralists so that they are able to see that pastoralism is no longer tenable in this age and era. Because of marginalization and the effects of cultural practices and beliefs, the women have been prioritized in many NGOs and FBOs. As a result, women have been able to adopt ALSs (KII 13. 16/4/2019).

Thus, through seminars, training, workshops, and benchmarking tours, the non-state actors had created awareness among the pastoralists on the need to adopt ALSs, more so among the women. Eneyew and Mengistu (2013) also note that through awareness creation, the non-state actors have promoted livelihood diversification in pastoral areas. Therefore, continued and improved awareness creation on the need to adopt ALSs in the face of declining pastoralism, would significantly increase adoption of ALSs in the pastoral community.

In Table 4.12, a mean of 3.34 indicates that most of the respondents were of the view that resources provided by non-state actors had encouraged adoption of ALSs. Also, most of the respondents agreed that there were strategies initiated by non-state actors to specifically enable adoption of ALSs by men (Mean=3.61) and women (mean=3.22). These views were unanimously supported by participants of KIIs and

FGDs who identified World Vision Kenya (WVK), the Catholic Church, and philanthropic/charitable individuals as the leading Non-state actors in enabling adoption of ALSs. The specific ways in which their resources and strategies had enhanced adoption of ALSs are as outlined below:

Table 4.13: ***How Non-State Actors' Strategies Enhance Adoption of ALSs***

S/ No	**Non-State Actor**	**Resource/ Strategy**	**Gender**	**Enabling Aspects**	**Resultant ALSs (Examples)**
1	World Vision Kenya	Credit Facility	Women	-Business start-up cheap loans. -Loans mostly given to SHGs.	-Petty business and bee-keeping
		Child Focus Programmes	Girls	-Education scholarship to needy girls -Protection against FGM and early marriages	-Employment as teachers and nurses.
2	Catholic Church	Ushanga Initiative	Women	-Impart skills on beadwork -Marketing	-Business -Cottage industry
		Food for Work	Men and women	- Food stuffs paid for work -Project handed overto the needy	-Crop farming -Poultry and fish farming
3	Private Philanthropy/ Charity	-*Harambee* -Peace initiatives	Men and women	-Fund projects -Peaceful environment	-Farming -Business -Employment

Table 4.13 shows that the WVK offered cheap credit facilities to women. These enabled them to start income-generating projects such as vegetable venting and beekeeping. Through child-focus programmes, The WVK also provided scholarships and protection against FGM/C and early marriages to vulnerable girls, thus increasing

their chances of attaining quality education and employment opportunities. While the Catholic Church‟s *Ushanga* Initiative was instrumental in the acquisition of beadwork skills, its Food for Work Programme had facilitated men and women to own in-come generating projects, mostly in agriculture. Philanthropic and charitable individuals had used their resources and influence to implement some socioeconomic projects including security and peace initiatives. These, bolstered adoption of ALSs in the areas of farming, business, and salaried/waged employment. Overall, the Non-state actors focus on the development of capital (human, social and financial) and an environment that is peaceful and conducive to adoption of ALSs, especially among women. Adan and Pkalya (2005) and Huho (2012) have also reported the direct and indirect role that non-state actors play in promoting livelihood diversification in the predominantly pastoral region. This is a positive development in a community where adoption of ALSs is undermined by low literacy levels, pervasive poverty, insecurity, and underdeveloped infrastructure (Karmeback et al., 2015; Nangulu, 2001; Tulel, 2013).

As illustrated in Table 4.12, a mean score of 3.48 gives the view that non-state actors played a bigger role than state actors in enabling adoption of ALSs among men and women in the pastoral community of West Pokot County. According to KIs and FGDs participants, this was more apparent in far flanged remote and rural areas. For instance, one KI observed:

> In this County, non-state actors dominate adoption of ALSs strategies. In some places, especially those that are far from town, apart from the chief and the teacher, people do not know of any other government official. These two do not have resources to initiate any effective project (KII 8. 16/3/2019).

Thus, in the rural areas, the differences between the two development actors were so huge that in some places, while non-state actors were many, the only state actor that people knew was the chief and the teacher, both of whom lacked resources to launch a project of significant impact in terms of adoption of ALSs. This explains why the first government of West Pokot County recognizes non-state actors as its key partner in the 2013-2017 Development Plan (West Pokot County Government, 2013). Adan and Pkalya (2005) also observe that, in most of the pastoral areas, the non-state actors have initiated more development strategies than the Government.

4.5.5 Technological Factors Influencing Adoption of ALSs by Men and Women

Technology is the utilization of science to carry out a function and is mostly applied to do entirely new things or to perform existing ones in a completely new way (Muhammad, 2012). Thus, technology is characterized by creativity and innovations which are very important in adoption of livelihoods. In this regard, this study sought to establish how various technological factors influenced adoption of ALSs among men and women in the pastoral community of West Pokot County. To achieve this, the respondents were asked to indicate their individual level of access and control of common technological aspects in the process of adoption of ALSs. In this case, HAF Tool 2 (Access and Control Profile), was utilized to determine who between men and women had access and control, or both, of the various technologies applied in adoption of ALSs. The findings are presented in Table 4.14.

Table 4.14: ***Access and Control of Technology Applied in Adoption of ALSs***

Technology	**Access%**		**Control%**	
	Men (173)	**Women (119)**	**Men (173)**	**Women (119)**
Mobile Phone	50.3	46.2	58.4	25.2
TV and Radio	51.4	17.6	59.5	7.6
Internet/Online Media profiles	18	9.2	19.1	7.6
Computer	6.4	3.4	7.5	1.7
Copiers/ printers/scanners	0.6	1.6	3.5	0.8
Tractor	42.8	17.5	44.5	9.2
Irrigation equipment	4	1.6	4	0.8
Certified hybrid seeds for crops grown	49.1	44.5	53.8	16.8
Inorganic fertilizers	54.3	35.3	58.4	26.9
Pesticides	52	46.2	58.9	34.5
Animal feeds e.g., hay and straw	10.4	2.5	11	0.8
Modern poultry houses and feeds	9.8	25.2	11	26.9
Milk Cooling plant	19.1	18.5	23	0
Modern beekeeping equipment	0.6	0.8	0.6	0
Modern fishing equipment	1.7	1.6	1.7	0.8
Average	**24.7**	**15.1**	**26**	**10**

Information and Communication Technologies (ICT) is a critical development tool in the 21st Century. For instance, access to the internet, commonly done through smartphones and computers, is a key driver of innovation and is critical to the achievement of the development aspirations of any individual and society at large. Notably, the achievement of Kenya‟s Vision 2030 is anchored on access and utilization of the ICT, particularly the internet and mobile phones. Cognizant of this,

Kenya‟s national policy on ICT envisages wide accessibility and utilization by the general population (Ndung‟u, Lewis, & Mothobi, 2019).

In relation to the use of ICT in adoption of ALSs, Table 4:14 shows that access to mobile phones by men and women was at 50.3% and 46.2%, respectively. However, the device was controlled by men and women at 58.4% and 25.2%, respectively. This means that, on average, 48.3% of pastoralists in West Pokot County accessed mobile phones, while 48.3% had control over them. This is very low compared to the national average where ownership of mobile phones stands at 87% (Ndung‟u, et al., 2019). Apart from TV and Radio, which on average were accessed at 34.5% and controlled at 33.6%, access, and control of the other ICTs and support accessories such as the internet, computer, copiers, printers, and scanners, were extremely low for both pastoral women and men. Similar observations were made by KIs and FGDs participants. For example:

> Mobile phone, radio, TV, computer and the internet have not significantly contributed to adoption of ALSs in the County because of lack of electricity, poor network and accessibility by majority of pastoralists who mostly reside in rural and remote areas. For example, ownership of mobile phones which is a very important device in this century, is very low especially in the rural areas. Ownership of smart phones is even lower. Overall, more and better phones are directly owned by men. Because of the nature of tasks women perform, which mostly revolved in or around the homesteads or village, many women are just content with the phones they get from their men/husbands or through borrowing (KII 5. 5/4/2019).

> All in all, mobile phones, have aided communications hence boosting adoption of ALSs. For example, some of us in business are able to monitor market trends, sell and buy goods and services without physically being in the market or with the customers involved. We have also benefitted from the new technology of mobile money transfer like *M-pesa* where we send and receive

> money via our phones. We also access internet services by use of smart phones. This has enabled us to gain and share information. Some of us, have used the devices to search for online jobs and business opportunities. Additionally, mobile phones have reduced physical hurdles to communication and have afforded us unhindered interactions even on the global level. Through this we get ideas and jobs (Youth FGD, Parua-South Pokot).

Thus, access and control of ICT in the process of adoption of ALSs were generally very low among pastoralists. This is corroborated by the admission of the County Government of West Pokot that access to ICT, particularly, the television and internet, are limited to a few areas in the County (West Pokot County Government, 2018). In concurrence, Hall (2017) adds that the use of ICT is generally low in entire rural Kenya, not West Pokot alone. The implication of this is that the transforming effects of ICT have not been felt in the adoption of ALSs in the pastoral community. Evidence of its positive effects could be deduced from the qualitative data that, where it had been accessed and applied, ICT had aided adoption of various forms of ALSs. Other researches confirm as much. In Small and Medium Enterprises (SMEs), for example, Loktary (2014) reveals that the benefits of ICT include great access to new markets, increased connections to customers, and improved quality of products and services. Dyer (2012) also observes that, among pastoralists, ICT is crucial for adoption of beneficial livelihood. Thus, ICT when fully embraced can contribute immensely towards adoption of ALSs.

On the level of access to and control over commonly used machinery, tools, and inputs that form modern technology in agriculture, Table 4.14, shows that it was generally

low for both men and women. For instance, while men accessed the tractor at 42.8% and controlled it at 44.5%, the women did it at 17.5% and 9.2% respectively. Yet, the tractor plays an enormous role in agriculture because other farm equipment that could not self-propel is mostly attached to it. These findings indicate that the agriculture sector in West Pokot relies heavily on traditional and indigenous forms of production, implying that adoption of ALSs in it was very low and slow. Nangulu (2001) has also found that the lack of modern technology has denied the pastoralists in West Pokot County an opportunity to improve food security and access to sustainable livelihood outside conflict-prone pastoralism. Notwithstanding this, data obtained from KIs and FGD participants, indicate that in the rare situation where modern technology has been fully applied, admirable results in terms of widening the scope of ALSs for pastoralists have been witnessed. Examples are as follows:

> Yes, we have witnessed real technology applied in crop farming. For example, use of tractor to plough land, building of terraces to conserve soil, use of hybrid seeds and application of organic fertilizers among others. All these technologies have transformed crop farming which used to be on small scale to an efficient venture which can be practised on a large scale and for commercial purposes. This has made crop farming to be a popular livelihood to households (Men FGD, Konyao-North Pokot).

> In this village, some of us have good dairy cows because of the use of modern technology in livestock upgrading through artificial insemination. Milk cooling plants, portable solar powered milk coolers and value addition through milk packaging and processing (as is the case in the making of yoghurt), have also been adopted and have significantly reduced losses usually occasioned by milk going bad. Consequently, some of us in this higher altitude region have abandoned the Zebu cattle for the Friesian and Ayrshire breeds to practise commercial dairy farming (Men FGD, Tapach -South Pokot).

Thus, modern technology increases productivity and makes farming more attractive to pastoralists. Nkediany et al. (2009) with similar findings note that the application of modern technology has resulted in increased productivity in livestock production. Figure 4.5 shows a milk cooling plant in Pokot South Sub-County. It is one of the technologies that are pivotal to dairy farming among Pokot agro-pastoralists.

***Figure 4.5*: A Milk Cooling Plant in Pokot South Sub-county**

The physiographic and natural conditions of West Pokot County are conducive for beekeeping and fishing (West Pokot County Government, 2018). Application of innovative technologies in these sectors would, therefore, make them more feasible and adoptable by both men and women in the pastoral community. Table 4.14, shows that access and control of the technologies applied in these sectors were dismally low. Modern beekeeping equipment was accessed by men and women at a paltry 0.6% and

0.8% respectively. Its control level was 0.6% for men and 0% for women. Concerning modern fishing equipment, access was 1.7% for men and 1.6% for women. Men exercised control over this technology at 1.7%, while women did it at 0.8%. These findings imply that adoption of beekeeping and fishing as ALSs is still extremely low in the pastoral community despite the environmental conditions being favourable. However, as was the case in other sectors, some KIs and FGD participants highlighted rare situations where these technologies had been applied and yielded good results, especially among the women:

> For us women, technology has yielded modern beehives such as the Kenya Top Bar and Langstroth that are easier and less dangerous to harvest. However, not many women have embraced it despite being given priority by the NGOs who donate the hives. Hence beekeeping is still dominated by men (Women FGD, Nakuyon-North Pokot).

> The use of motorboats, a new technology in the County, has made commercial fishing possible among the pastoralists especially in the Turkwel dam and along permanent rivers e.g., Rivers Weiwei and Muruny. Another milestone in the County regarding commercial fishing is the fishpond technology. This has increased the number of people in fish farming. Women are particularly the greatest beneficiaries of the technology as the ponds are constructed within their homesteads where they can practise fish keeping and at the same time attend to their traditional domestic chores. In fact, I personally have a thriving fishpond over there (pointing to a fishpond over the garden fence). Unlike other women, I used own resources to construct it, because I am able. The County just availed me the experts for guidance (KII 9. 9/3/2019).

These sentiments confirm the feasibility of beekeeping and fishing as ALSs for pastoralists. Notably, the application of modern technology makes them achievable by both genders. Magal (2016) also notes that pastoralists in West Pokot have adopted beekeeping and fishing, but at a minimal level because of the use of traditional and rudimentary technologies. With indications that modern technology is

gaining roots, beekeeping and fishing hold promise as some of the sectors that will absorb a sizeable number of pastoralists. Moreover, the gender gap will be narrowed as modern technology enables women to adopt hitherto men-dominated activities. Figure 4.6 shows a fishpond in the compound of a female KI in Chepareria, Pokot South Sub-County.

Figure 4.6: **Fishpond in Home of a Female KI in Chepareria, Pokot South Sub-county**

In all the technologies listed, except for poultry and beekeeping sectors, men exercised more access and control than women. Therefore, study findings exposed stark gender disparities which worked against women to the extent that they did not benefit adequately from the advantages accrued in the application of technology in adoption of ALSs. Reasons for the disparities were given by key informants such as:

> There is a deep-rooted belief in the community that women are not good in technology. Hence, the few girls who complete education are not keen on taking science-oriented courses. Also, use of some of the technologies such as the tractor in ploughing, is physically demanding and is considered too hard and dangerous for women. Further, women are pinned down by domestic duties, to the extent that they do not participate in economic activities that require a lot of technology. Thus, women‟s use of technology is minimal (KII 13. 16/4/2019).

Apparently, both pastoral men and women had been socialized to believe that the use of technology was hard and not safe for the women. Also, women‟s engagement in productive roles where innovative technology was mostly applied, was minimal or non-existent. This confirms the observation that access to resources, such as modern technology, is influenced by acceptable and established gender division of labour (AfDB, 2015). UN (2015b) also establishes that women‟s access to technology is lower than that of men, globally. The UN attributes this to women‟s continued underrepresentation in learning institutions‟ technology-oriented fields. Therefore, pastoral women‟s limited access to innovative technology is caused by the established gender division of labour and disparities in accessing education, especially in the science and technology fields. Despite the limited access to technology in the community, feedback from KIIs and FGDs shows that it had stimulated adoption of various types of ALSs wherever and whenever it had been applied. This implies that when technology is introduced with gender sensitivity and is fully embraced, it has the potential to promote adoption of ALSs among men and women of the pastoral community of West Pokot County.

Under the second objective, this study has established that adoption of ALSs among men and women in the pastoral community of West Pokot County, is influenced by a complex mesh of push and pull factors including sociocultural, technological, and environmental factors. Others are the type of strategies employed by development agencies to foster adoption of ALSs. The push and pull effect is, however, not similar for men and women. Hence, there is the existence of gender differentials in adoption of ALSs in which the latter are more disadvantaged. These findings concur with the viewpoint of Structural Marxists that the decisions and actions of individuals and groups are fundamentally influenced by the structures in which they are located and which exert influence over social, political, and economic processes (Alexander & Colomy, 1990; Maryanski & Turner, 1991, as cited in Muchangi 2014, p. 56). In the view of this study, the pastoral community of West Pokot County is a complex structure with various components (men and women), structures, and systems (physical, cultural, and socioeconomic) that act to either enable or constrain adoption of ALSs. In the next section, the study discusses the effects of adoption of ALSs on households in the pastoral community.

4.6 Effects of Adoption of ALSs on Households in the Pastoral Community of West Pokot County

Structural Functionalism Theory postulates that every pattern of activity in society makes a positive or negative contribution to it (Muchangi, 2014). Therefore, under the third objective, this study evaluated the effects of adoption of ALSs on households in

the pastoral community of West Pokot County. This evaluation was given a gender perspective because reviewed literature indicated that the effects of the shift to ALSs in pastoral societies were gendered. Thus, the effects of adoption of ALSs on gender roles, relationships, and overall living standards of households were considered. The findings are presented in subsequent sections under these sub-themes.

4.6.1 Effects of Adoption of ALSs on Gender Roles in Households

Gender roles are tasks or functions assigned to men and women by society (Reeves & Baden, 2000). These are adhered to very strictly in pastoral societies such that, while men perform most of the productive and community roles, the women do the reproductive ones (O‟Neil, 2011; Sherman, 2013). With adoption of ALSs gaining roots, this study sought to evaluate how the strict gender roles in the pastoral community of West Pokot County were affected. This was achieved by asking the respondents to indicate their level of agreement on six statements related to the effects of adoption of ALSs on gender roles in households. The responses were rated on a five-point Likert Scale where: 1=Strongly Disagree (SD), 2= Disagree (D), 3= Undecided (U), 4= Agree (A) and 5= Strongly Agree (SA). The mean and SDs were generated from SPSS version 23 and are presented in Table 4.15. Further probing was done through KIIs and FGDs to explain the figures.

Table 4.15: ***Views on Effects of Adoption of ALSs on Household Gender Roles***

Shift in Household Gender Roles	**Mean**	**SD**
Domestic chores, no longer the preserve of woman	3.57	1.08
Household leadership role no longer the preserve of man	2.98	1.16
Decision making in the household no longer the preserve of man	3.27	1.15
Role of household provider no longer the preserve of man	3.48	1.21
Adoption of ALSs resulted in increase in workload for women	3.67	1.24
Mean	**3.40**	**1.17**

From the illustrations in Table 4.15, a high mean of 3.57, implies the majority of the respondents agreed that with adoption of ALSs gaining roots in the pastoral community, domestic chores were no longer exclusively performed by the women. KIs and FGD participants expressed similar views as underlined by the following excerpts:

> Many of the ALSs occasion absence of men and women from home for quite a long time. Therefore, whoever remains in the household will have to perform all tasks (KII 15. 12/03/2018).

> Adoption of ALSs has led to increase in people with good education and exposure hence changes in attitudes. As a result, many of us here cook for our families. We even care for the children and wash clothes (Men FGD, Tapach-South Pokot)

These statements show that there was an increase in the number of men performing household chores that were traditionally exclusive to women. Similarly, a study by Farooquee and Rawat (2001) reveals that livelihood diversification in pastoral communities has blurred the boundaries that separate men and women in terms of household chores. Therefore, adoption of ALSs has brought about a change in the performance of gender roles in a community that is known for strict adherence to

gender roles as observed by Mutsotso (2013) and Karmeback, et al., (2015). This is progress in the attainment of gender equality.

The mean rating of 2.98 on household leadership, shown in Table 4.15, also means that most of the respondents believed the household leadership role was no longer performed exclusively by the man. KIs and FGD participants expressed similar views. Indeed, under demographic information in Section 4.3, a good number of households were found to be headed by women. Since pastoral men are traditionally the undisputed leaders of their households, these findings indicate that adoption of ALSs has brought enormous changes in the pastoral community. Participation of women in leadership is one of the positive developments that scholars including Kasomo (2012) and Rai (2005) affirm as the pathway to the achievement of gender equality and sustainable development. The pastoral women‟s increased participation in leadership would help narrow the gender gaps in adoption of ALSs.

The view that decision-making in the household was no longer the preserve of man was shared by the majority of the respondents as indicated by a high mean rating of 3.27 in Table 4.15. This means that the chances of any other household member other than the man to make decisions had increased with adoption of ALSs. This view was supported during KIIs and FGDs as evidenced by the feedback from the following participants:

> I am one of the few lucky women to have achieved good education and a well-paying job. My siblings, parents, children and husband entirely depend on me

> to the extent that they seek my opinion on many issues, even private ones. They tell me that, I am their „eye", „ear" and „mouth" meaning I must see, hear and talk on their behalf. In short, I make or influence many decisions in my own household, that of my parents and those of my siblings who are not well resourced. The number of girls and women doing this is increasing with decrease in pastoralism where men held sway (KII 9. 9/3/2019).
>
> We are in an environment where most of us are very ignorant of many things. Because of no formal education and exposure, we cannot purport to be making decisions on modern issues such as cementing a house or buying the new gadgets they use today in cooking. Definitely, the person with the money and the education, woman or man, decides and we just watch and comply (Men FGD, Tapach-South Pokot).

Thus, adoption of ALSs had increasingly brought women on board when it came to household decision-making. In this regard, Karmebäck et al. (2015) have also found that, through income earned from entrepreneurship, women in West Pokot are enjoying a higher degree of financial independence, more decision-making power, and a louder voice than before in household and public matters. The same has happened among Somali pastoralists in Ethiopia where Asmare et al. (2007) note that women have made joint decisions with their husbands, a move that was rare before adoption of petty trade. Attainment of gender equality in adoption of ALSs, therefore, increases gender equality in household decision-making.

The view that, with adoption of ALSs, the role of household provider was no longer the preserve of man, received a high mean rating of 3.48 as indicated in Table 4.15. Clearly, the majority of the respondents subscribed to the view as stated. Analysis of information obtained through KIIs and FGDs revealed the same. For instance, men during one FGD observed:

> When livestock was everything, men being the owners, were undisputed household providers. But today, there are better sources of livelihoods that have surpassed livestock. For example, moving around, you see several grocery stalls and food kiosks. Many of them are owned by our women. When drought, diseases and cattle rustlers hit, we lose livestock and we come home or remain at home to depend on our women‟s other sources of income and food. Further, with a lot of support that women get from NGOs, they do many businesses. At the end of the day, they provide for the household. Though men are still dominating role as providers, the situation is changing and very fast (Men FGD, Konyao-North Pokot).

From the above, it is evident that the person who accessed resources utilized as the main household livelihood was the breadwinner. Thus, unlike the traditional livestock sector, where men exercised absolute control and were the undisputed breadwinners, adoption of ALSs opened opportunities for women, who also became breadwinners in households. Aregu et al. (2007) have similar findings among the Afar and Borana pastoralists in Ethiopia. They report that the Afar and Borana men are increasingly accepting that the women in their households could play an active and successful role in income generation. This is an indicator that the boundaries that separate men and women in terms of gender roles in pastoral households are getting blurred and, in some households, completely dismantled as a result of livelihoods diversifications.

The notion that adoption of ALSs increased the workload for women was shared by the majority of the respondents as indicated by a high mean score of 3.67 as shown in Table 4.15. KIs and participants of FGDs argued that adoption of ALSs gave women an added burden because of reasons which were clearly captured by one KI as follows:

> Adoption of ALSs has increased women‟s burden in households. Take for example, the one who owns a grocery or food kiosks. You know, she has to do

> most of the preparations at home. She has to select and bundle up the vegetables and cook most of the foodstuffs such as tea before taking them to the selling points. Yet, she still performs most of the household‟s domestic chores. Adoption of ALSs has also occasioned long absence of men from the home. Women, therefore, step into their shoes and perform their customary duties (KII 3. 3/3/2019).

Therefore, adoption of ALSs resulted in increased participation of women in productive roles, yet they still performed most of the reproductive roles. Clearly, this indicates an increase in workload for the women. These findings concur with those of de Jones and Flintan (2020) that, with the diversification of livelihoods, pastoral women are left in a position of having to do more and more of the work traditionally done by men. UN statistics show that overworking of women is a global phenomenon. UN (2015b) indicates that when both paid and unpaid work are considered, women work longer hours than men, an average of 30 minutes a day longer in developed countries and 50 minutes in developing countries. An increase in workload for women implies poor health and reduced capacity in adoption of ALSs.

The overall mean rating in Table 4.15, is 3.49. This is above average, meaning that adoption of ALSs has profound effects on gender roles in households. More importantly, the gender gap in roles is generally narrowing in the community such that the dominance of men in productive roles and that of women in reproductive ones, is decreasing. Consequently, the findings of this study agree with those of Karmebäck et al. (2015) that, in Chepareria Division of West Pokot County, despite men and women still having different spheres of responsibilities and positions within the household

economy as well as with regard to public life, the boundaries are becoming less defined. This is a positive development for the adoption of ALSs because it utilizes the capacities inherent in both men and women.

4.6.2 Effects of Adoption of ALSs on Gender Relations in Households

Gender relations are hierarchical relations of power between women and men (Reeves & Baden, 2000). In households, these relations show who, between man and woman, has more access to and control over resources and decision-making. This study sought to evaluate the effects of adoption ALSs on gender relations in pastoral households. To achieve this, the respondents were to indicate their level of agreement on four statements. The responses were rated on a five-point Likert Scale where: 1=SD, 2=D, 3=U, 4=A, and 5=SA. The mean and SDs were generated from SPSS version 23 and are presented in Table 4.16.

Table 4.16: ***Views on Effects of Adoption of ALSs on Gender Relations in Households***

Effects of Adoption of ALSs on Gender Relations	**Mean**	**SD**
Men are not comfortable with women adopting ALSs	3.30	1.11
Adoption of ALSs led to increase in adultery/separation/divorce	2.78	1.00
Adoption of ALSs has led to decrease in domestic violence	3.32	0.84
Adoption of ALSs led to shift in center of power and respect	3.50	0.92
Adoption of ALSs has increased respect/recognition for Women	3.40	1.01
Mean	**3.26**	**0.98**

In Table 4.15, the mean rating for the statement that men were not comfortable with women adopting ALSs is 3.30. This rating is above average, denoting that most

respondents believed that men in the community are not happy with women adopting ALSs. KIs and FGD participants outlined how the discomfort among the men brewed disharmony in households. For instance:

> In this community most men are uncomfortable with women adopting ALSs. This is common among men who did not get good education and have not travelled well to see the changes in the world. They think locally and strongly follow their cultures which in most cases discriminate against women. They believe they are everything in the household, everybody else is subordinate. More importantly, they fear that women may overturn the tables and become household heads (KII 13. 16/4/2019).

> Majority of the men in this community cannot stand a woman who has progressed more than them. In fact, they do not marry them. Those who got married before they developed, experience endless suspicions and accusations of infidelity and insubordination. They sometimes become victims of divorce, separation or domestic violence (Women FGD, Kodich-North Pokot).

Evidently, for the majority of the men in pastoral households, women‟s progress in adopting ALSs did not go well with them. They feared the reversal of roles and status which were associated with adoption of ALSs. This resulted in acrimonious relations which mostly ended in divorce, separation, and Gender-based domestic violence. Oumer et al. (2007) have also found out that among the Somali pastoralists, men are not comfortable with women moving out beyond the domain of the home in which their main functions are to cook, launder clothes, nurture, and be “wives” to their husbands. These perceptions and attitudes, deny the community the benefits accrued from the full exploitation of the potential in women.

Table 4.16 also indicates that adoption of ALSs resulted in an increase in adultery, separation, and divorce. This had a mean of 2.78, which was slightly above average.

This implies that, though many supported the view, a significant number dissented. These different viewpoints among the respondents were supported by KIs and FGD participants, such as:

> With increase in disposable income as a result of adoption of ALSs, some people especially the men, develop twisted sense of good life and end up in promiscuity and infidelity. Some work far away and are mostly absent in their matrimonial homes, hence increased susceptibility to infidelity. The ensuing suspicion and disapproval from the spouse, further strains the relationship between couples. This results in increase in adultery, separation and divorce. These cases are, however, not very common in this community (Men FGD, Tapach-South Pokot).

> I have been here for a while now and I can say, adultery, divorce and separation are not very common. Okay, ALSs may make people vulnerable, but this is a conservative community where there is strict adherence to traditions and customs (KII 2. 16/3/2019).

Thus, adoption of ALSs negatively changed the lifestyle of some of the pastoralists to the extent that they became more vulnerable to adultery, separation, and divorce. This ended in a strained spousal relationship in households. The social vices and their effects were, however, minimal because of the deterrent effects of the community‟s strict traditions and customs which strongly disapproved of them. Kioko (2009) has found similar causes of infidelity among married couples in Kitui County, Kenya. These included changing tastes and preferences as a result of the increase in income and working away from home.

The mean rating of 3.32 in Table 4.16 indicates that the majority of the respondents felt that adoption of ALSs had caused a decline in domestic violence in pastoral

households. Analysis of information obtained from KIs and FGD participants, revealed concurrence with this view. For example, a priest observed:

> Domestic violence is common in this community. However, this has reduced tremendously with adoption of ALSs. This is because ALSs have generally improved education standards and enlightenment among members of the community, hence more respect and value for each other. Educated and enlightened people are also more aware of the consequences of harming another person and this serves as a deterrent. Further, women who are mostly the victims of violence in households have made commendable progress in adopting ALSs. Their ability to cater for both individual and household needs have increased, thereby reducing their dependency on men. They are, therefore, less vulnerable to abuses by men who misuse their cultural and socioeconomic power (KII 14. 6/3/2019).

From the foregoing statement, it is apparent that adoption of ALSs improved education levels, enlightenment, and socioeconomic status among members of the pastoral community. All these reduced vulnerabilities to domestic violence especially among women who were mostly at a higher risk due to patriarchal dominance. A study by Frosina and Mwaura (2016) also establishes that adoption of ALSs has significantly reduced Gender-based domestic violence in Pokot households. Generally, access to sustainable livelihood and attainment of women's empowerment alleviate Gender-based domestic violence (UNICEF, 2018). Therefore, adoption of ALSs encourages a harmonious co-existence of household members. This has the potential to spur adoption of ALSs in the pastoral community.

The view that adoption of ALSs had led to a shift in centre of power and respect, was supported by the majority of the respondents as shown by the high rating score of 3.50 in Table 4.16. KIs and FGDs revealed that, in traditional pastoral households, the head

(in most cases, the man) was the centre of power and respect. However, with adoption of ALSs, the elevated position had shifted to whoever was the household‟s breadwinner- child, woman, or man. On this, one key informant stated:

> Today, you find a person who is engaged in a well rewarding ALS, being respected regardless of age and gender. As a result, girls and women nowadays can be more respected than an elderly man. I have seen them being fronted by their households to present their views in community meetings, where they are given seats beside men. Traditionally, women rarely attended community meetings and when they did, they sat on the ground separate and distant from men. Indeed, we have changed (KII. 13/3/2018).

This statement underscores the view that respect and centre of power were accorded to whoever was successful in the adoption of ALSs, regardless of age or gender. ALSs are, therefore, becoming the new symbol of power and authority in pastoral community households. More importantly, the findings imply that the efforts and success of every household member, in terms of adoption of ALSs are being recognized and appreciated by the community. This is indicative of a community that is beginning to embrace due respect and value to all, irrespective of gender and age. This is a positive development toward gender equality and could further spur adoption of ALSs in the community.

Also, the majority of the respondents subscribed to the belief that adoption of ALSs had resulted in more respect and recognition accorded to women in households, as evidenced by the above-average mean score of 3.40 in Table 4.16. This viewpoint was supported by data obtained through interviews and FGDs. For example, according to participants of one FGD:

> Women have proved to be very resilient and have progressed in venturing outside the livestock sector and to be honest, they have done more things than us. Through their hard work, we have met our basic needs and sometimes we afford to pay fees for our children and some luxuries. For this, we now appreciate and count them as very important in the survival of our households (KII 9. 9/3/2019).

This reveals that most households enjoyed the fruits of women‟s resilience in adoption of ALSs, hence an increase in respect and recognition accorded to them. They were notably recognized as important partners in the survival of pastoralist households. Aregu et al., (2007) have also established that through adoption of ALSs, women have generated their own additional household incomes and have been able to pay for expenses such as schooling and healthcare. As a result, Aregu et al., note that men are increasingly accepting that women could play active and successful roles in boosting the economic status of the households. According to IWGIA (2012), the pastoral community of West Pokot County is known to subordinate women. Gender-based violence is also common in the community (UNICEF, 2018). Recognition and respect for women is, therefore, a milestone in improving gender relations in households, gender equality, and adoption of ALSs.

The overall mean score on the effects of adoption of ALSs on gender relations in households in Table 4.16, is 3.26. This means that adoption of ALSs has effects (negative and positive) on gender relations in households. In the CVA matrix, gender relations in households are among the social issues that could either increase or decrease people‟s vulnerabilities and capacities (March et al., 1999). Whereas

harmonious gender relations increase capacities among household members, discord exacerbates their vulnerabilities. Therefore, the negative effects of adoption of ALSs on gender relations, as noted by this study, could increase the vulnerabilities of household members and, thereby undermine adoption of ALSs. But, the positive effects could be turned into opportunities for enhanced adoption of ALSs because they grow the capacities of household members.

4.6.3 Effects of Adoption ALSs on Socioeconomic Status of Households

Due to many years of under-development, pastoralist areas of Kenya have high incidences of poverty (Kirkbride, 2006; Kipuri & Ridgewell, 2008). With the increased diversification of livelihoods among pastoralists as noted by researchers and authors, it was the aim of this study to establish the contribution of this development to poverty alleviation and improvement of access to basic services in pastoral households. Thus, under this section, the study specifically endeavoured to evaluate the effects of adoption of ALSs on household socioeconomic status. In doing this, emphasis was placed on generating gender-disaggregated data to determine whether the effects were also gendered. To achieve this, the respondents were asked to indicate their level of agreement on five statements related to household socioeconomic status. The responses were rated on a five-point Likert Scale where: 1=SD, 2=D, 3=U, 4=A, and 5=SA. The mean and SDs were generated from SPSS Version 23 and are presented in Table 4.17.

Table 4.17: ***Views on Effects of Adoption of ALSs on Households' Socioeconomic Status***

Effects ***of Adoption ALSs on Socioeconomic Status of Households***	**Mean**	**SD**
Adoption of ALSs has helped minimize risks in households	3.72	1.03
Adoption of ALSs has improved food security in households	4.20	0.61
Adoption of ALSs has improved health among household members	4.30	0.88
Adoption of ALSs has improved education of household members	4.13	0.79
Adoption of ALSs has led to general improvement in housing	4.02	0.67
Mean	**4.07**	**0.80**

In this study, a risk is a situation or combination of events that endanger the survival of pastoral households. According to Moritz et al., (2011), pastoral households constantly run the risk of losing their herds (livelihood) to droughts, diseases, and other disasters. In West Pokot County, there is an additional danger of losing part or entire herd to cattle rustlers. As such, study participants were asked to indicate how adoption of ALSs had helped to minimize such risks. According to Table 4.17, the high mean rating of 3.72 indicates that majority of the respondents believed that adoption of ALSs had helped to minimize risks in households. This was also strengthened by key informants and FGD participants, such as:

> Nowadays, it is easy to survive because we have alternatives. We all remember, in 1984, when a deadly livestock disease wiped more than half of cattle in most parts of this County, and households suffered hunger and malnutrition. Many of us dropped out of school. But, today, this is rare to happen, because those who still love the cattle can easily restock using money earned from ALSs (Men FGD, Konyao-North Pokot).

> In 1999, all our cows were taken by cattle rustlers. Fortunately, I completed my education and then ventured into politics and business. I live in town and do other things. Apart from few family cows in our rural home, I do not have

> other cows, but I am able to meet all the needs of my household very comfortably. We are becoming many in this lifestyle, because we have experienced the risk of depending on livestock alone (KII 10. 6/4/2019).

Evidently, pastoral households mitigated risks occasioned by a loss of livestock to drought and cattle theft by restocking using the income earned from ALSs. Other households abandoned livestock keeping completely and survived on ALSs. Consequently, adoption of ALSs built resilience, and reduced vulnerability and most households were no longer at the mercy of adverse environmental changes. These findings are in line with those of Moritz et al., (2011) that economic diversification of households effectively reduces the risks and uncertainties of the pastoral economy in two ways. First, diversification leads to stability in sources of wealth and livelihood strategies and lessens the need for insurance. Second, when livestock production makes up a smaller percentage of household income, the risk associated with livestock husbandry decrease, and this reduces the need for insurance.

Also, data obtained from KIIs and FGDs, indicate that resilience against risks through adoption of ALSs was stronger in households headed by men than those that were headed by women. Notably, one KI outlined:

> In this community, women rarely head households when the men are there. This means that women mostly head households where they are widows, separated or single. In terms of adoption of ALSs, such households are disadvantaged because contribution and support from men who are better resourced is either missing or minimal. Also, childbearing, caregiving and domestic chores consume many resources from the women, including time. Ownership of livestock which could be sold, and money used to adopt ALSs such as businesses, is low and mostly nonexistent. These households are

> therefore very poor and survival in and out of livestock sector is very low (KII 15. 12/03/2018).

Therefore, adoption of ALSs in households headed by women was very low because they lacked the resources to do so. They were also pinned down by reproductive roles. Further, the benefits accrued from complementary efforts of both men and women were low or missing in the majority of such households. As a result, adoption of ALSs in women-headed households was not enough to mitigate risks. The fact that poverty and vulnerability are high in women-headed households has been underscored by other researchers. For example, Kipuri and Ridgewell (2008) argue that women-headed households succumb more quickly to crises and take longer to recover than those headed by men.

Food security exists when all people are assured of continuous physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for active and healthy life (FAO, 2002). UNICEF (2018) reckons that West Pokot is among the most food insecure Counties in Kenya. In this regard, this study sought to establish whether adoption of ALSs had brought an improvement to food security in households. In Table 4.17, an overwhelming majority of respondents acknowledged that adoption of ALSs had improved food security in the community‟s households (mean=4.2). This view was also held by KIs and FGD participants. However, they observed that not all households had experienced an

improvement in food security because child-headed and woman-headed households were still acutely insecure. For example, participants in one FGD stated:

> Sometimes famine was real and West Pokot was synonymous with hunger and relief food. But today, because of education, almost all households grow crops. We have also started keeping more productive livestock especially in terms of milk. And because of improved pasture management and livestock breeds, nomadism has reduced, meaning, milk is always available at home especially for the women and children who were mostly left behind when men migrated with the animals. Also, businesses such as the one we are now engaged in as a group, earns us some income, meaning we can buy foodstuffs when our own is not enough. There is an increased number of people in salaried employment who can afford balanced diet. In short, food situation in majority of our households has improved greatly. However, there are households that do not have livestock and adoption of ALSs is either minimal or has never happened. These are very poor households and are mostly headed by children and women. While the children are mostly orphans, the women are mostly widows, singles and elderly (Women FGD, Nakuyon-North Pokot).

The above statement gives clear evidence of how adoption of ALSs has enabled pastoral households to change for the better in terms of food security. Notably, ALSs had resulted in an increase in agropastoralism, mixed farming, and the number of people in income-generating activities such as businesses and salaried/waged employment. All these had contributed to improved food security in pastoral households, except some of those headed by children and women because ownership of livestock and adoption of ALSs were either minimal or non-existent. These findings imply that orphaned children and women are still marginalized in the community to the extent that they find it hard to access productive resources. A Report by UNICEF (2018) that food security in West Pokot County is very low means that the alleviating effects of adoption of ALSs, as established by this study, are at a bare minimum.

Nonetheless, adoption of ALSs in the community has positive effects on food security.

The mean rating of 4.30 illustrated in Table 4.17, indicate that, with adoption of ALSs, households in the pastoral community registered improved standards of health. Expressing concurrence, FGD participants also outlined how this had been achieved:

> For us women, getting money for medical services through sale of livestock which are controlled by men is a bit hard. But now, our other sources of income have made it easier for us and the children to access medical services. Also, through the new livelihoods that we have adopted, like businesses, we have traveled widely, and interacted a lot with people from other communities and different backgrounds. We also formed groups such as the current one and NGOs usually come around to educate us on health issues. Through all these, our eyes have been opened on matters of family planning, good hygiene and good diet. Many of us have also been able to acquire health insurance covers especially the NHIF. When we relied heavily on livestock, we couldn‟t get all these. We can therefore say our health and that of the children has improved a lot (Women FGD, Nakuyo-North Pokot).

> Nomadism has had a toll on our health. It is very strenuous and physically exhausting because of a lot of trekking in search of pasture and water. It is also risky, because, we always found ourselves in unfamiliar territories and sometimes in violent confrontation with other rival nomads. Further, when drought sets in, we climb trees to cut branches and leaves for the animals. This has occasioned very serious injuries and sometimes deaths. Now, nomadism has reduced with reduction in livestock keeping and we are better off in terms of health (Men FGD, Tapach- South Pokot).

> Majority of households keep livestock, meaning milk and meat are still available, albeit in lower quantities because of lack of animal feeds and sometimes water. Now, with ALSs, they can afford a wider variety of diet hence improved health. Diseases such as Kwashiokor, for example are very rare now, because households can easily get maize meals and other sources of carbohydrates (Youth FGD, Kanyerus-North Pokot).

Therefore, through adoption of ALSs, women became enlightened on health matters.

The nomadic lifestyle, which was physically demanding and susceptible to risks, was

reduced. More importantly, the affordability of good healthcare and a balanced diet increased. This is a milestone in a community where maternal and child health is one of the worst in the country due to early forced marriages and poor nutrition as has been reported by UNICEF (2017). These findings are consistent with those of Karin (2012) that increased household income, as a result of diversification of livelihoods has been used to improve health in pastoral households.

However, health in a few households headed by women and children was reported to have worsened with adoption of ALSs. One FGD observed:

> In this community, households headed by women and children are poorer. Some are so poor, to the extent, they do not have livestock and only depend on leasing out their labour to people‟s farms and construction sites. In most cases they do not get the work and when they get, they are not paid well. As a result, their health is deplorable because they do not get adequate food and cannot afford medical services (Women FGD, Nakuyon-North Pokot).

This statement indicates that health standards were poor in households headed by women and children because their members were not involved in any gainful ALSs. Yet, they did not have livestock to supplement their meager and sometimes inconsistent wages. This notwithstanding, the bigger picture is that adoption of ALSs leads to improved health in most households of the pastoral community, and this serves as an incentive for enhanced adoption of ALSs.

Table 4.17 also shows that majority of the respondents were of the view that adoption of ALSs had resulted in a general improvement in the education of all household

members (mean=4.13). Responses from KIs and participants of FGDs demonstrated that there were three ways in which adoption of ALSs had caused improvement in the education of household members in the pastoral community. First, income earned from ALSs enabled parents to educate their children and further their own education. Second, adoption of many ALSs led to wide travel and interactions with people from other communities and diverse socioeconomic backgrounds. This exposed and enlightened the pastoralists to the extent that they invested in education. As a result, education levels among exposed pastoralists and their children improved immensely. Third, adoption of ALSs caused sedentarization, meaning, children and parents had the time to attend school and further their education respectively. This was hard in the nomadic lifestyle. This came out clearly from one KI who stated:

> ALSs have increased sources of income in households. This has been used to enable children‟s completion of education. Some parents have also gone back to school and colleges for further studies. Also, adoption of ALSs such as trade and formal employment, requires that one travels a lot. In the process, they get to meet and interact with other people from different places and communities who have different experiences in life. Through these travels pastoralists have learnt that education is very important. In fact, if you observe keenly, you will notice that, pastoralists in ALSs are more educated and their children complete school. On the other hand, members of households, which still rely heavily on traditional way of livestock keeping, are less educated for they are unexposed. They even do not get the time to attend school and further their education, because of nomadic lifestyle which still characterize livestock keeping in this community (KII 12. 9/3/2019).

Further, analyzed data reveal that girl-child education was the biggest beneficiary of adoption of ALSs because what used to happen before adoption of ALSs, denied girls the opportunity to pursue a good education. This was well articulated by women in FGDs, such as:

> In the traditional set up, girls never went to school because they were married off even at tender age to earn the family the prized dowry and bring riches, esteem and status to the parents. But today, because of our income generating activities, we have own resources and we can enroll our daughters in school even when their fathers oppose (Women FGD, Chepareria-South Pokot).

Thus, before adoption of ALSs, the community saw girls as potential sources of wealth in the form of dowry and never allowed them to go to school. Further, with adoption of ALSs across gender, women were also empowered to take up the challenge of educating the girls. Apart from affording to educate them, adoption of ALSs had empowered women to the extent that they made independent decisions. The positive correlation between adoption of ALSs and education has also been noted by other researchers. For instance, Asmare et al. (2007) observe that among the Somali pastoralists of Ethiopia, an increase in income from small businesses in handicraft products enables households to send their children to school. Based on the findings of this study, adoption of ALSs is, by and large, the panacea for the low literacy levels currently experienced in West Pokot County.

The mean rating of 4.02 in Table 4.17, indicates that the majority of the respondents believed that adoption of ALSs had led to a general improvement in the quality of households‟ housing. This was confirmed and elaborated during KIIs and FGDs. For example, one KI indicated:

> As a result of adoption of ALSs, the numbers of households residing in permanent buildings are on the rise especially in urban areas. Roofing materials are no longer twigs and grass, but iron sheets; some of very high quality, coloured and beautiful. Comparatively, women are still poorer than men in this community and can therefore hardly afford to put up a good house. They also

> lack the experience and expertise on construction matters. Therefore, households headed by women reside in houses of lower quality many of which are semi-permanent and makeshift structures.

The data show that adoption of ALSs had contributed to better housing in the pastoral community such that the semi-permanent makeshift structures were replaced by permanent ones. This is corroborated by government records which show that the percentage of the residents of West Pokot who have corrugated iron sheet roofs has increased from 27% in 2012 (KNBS, 2013) to 54% by 2019 (West Pokot County Government, 2018). Similarly, Luyali et al. (2015) report that the pastoral community is shifting from living in *"manyattas"* (huts made of mud, cow dung, and wood) to semi-permanent and permanent houses. However, just like in the other areas that have been evaluated and presented in the preceding paragraphs, women-headed households are also performing poorly in the housing parameter. The reasons given are lack of affordability and expertise. This means that women are disadvantaged in the pastoral community in most aspects.

The overall mean rating of 4.07 in Table 4.17 implies that adoption of ALSs has greatly improved the socioeconomic statuses of pastoral households. Researchers with similar findings are Saranta (2013) and Kirkbride (2006). They have discovered that diversification of livelihoods has improved living standards among the Isiria Maasai and Turkana pastoralists, respectively. Outside the African continent, Moritz et al. (2009) have established that diversified pastoralists in Khanasser Valley in Syria, are better off socioeconomically, than those who have not. Ahearn (2010), Eneyew, and

Mengistu (2013) also concur but add that, households that are headed by women, are worse off in overall well-being than those headed by men. Statistics from the Government of Kenya (RoK, 2011b), too, show there is a significant gap in poverty levels between female-headed and male-headed households.

In general, the findings indicate that adoption of ALSs has both positive and negative effects on households in the pastoral community. Whereas the positive effects include narrowed gender gap and improved standards of living, the negative ones are increased workload for women and cases of spouses accusing each other of adultery, among others. In line with the CVA, the positive effects could increase the capacities of both men and women, thereby promoting adoption of ALSs. Conversely, the negative effects have the potential to exacerbate vulnerabilities, especially among the women who face double marginalization for being pastoralists (who are mostly marginalized) and women in a men-dominated society. Notwithstanding the negative effects, this study underlines that adoption of ALSs results in improved living standards in households. It is, therefore, the best pathway out of overreliance on the diminishing livestock economy, pervasive gender inequality, violent conflicts, and the high poverty incidences in the pastoral community of West Pokot County. The next section deals with the identification of gender-responsive strategies that could enhance the uptake of ALSs in the community.

4.7 Gender Responsive-Strategies to Enhance Adoption of ALSs in the Pastoral Community of West Pokot County

A strategy is gender-responsive if gender norms, roles, and inequalities have been considered and measures have been taken to actively address them (WHO, 2006). Therefore, a gender-responsive strategy responds to the different needs and potentials of men and women, implying that they have immense potential of promoting enhanced adoption of ALSs among men and women in the pastoral community of West Pokot County. As such, under the fourth objective, this study sought to identify gender-responsive strategies which could be employed to enhance adoption of ALSs in the community. This was done for each of the major development stakeholders which operated in the County: The County and National Governments, Non-State actors, and the community itself.

4.7.1 Gender-Responsive Strategies for the County Government

The County, being a devolved unit of governance, influences general development. It, therefore, determines the rate of adoption of ALSs. Thus, this study sought to identify gender-responsive strategies that might be used by the Government of West Pokot County to scale-up adoption of ALSs. To achieve this, the respondents were provided with a list of strategies and were asked to indicate their level of agreement on each of the strategies‟ gender responsiveness. The responses were rated on a five-point Likert Scale where: 1=SD, 2=D, 3=U, 4=A, and 5=SA. The mean and SDs were generated from SPSS Version 23 and are presented in Table 4.18.

Table 4.18: ***Respondent Level of Agreement on Gender Responsiveness of Strategies Applied by the County to Enhance Adoption of ALSs***

The following strategies are gender-responsive	Men		Women	
	Mean	**SD**	**Mean**	**SD**
Education and training programmes	3.52	1.62	3.40	1.18
The youth empowerment centres	1.52	0.61	1.44	0.70
Cooperative societies	1.97	0.66	1.60	0.87
Agricultural services and infrastructure	2.01	0.52	1.98	0.78
Public participation programmes	1.12	0.44	1.01	0.34
Campaign against harmful cultural aspects	1.98	0.97	1.97	1.26
Mean	**2.02**	**0.80**	**1.97**	**0.86**

In Table 4.18, the mean ratings of the gender responsiveness of strategies that could be employed by the County Government to enhance adoption of ALSs were: Education and training programmes (Men=3.52; Women=3.40); the youth empowerment centres (Men=1.52; Women=1.44); cooperative societies (Men=1.97; Women=1.60); agricultural services and infrastructure (Men=2.01; Women=1.98); public participation programmes (Men=1.12; Women=1.01) and campaign against harmful cultural aspects (Men=1.98; Women=1.97). Apart from education and training programmes, the mean ratings for all the other statements were below average. These are further explained in the subsequent sub-sections.

4.7.1.1 Education and Training Programmes at County Level

In Kenya, the functions of the County Governments in relation to education and training are pre-primary education, child care facilities, farmers' training centres,

village polytechnics (Youth Polytechnics), and home craft centres (TI, 2014). Education and training obtained through these programmes are envisaged to develop a human resource that has the capacity to spur development, such as adoption of ALSs. According to Table 4.18, a mean rating of 3.52 among the men and 3.40 among the women show that majority of the respondents were of the view that the educational and training programmes offered by the County were gender-responsive. The key informants and FGD participants were, however, of contrary opinion as outlined by the following key informant:

> Since coming into existence in 2013, the County government has re-energized development and management of Early Childhood Development Education Centres (ECDECs), the polytechnics and home craft centres. It has tried to ensure that the institutions absorb and benefit all learners regardless of gender. Nonetheless, the County government seems to lack the capacity to ensure this happens. Thus, the institutions in the County are still very few and mostly in towns. Not every child and trainee can brave the long distances, sometimes through hard terrain and insecure spaces, to reach them. Obviously, girls and women are disadvantaged. Further, in the institutions, gender disparities exist in enrolment, retention and completion. Regarding polytechnics and craft centres, most students take courses associated with their gender such as tailoring and masonry for women and men, respectively. In view of all these, I am strongly convinced that the programmes are far from responding to the needs of both men and women (KII 4. 13/4/2019).

From this statement, the County Government endeavoured to ensure that there was gender equality and inclusivity in access to early childhood education and vocational training. However, this had not been attained because the institutions offering the programmes were still insufficient and had poor geographical distribution, thereby disadvantaging the marginalized members of the community such as the rural dwellers, girls, and women. In regard to vocational training offered in polytechnics

and craft centres, the statement by the KI further reveals that the choice of courses was gendered such that men and women enrolled in areas traditionally perceived to be suitable for them. Similarly, the County Integrated Development Plan (CIDP) for West Pokot County (2018-2022), shows that the levels of access, retention, and completion in the County learning and training institutions are low and characterized by huge gender disparities. In this case, girls and women are more disadvantaged. This is attributed to retrogressive cultural practices and long (sometimes treacherous) distances that the learners have to cover to the few institutions (Luyali et al., 2015). Based on the aforesaid, this study notes that the programmes are inadequate in addressing practical and strategic gender needs. They are, therefore, not gender responsive and are inadequate in enhancing the adoption of ALSs.

4.7.1.2 County Youth Empowerment Centres

The County Government of West Pokot recognizes the youth, who account for 31% of the total population, as a resource and potential wealth for the County. Hence, it acknowledges that it has a constitutional mandate to make them productive citizens (West Pokot County Government, 2018). To achieve this, the devolved unit of governance established Youth Empowerment Centres (YECs) in all four sub-counties. YECs aimed at developing incubation centres where the youths could access cyber and digital services, create their own ideas, access jobs, socialize and recreate to increase creativity and productivity. The impacts of this on adoption of ALSs could not be underestimated. This project was evaluated for gender responsiveness in order

to establish whether it had the capacity to tap into the potentials of both men and women. The findings in Table 4.18 show that the gender responsiveness of YECs had a mean rating of 1.52 for men and 1.44 for women. This means that the project was not gender-responsive. Among the study KIs and FGD participants, only two of the former and one of the latter knew of the project‟s existence and their views on its gender responsiveness were:

> In the establishment of YECs, nobody was keen to consider gender issues. But what I know is that, in this County, no gender is discriminated nowadays. The doors of the centre are open to all (KII 1.11/3/2019).

> I am not aware of any involvement of the community, the women and gender officials in establishment of YECs which was done in a hurry and I know it is not gender responsive. For example, it is an incubation centre that heavily relies on technology, yet women are not as tech savvy as men. If nothing is done, then the men will benefit more than the women from the project (KII 3. 3/3/2019).

> Though the project is in initial stages and with some teething problems, some of us have benefitted from it. In terms of gender, young men are overwhelmingly the majority and we have not heard of any plan to shore up attendance by young women (Youth FGD, Parua-South Pokot).

From the above responses, it would seem that there was no deliberate attempt to mainstream gender issues in the establishment of YECs. Participation of the community, especially the women, and gender experts in the formation of the project did not happen. Yet, this would have provided a perfect opportunity to highlight gender issues. Notably, the project heavily relied on the application of technology. In the absence of any attempt to shore up technology compliance among the women, who were not as tech-savvy as men, they were disadvantaged. YECs are, therefore, mostly gender-blind and far from being gender-responsive (WHO, 2016). Yet, YECs are

critical in the pastoral community where the youth are disempowered by many cultural and socioeconomic challenges. Emphasizing the critical role that well-designed YECs could play in development, Hall (2017) states that the formation of incubation centres for youth enterprises (which is a key element of YECs), helps tap into the great asset that is offered by Kenya‟s youthful population. This underscores the need for YECs which are gender responsive in order to promote adoption of ALSs by both men and women.

4.7.1.3 Cooperative Societies at County Level

A Cooperative Society is an autonomous association of women and men who unite voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise (Okwara & Uhuegbulem, 2017). The County government of West Pokot promoted the establishment of what it called “vibrant” cooperative societies (West Pokot County Government, 2018). This initiative was evaluated for gender responsiveness. The results in Table 4.18 indicate that the mean rating for men was 1.97 and that of women was 1.60, implying that the initiative was not gender-responsive. This was confirmed by a gender officer at the County and FGD participants who were beneficiaries of the County government‟s initiative. They stated as follows:

> The County government has done great job in promoting cooperative movement in the County, since it came into place in 2013. But the problem is, despite our effort, they are gender blind and insensitive to the plight of women who are disadvantaged in this community. All of them are run and controlled by men even in the management boards. Further, women are not fully

> represented in all decision-making meetings held by the County cooperative department (KII 3. 3/3/2019).
>
> The only cooperative society, we know here is Kodich Farmers‟ Cooperative Society, which has not been active for a while. But in 2013, the County government revived it and developed a honey processing plant as key project for the society. The cooperative is owned and run by men. Our group got the contract of selling the processed honey. We have not heard of anybody talking about gender and we do not attend meetings. The secretary just delivers only the information that we need (Women FGD, Kodich-North Pokot).

According to the statements, there was the absence of a deliberate attempt to involve both men and women in all stages of formation and operationalization of the County sponsored cooperative movement. Instead, the traditional gender norms and roles reigned supreme whereby men dominated, and women played a subordinate and passive role. It is particularly clear that decision-making and ownership of the cooperatives were dominated by men. These findings are corroborated by the information contained in a performance report for the County Cooperative department. In the report, apart from membership where the number of men and women is shown, there is no mention of gender issues anywhere (West Pokot County Government, 2016). The report also reveals stark gender disparities in membership to the cooperatives and their decision-making organ-the Board of Management as shown in Table 4.19.

Table 4.19: ***Membership/Management in Selected Cooperative Societies in West Pokot County***

Name of Cooperative	**Membership**			**Board of Management**			**Chair**
	Total	**Men**	**Women**	**Total**	**Men**	**Women**	
Muruny	1682	1207	474	9	7	2	Man
Lelan	1022	804	218	10	7	3	Man
Ortum	630	512	118	8	6	2	Man
Total	**3,334**	**2,523**	**810**	**27**	**20**	**7**	

According to Table 4.19, over two-thirds of memberships to Muruny, Lelan, and Ortum farmers‟ cooperatives, are men. Men also had an overwhelming dominance in membership and leadership of the boards of management. This implies that women‟s participation in cooperative societies was very low. Evidently, the cooperative movement in West Pokot is not gender-responsive. Therefore, the initiative may not be helpful in enabling the community to meet its development aspirations such as the adoption of ALSs. According to Okwara and Uhuegbulem (2017), cooperative societies are particularly helpful in areas where the provision of essential services by the government to meet the needs of the people is inadequate. West Pokot, being mainly rural and marginalized, provision of essential services by the government, is scant. One of the ways to fill this gap is a strong cooperative movement which is achievable if gender is to be mainstreamed adequately.

4.7.1.4 County Public Participation Programme

Public participation in the County planning process is mandatory as indicated in Section 113 of the County Government Act, 2012 (TI, 2014). As such, the West Pokot

County Government put in place participatory forums, especially in the budget preparation and validation exercises (West Pokot County Government, 2018). This programme, would be more effective in enhancing adoption of ALSs in the pastoral community of West Pokot County if it were gender-responsive. It was, therefore, evaluated for gender responsiveness. In Table 4.18, a mean score of 1.12 for men and 1.01 for women indicate an overwhelming majority of the respondents felt the programme was not gender-responsive. There was also unanimity about this among participants of KIIs and FGDs. Their views were covered comprehensively by one key informant:

> Public participation meetings are held throughout the County. However, women‟s attendance is very low and sometimes they do not attend because they are rarely invited. Also, some of the meetings happen very late in the evening when women will have gone home because of security reasons and to also attend to their domestic chores. Further, the few women who attend are reluctant to express their ideas fearing a backlash from the community that prefers passive women. My other observation is that, gender issues are rarely raised and discussed in these meetings. Because of all these, I think the programme, is particularly unfair to women because, I do not think men can properly express issues appertaining to them. Even on the side of men, there are also issues that may be forgotten or overlooked when gender issues are not integrated in the agenda of the meetings (KII 15. 12/03/2018).

Evidently, the County participatory programme lacked gender responsiveness because women‟s involvement was either minimal or non-existent due to cultural constraints. Further, gender issues were rarely included in the meetings‟ discussions. This implied that the programme was gender-blind and insensitive to the needs, interests, perspectives, and knowledge of women and men. Yet this was the reason for a participatory development process. Hence, the programme is inadequate to stimulate

adoption of ALSs by both men and women. These findings are similar to those of Tanyag and True (2019) who have established that women in West Pokot County are traditionally excluded from participating in decision-making. This is due to the unequal division of labour and norms which specifically prohibit women from speaking in the same spaces where men are gathered. Hence, women are physically prohibited from participation. The UN (2010) also notes that implementation of already legislated policies to increase women‟s participation remains inadequate in many countries owing to socio-cultural norms and women‟s lack of knowledge of their rights.

4.7.1.5 County Programme for Campaign Against Retrogressive Cultures

Since its formation in 2013, the West Pokot County Government has been fighting against outdated cultural and customary practices, beliefs, norms, and values because they have the potential to undermine the achievement of its development aspirations, including adoption of ALSs among its population which is predominantly pastoral. Lined for total eradication are early forced marriages, polygamy, wife inheritance, FGM/C, and cattle rustling. Measures applied include sensitization against the vices, the development of rescue centres and boarding schools, especially for girls, and the creation of awareness for existing support programmes (West Pokot County Government, 2018). In order to gauge its level of effectiveness, the eradication of harmful cultures programme that the Department of Culture and Social Services spearheads, was evaluated for gender responsiveness. A mean rating of 1.98 for men

and 1.97 for women in Table 4.18 indicate that the programme was not gender-responsive. Also, the community, through KIIs and FGDs, was categorical that the programme lacked gender responsiveness and this reduced its effectiveness as evidenced by the persistence of the vices. One key informant candidly stated:

> How do you expect a programme to be effective, when in this age and era, women are rarely involved? Then there is this narrow and misguided thinking of associating some vices with particular gender such that the gender "concerned" is placed on the forefront of eliminating them. For example, men and women are mostly involved in sessions appertaining to eradication of cattle rustling and FGM/C, respectively. Yet all these vices affect all regardless of gender, meaning all can have important input based on their different experiences. Also, gender issues are rarely in the agenda during the campaigns against the vices (KII 3. 3/3/2019).

These data show that the West Pokot County programme for the eradication of retrogressive cultural aspects rarely involved women in its campaigns. The programme was also guided by a narrow perspective that gendered the vices such that men and/or women were fronted to exclusively tackle specific vices. For example, while men were put at the forefront of the campaigns against cattle rustling, women were fronted when it came to anti-FGM pursuits. Additionally, there was no deliberate commitment and intent to consider gender issues during all stages of the campaigns. All these made the programme score low on gender responsiveness. Yet, gender responsiveness would have brought on board the potential of both men and women in order to realize the development aspirations of the community, including adoption of ALSs. Kristensen and Nairesiae (2009) argue that there is a need to deliberately include both men and women in the fight against the social vices that bedevil the community. In particular,

they observe that FGM interventions should also involve men because they are decision-makers in the community and wield immense power to exert more pressure on women to stop circumcising girls.

4.7.2 Gender-Responsive Strategies for the National Government

In the 2010 Constitution, Kenya operates under two-tier levels of governance where the County and National Governments exist. Though many functions have been devolved to the Counties, the National Government constitutionally controls up to 85% of the national budget, policy formulation, and maintenance of standards, and is directly in charge of key ministries and sectors such as education, defence and internal security (TI, 2014). Therefore, this study considered the national government as a key player in enhancing adoption of ALSs among men and women in the pastoral community of West Pokot County. Thus, it sought to identify, from among its strategies, those that were gender responsive and could, therefore, promote adoption of ALSs. To achieve this, the respondents were provided with a list of the strategies and were asked to indicate their level of agreement on each of the strategies‟ gender responsiveness. The responses were rated on a five-point Likert Scale where: 1=SD, 2=D, 3=U, 4=A, and 5=SA. The mean and SDs were generated from SPSS Version 23 and are presented in Table 4.20.

Table 4.20: ***Level of Agreement on Gender Responsiveness of Strategies Applied by the National Government to Enhance Adoption of ALSs***

The following strategies are gender-responsive	Men		Women	
	Mean	**SD**	**Mean**	**SD**
Education and training programmes	3.72	0.53	3.52	1.01
Security services	1.88	0.66	1.67	0.87
Micro finance facilities	1.91	0.52	2.02	0.78
Mean	**2.50**	**0.57**	**2.40**	**0.89**

Table 4.20 shows that while the mean ratings of the gender responsiveness of education and training programmes were high (Men=3.72; Women=3.52), those of security services (Men=1.88; Women=1.67) and microfinance facilities (Men=1.91; Women=2.02), were below average. These are further explained in the subsequent sub-sections.

4.7.2.1 National Government's Education and Training Programme

Under the current constitutional dispensation on education matters, the National Government is responsible for education policy, standards, curricula, and examinations. It is also in charge of universities, tertiary educational institutions and other institutions of research and higher learning, primary schools, secondary schools, and special education institutions (RoK, 2010). More importantly and which is of direct benefit to the pastoralists, the National Government plays a leading role in the implementation of free and compulsory basic education. In Table 4.20, a mean score of 3.72 for men and 3.52 for women on the National Government‟s education and training programmes, indicate that majority of the respondents believed that the

programmes were gender-responsive. This belief was affirmed by KIs and FGD participants. For example, some of them stated as follows:

> The government‟s affirmative action policy on education has helped members of this community to secure places in national secondary schools and universities, with lower marks than the rest of Kenyans from well-to-do communities. The girls and women are even allowed with lower marks. This makes me believe that the government is keen on addressing the gender gap and disparities in accessing education in pastoral communities such as ours (KII 5. 7/4/2019).

> The National Government has ensured that every administrative unit has a school hence reducing distances to schools. Also, all learning institutions have been instructed to provide clean water, sanitation and hygiene services to learners. Construction of separate toilets/washrooms for boys and girls has become a priority. This has created favourable conditions for learning especially for the girls and women. As a result, school completion rates and performance has increased (KII 4. 13/4/2019).

> Nowadays, we sent all children to school because the government has made it free and compulsory. The administration through the chiefs is particularly keen on the girl child going to school. This development is very recent and at least at the primary school level, the number of girls and boys is getting equal (Men FGD-Konyao-North Pokot).

These statements show that through the affirmative action policy on education, members of the community were among other marginalized Kenyans, who were able to access secondary schools and institutions of higher learning with lower marks than the rest of other Kenyans with privileged backgrounds. For pastoral girls and women, the benefits were two-fold: as girls/women and as members of a marginalized community. This meant that they were admitted into learning institutions with much lower marks than the boys/men from the same community. The statements also indicated that, under free and compulsory basic education programme, the government had increased the number of learning institutions and made them more conducive for

both boys and girls. Pastoralists who were reluctant and unwilling to send their children to school were also forced to do so. On this, more emphasis was placed on the girl child. As a result, progress towards gender parity in enrolment was being made. Evidently, the National government‟s education and training programme is gender-responsive. With continued and improved implementation, it has the potential to bring about gender equality and equity in access to education in the pastoral community, hence catalyzing adoption of ALSs by both pastoral men and women.

4.7.2.2 National Government's Security Services

In the 2010 Constitution of Kenya, under the fourth schedule, security is a function of the national government (RoK, 2010). For this crucial service to be effective in creating a peaceful environment that is conducive to development, and as required by the Constitution, gender responsiveness is mandatory. However, according to Table 4.20, a mean score of 1.88 for men and 1.67 for women, indicate that the security services provided by the National Government lacked gender responsiveness. This view was also held by the majority of participants in KIIs and FGDs who gave the following reasons for the lack of gender responsiveness:

a) Women were underrepresented in the composition of personnel of the security agencies that were active in West Pokot. These included the Kenya Defence Forces (KDF) and the National Police Service. As such, their security plans and operations lacked adequate input from the women.

b) When the community was involved in security interventions, the inclusion and active participation of women had been very low and sometimes non-existent. Therefore, peace talks, mediations, and other peace negotiations and planning processes, lacked crucial inputs from the women.

c) On many occasions, communal punishments had been meted out disregarding the gendered impact it could have.

d) Security agents tended to associate women with minor crimes and men with major ones. Therefore, they always pursued the men whenever a major crime such as robberies and cattle rustling was committed, forgetting that women could also be involved in such crimes directly or indirectly.

One KI stressed that:

> In as long as women‟s roles in security matters are overlooked or underestimated, the way it is now, achievement of peace and security is a mirage. There is this belief that the men in community are rigid and hard to deal with, but let me tell you, they do listen to their women especially their mothers and daughters. Women look passive and powerless, but to me they have great potential that can be tapped to achieve admirable results. I think in the spirit of gender mainstreaming; it is high time that the security sector takes on board both genders (KII 1.11/3/2019).

Clearly, the security interventions applied by the National Government were gender-blind and insensitive to the differential impacts posed by the actions on men and women. This might explain why the security sector was yet to bring to an end outlawed practices such as FGM/C, wife inheritance, early forced marriages, and cattle rustling in the community. These continued to hamper the development aspirations of the

people, including adoption of ALSs, especially among the women who suffered more impacts of the vices. Some researchers have made similar findings. For example, Tulel (2013) has found that the lack of meaningful participation of women in peace talks, mediations, and negotiations results in failure in peace processes initiated by the government in collaboration with the pastoral community of West Pokot. Schilling et al. (2012) also note the crucial role that women play in reducing insecurity emanating from cattle raids. According to the UN (2010), insecurity, conflicts, and related crisis situations have profoundly different impacts on women and girls who, as a result, find it difficult to access health care, education, and livelihoods. Effective responses, therefore, require the equal participation and inclusion of women in decision-making. All these underscore the need for security approaches that are gender-sensitive, specific, and transformative in order to deliver a peaceful and secure environment that is conducive to the meaningful adoption of ALSs by all.

4.7.2.3 Microfinance Services Provided by the National Government

Microfinance services are both financial and non-financial and are provided to low-income earners who do not have adequate collateral to enable them to borrow from commercial banks (Kamau, 2010). The West Pokot County Government acknowledges that in order to promote entrepreneurship and increase employment opportunities for the pastoralists, the National Government availed micro financial services such as the Women Enterprise Fund (WEF), Uwezo Fund, and the National Government Affirmative Action Fund (NGAAF) (West Pokot County Government,

2018). This study endeavoured to evaluate the gender responsiveness of these microfinance services. The findings in Table 4.20 show that the mean rating for men was 1.91, while for women, was 2.02. Therefore, most of the respondents were of the opinion that the services were not gender-responsive. During KIIs and FGDs, the majority of the participants were of the same view. They observed that the financial services lacked gender responsiveness because most of them only addressed the micro financial needs of the women. This was based on the commonly held stereotype that women were always more vulnerable than men. Yet, the ground was shifting in favour of women in the pastoral community. For example, according to one key informant:

> For many years, focus was trained on women who were assisted more than the men. Today, there are many reformed cattle rustlers, idling out there. Also, the boys who never went to school because they provided security and tended to livestock during droughts are now without a good livelihood. In my view, today, if men are not more vulnerable and need more assistance, then they are at par with the women (KII 13. 16/4/2019).

Study participants also observed that the designers of the products offered by microfinance did not consider the pastoral community‟s socio-cultural and economic situation. The designers seemed to be guided by the one-size-fits-all mentality, where strategies that succeeded elsewhere, were lifted without amendments and applied to the pastoral community. Consequently, the services became inaccessible to the majority of community members, and most of those who accessed them, defaulted. Related to this observation, women in one FGD noted:

> WEF management, is either oblivious of the context under which women operate in this community or they have decided to ignore because the amount that can be loaned to groups cannot be less than Ksh.100, 000. Hence, women,

> who do not own livestock-the only possible source of such amount of money will find it hard to access the funds (Women FGD, Chepareria-South Pokot).

Also, during KIIs and FGDs, it was noted that by concentrating their services in urban areas, the financial institutions failed to consider the fact that the pastoralists, especially the women, were predominantly rural dwellers. As such, the services were not easily accessible by most pastoralists. According to the participants, women‟s case was exacerbated by the fact that their mobility was lowered by their gender roles and cultural restrictions. Giving proof, a Chamber of Commerce member, West Pokot Chapter, stated:

> Apart from Faulu Kenya which opened a branch in Kabichbich, Pokot South Sub-county recently, the rest have their only offices here at Makutano/Kapenguria Township, where West Pokot County and West Pokot Sub-county are headquartered. This leaves out two very vast sub-counties: North and Central Pokot. I know, they are mobile sometimes, but better service is obtained when in offices (KII 8. 16/3/2019).

This statement shows that a vast majority of the pastoralists like those from North and Central Pokot must cover quite some distance to access better microfinance services. By and large, it was evidently clear that the microfinance services were not gender-responsive because of the reasons highlighted by the participants. These findings are in congruence with those of Kamau (2010) that patriarchal ideologies, community perceptions of gender roles, and unfriendly policies impact access to microfinance resources in Kenya. Kirkbride (2006) also observes that, since 1979, a number of ASAL development policies have been formulated, but have been failing because they

do not address the special characteristics of the ASALs and the communities who live in them.

4.7.3 Gender-Responsive Strategies for the Non-State Actors

According to Adan and Pkalya (2005), non-state actors which include NGOs, CSOs, MNCs, the media, FBOs, and CBOs, play a leading role in the development of areas dominated by pastoralists. Notably, they contribute immensely towards pastoralists‟ adoption of ALSs. It is for this reason that this study sought to identify strategies that were gender responsive and could, therefore, enhance adoption of ALSs in the community. To achieve this, the study asked the respondents to indicate their level of agreement on the gender responsiveness of the strategies employed. The responses were rated on a five-point Likert Scale where: 1=SD, 2-D, 3=U, 4=A, and 5-SA. The mean and SDs were generated from SPSS Version 23 and are presented in Table 4.21.

Table 4.21: ***Level of Agreement on Gender Responsiveness of Strategies Applied by the Non-State Actors to Enhance Adoption of ALSs***

	Men		**Women**	
The following strategies are gender-responsive	**Mean**	**SD**	**Mean**	**SD**
Education services	3.67	0.50	3.92	1.04
Capacity building and development strategies	2.55	0.54	2.52	0.68
Agricultural Programmes	2.11	1.15	2.05	1.07
Mean	**2.78**	**0.73**	**2.83**	**0.93**

The mean ratings of the gender responsiveness of the strategies applied by the Non-State actors to enhance adoption of ALSs in Table 4.21 are as follows: Education

services (Men=3.67; Women=3.92), capacity building and development strategies (Men=2.55; Women=2.52) and agricultural programmes (Men=2.11; Women=2.05). These are explained in detail in the next sub-sections.

4.7.3.1 Education Services Provided by Non-State Actors

In West Pokot County, the non-state actors have played a significant role in education provision (Kristensen & Nairesiae, 2009). Whereas some have acted as private agents, the majority have complemented the state‟s initiatives by participating in policy formulation and infrastructural development. The study findings in Table 4.2.1, that the mean score for men was 3.67 and for women was 3.92, indicating that the education services provided by the non-state actors were accessible to both women and men. This perspective was also held during KIIs and FGDs where it emerged that, apart from just identifying gender issues, the Non-state actors had taken practical steps to help the community overcome historical gender biases in education. This was apparent in their policies, projects, and programmes as outlined below by some of the participants:

> Considering our nature of work and the context in which we operate as World Vision, we have employed professionals such as educationists, sociologists, and gender and human rights experts. We also do baseline surveys before any policy is formulated and project launched. Also, in all we do nowadays, we involve the community and we emphasize that men and women participate in equal numbers (KII 13. 16/4/2019).

> Seeing that there are many girls who are not able to complete school because of forced early marriages, early pregnancies and lack of fees, the WVK, has established a girls‟ rescue centre and given scholarship to teenage mothers who returned to school. The church, such as the Catholic, runs a less similar strategy (Youth FGD, Kanyerus-North Pokot).

> Noting our nomadic lifestyle, the churches and the NGOs, have built boarding schools. As a result, many especially the boys completed school. Then they started concentrating on girls‟ schools and when they realized the girls were overtaking the boys, around 2010, they shifted their effort to more boys‟ schools or mixed gender schools. Today, it is a matter of balancing between girls‟ and boys‟ schools. These people have helped us more than the government and almost all of us here can attribute our little education to them (Men FGD, Tapach-South Pokot).

Therefore, the education policies, projects, and programmes of the Non-state actors were underpinned by expertise and stakeholder opinion, and research-based evidence. This enabled them to adequately address time-bound educational concerns and needs of both men and women. As County progresses towards the achievement of gender parity in education, much of this is attributed to the gender-responsive strategies adopted by the Non-state actors. These findings are consistent with those of Ng‟ang‟a (2012) which indicate that by investing in education infrastructure, the Non-state actors responded well to the educational needs of the people of remote parts of West Pokot County. With the education services provided by the state also being gender-responsive as indicated in subsection 4.7.2.1, it means that access to education and benefitting from it was becoming possible for both pastoral women and men. This promises significant payoffs to adoption of ALSs.

4.7.3.2 Capacity Building and Development Strategies by Non-State Actors

Whereas capacity building is the process of creating capacities where they never, or little existed, capacity development refers to the process in which existing capabilities are strengthened and maintained to achieve targeted development objectives over time

(UNDP, 2009). A mean score of 2.55 and 2.52 among the men and women respectively as shown in Table 4.21, indicate that a slim majority of respondents were convinced that the capacity building and development strategies, employed by Non-state actors in West Pokot County to enhance adoption of ALSs among pastoralists, were gender-responsive. But, a significant number of respondents were of the contrary opinion. The KIs and FGD participants were also equally divided in their opinions. Content analysis of the information they gave, revealed that those who saw the strategies as gender-responsive argued that the Non-state actors never discriminated against people along gender lines in identifying those who were eligible for capacity building and development. Instead, they were guided by existing vulnerabilities and capacities. These views were articulated by some of the participants, such as:

> We were advised that we needed to see other women who have succeeded under the same conditions as ours. Therefore, the Catholic Church‟s Ushanga initiative took us to see what our counterparts, the Karamojong women were doing across the border. We learnt a lot about their group‟s organizational structure, the sort of training they underwent and how they marketed their products. As a result, our project on bead work, ornaments and jewelry is thriving. To us, the church‟s initiative came at the right time and recommended the right strategy for us. We have also seen NGOs take men and women for trainings, seminars and workshops, depending on their respective needs as groups and as individuals (Women FGD, Nakuyon-North Pokot).

> In my view, the capacity building strategies by the Non-state actors respond very well to the needs and concerns of both men and women at any given time. Lately, I have seen many of them shifting focus to men on issues appertaining to embracing change and dropping of harmful cultural and traditional practices and beliefs, because they have discovered, this is what is letting the community down. I have also seen women in well-established business groups being taken for training on business planning, management and development to encourage them to venture into more viable business opportunities (KII 3. 3/3/2019).

These statements show that the Non-state actors recommended capacity building and development strategies such as benchmarking, seminars, workshops, and training, based on the pressing needs of the individuals, groups, and community at large. For example, seeing that the women in the Ushanga Initiative lacked exposure and needed to learn from best practices applied in similar but successful groups elsewhere, the Catholic Church took them for a benchmarking tour to Uganda where they took valuable lessons from their Karamojong counterparts. Men, on the other hand, were enabled to bring change in the community because they exercised immense power and influence by virtue of being household heads and decision-makers. According to WHO (2006), a strategy that considers women‟s and men‟s specific needs and intentionally targets and benefits a specific group of women or men to achieve certain policy or programme goals or meet certain needs is gender-responsive. These characterize the capacity-building and development strategies applied by the Non-state actors in West Pokot.

As indicated, there were voices of dissent during KIIs and FGDs to the effect that the capacity-building and development strategies applied by the non-state actors lacked gender responsiveness. Their view was that the Non-state actors should have done more capacity building and development on women because they also performed crucial roles in adoption of ALSs. For instance, women in Pokot South argued:

> They do not target the right people. For instance, on agriculture, focus should be on women who are always at home and can use their knowledge on livestock and crop farming. Many a times, men are taken for training, yet they are not at

> home most of the time to tend to the livestock and the gardens (Women FGD, Chepareria-South Pokot).

Therefore, the women, and not men, should have been targeted for capacity building and development programmes since they played a bigger role in agriculture by virtue of being within the homestead most of the time. This perspective is influenced by traditional gender roles and norms and would have made the strategies to further perpetuate gender inequalities in the pastoral community. Tirivanhu and Van Rensburg (2018) state that a strategy that perpetuates gender inequalities by reinforcing them is gender unequal and lacks gender responsiveness. This being the case, this study concludes that the capacity building and capacity development strategies employed by Non-state actors in West Pokot County are gender responsive and have the potential to enhance adoption of ALSs among pastoral men and women.

4.7.3.3 Agricultural Programmes by Non-State Actors

According to researchers such as Nangulu (2001) and Nyberg et al., (2015), the agriculture sector was one of the major sources of ALSs for the pastoralists residing in West Pokot County. As such the Non-state actors, being key partners in development initiatives, run some programmes to augment the government‟s effort to promote agriculture in the ASAL County (Kristensen & Nairesiae, 2009). In Table 4.21, a mean score of 2.11 for men and 2.05 for women reveal that the programmes sponsored by the Non-state actors to enhance adoption of ALSs in the agriculture

sector lacked gender responsiveness. This also emerged during KIIs and FGDs as exemplified by the views of the following key informant and FGD participants:

> We have robust agricultural progrmmes in our church. I acknowledge that to a large extent we have not been keen on gender considerations. The services and projects are just given to individuals, groups, households and villages regardless of gender. For example, we have a tractor for tilling land which is leased out to farmers at a very subsidized price. I think this mostly goes to men who can pay for it and have the power to decide how the household plot is to be tilled (KII 15. 12/03/2018).

> ELCK has a project where people are issued with fencing wires to fence their gardens. The procedure is that one registers and travels to Kacheliba town to pick the wires. Because of our domestic chores and lack of fare to travel and transport the wires, many of us have not benefited from this project more so the single and widowed women whose gardens remain poorly fenced (Women FGD, Kodich-North Pokot).

The statements above indicate that gender issues were not considered in the agricultural programmes offered by Non-state actors. For instance, the tractor-hire and fencing-wire projects highlighted were available to any individual, group, household, and village regardless of gender as long as they applied and afforded the logistics involved until the facilities reached their plots. This is an assumption that both men and women can access the facilities and benefit from them equally. The reality is that it is harder for women in the pastoral community to access and benefit from such resources due to the myriad cultural constraints they face and their lower socioeconomic status (Kipuri & Ridgewell, 2008). Consequently, the agricultural programmes offered by Non-state actors are inadequate in stimulating adoption of ALSs in the agricultural sector among the pastoralists, more so the women.

4.7.4 Gender-Responsive Strategies for the Pastoral Community

This study considered the pastoral community to have the capacity for self-determination and, therefore, a key player in promoting adoption of ALSs among its members. In view of this, the study sought to identify gender-responsive strategies that the community could draw on to enhance adoption of ALSs. To achieve this, the respondents were asked to indicate their level of agreement on the gender responsiveness of the strategies already employed by the community. The responses were rated on a five-point Likert Scale where: 1=SD, 2-D, 3=U, 4=A, and 5-SA. The mean and SDs were generated from SPSS Version 23 and are presented in Table 4.22.

Table 4.22: ***Level of Agreement on Gender Responsiveness of Strategies Applied by the Community to Enhance Adoption of ALSs***

	Men		**Women**	
The following strategies are gender-responsive	**Mean**	**SD**	**Mean**	**SD**
Mentorship programme by community elites	3.77	0.51	3.91	1.01
Support to development agencies	2.01	0.56	1.52	0.58
Mean	**2.90**	**0.54**	**2.72**	**0.80**

In Table 4.22, it is clear that the mean ratings for gender responsiveness were high regarding mentorship programme (Men=3.77; women=3.91) and low in the case of support by the community to development agencies (men=2.01; women=1.52). Detailed explanations/discussions are presented in the next sub-sections.

4.7.4.1 Pastoral Community's Mentorship Programme

Mentorship refers to a sustained relationship between the person being mentored (mentee or apprentice) and a professional or expert in a certain field (mentor) (Muchiri, 2013). In the pastoral community of West Pokot County, it had become common that the elites formed both structured and unstructured mentorship programmes aimed at boosting education standards and adoption of ALSs (West Pokot County Government, 2018). The study findings in Table 4.22 indicate that on the community‟s mentorship programme, the mean rating was 3.77 and 3.91 for men and women respectively. Accordingly, most of the respondents believed that the mentorship programme was gender-responsive. In concurrence, key informants and FGD participants gave reasons for this which were well outlined by participants of the following FGDs:

> Our elites who include University students, businessmen, and professionals, move around schools, churches and villages as individuals, mixed gender groups and couples. Through them, we have learnt that most of our cultural practices and beliefs such as FGM/C, cattle rustling, and subordination of women are distractive to our progress in education and wellbeing. We have also learnt of our rights and the opportunities (Youth FGD, Kanyerus-North Pokot).

> The County first lady herself is our role model and mentor. She sat down with us under this tree and imparted in us very progressive ideas such as our rights as women, importance of educating both boys and girls and why FGM/C is dangerous and backward (Women FGD, Chepareria-South Pokot).

These reports show that in the community mentorship programme, gender parity among the mentors was encouraged and the needs and concerns of both women and men mentees were addressed adequately. For example, among the girls/women, emphasis was placed on them knowing their rights and building capacity in them so

that they were able to shun destructive cultural practices and pursue their entitlements such as education and resources. On the other hand, the boys/men were particularly, encouraged to shun aggressive behaviours against women and members of other communities through a change in attitudes and perceptions of masculinity. Moreover, existing gender stereotypes and discrimination against women were demystified. Therefore, the community mentorship programme responds well to the socioeconomic needs, concerns, and aspirations of both genders. Certainly, the programme, contributes immensely towards the pastoral community‟s pressing need of reducing overreliance on pastoralism through adoption of ALSs. Indeed, researchers such as Muchiri (2013) have also found out that, by developing people who are productive and employable, community mentorship programmes have helped them to attain their development aspirations. Also, the Kenya Government, acknowledges that mentorship empowers the youths and because they are the most productive members of the community, its impacts on development cannot be underestimated (RoK, 2007).

4.7.4.2 Pastoral Community's Support to Development Agencies

The pastoral community of West Pokot County renders both cash and in-kind support to state and Non-state development initiatives which promote adoption of ALSs. With a mean score of 2.01 for men and 1.52 for women, the study findings in Table 4.22 indicate that most of the respondents were of the view that the community support to other development stakeholders lacked gender responsiveness. This view was also held during KIIs and FGDs. It was posited that women‟s participation was very low

because gender roles and customary norms constrained them from attending and actively participating in public or communal engagement. It was also noted that the provision of free labour which was one of the in-kind support that the community rendered to development agencies, was performed along traditional gender roles such that, as women offered catering services, men served in decision-making and security sectors. Women‟s access to control rights over community resources was also very low and so they could not render much support to community development initiatives. Related to these, one of the KIs observed:

> In support of development initiatives, the community has donated own resources such as time, land, livestock and free labour. However, as is the norm, women‟s participation is passive because men being the decision makers both in public and in households are in the forefront. When support of the community is required in form of labour, cooking and food serving services are dominated by women as men dominate the hard labour and security activities (KII 12. 9/3/2019).

Thus, the programme lacked gender responsiveness because it replicated and reinforced a gendered division of labour. Also, women‟s participation was minimal, yet this could have decreased their vulnerabilities and increased their capacities. Similar findings have been made by Kipuri and Ridgewell (2008) that pastoralist culture excludes women from important roles. For example, women do not attend many of the social occasions at which men make decisions that affect the whole community because they are socialized to respect and submit to the leadership and decisions of men. By and large, the lack of gender responsiveness in the programme denies the community the opportunity to tap into the great potential inherent in women.

This poses negative impacts on adoption of ALSs in the community, especially among women.

On the whole, this study, under the fourth objective, establishes that, apart from the mentorship programme spearheaded by the pastoral community‟s elites and education/training programmes by the National Government and Non-state actors, the rest of the fourteen strategies interrogated, rank poorly in gender responsiveness. Implementation of all the existing legislations, policies, and programmes aimed at bridging the gender gap, such as gender mainstreaming policy and the two-thirds gender rule, could, however, improve the gender responsiveness of all the strategies employed by stakeholders, thereby enhancing adoption of ALSs in the community. The next Chapter presents a summary of the findings, conclusions, and recommendations of the study.

CHAPTER FIVE

SUMMARRY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This Chapter presents a summary of the study findings, conclusions, recommendations, and suggestions for further research.

5.2 Summary of the Major Findings

The first specific objective of the study was to assess the status of adoption of ALSs by men and women in the pastoral community of West Pokot County. It was established that a majority of the pastoralists had adopted ALSs in both formal and informal sectors, but mostly in the latter. However, the adoption was characterized by gender differentials. Thus, women were faster and had adopted more ALSs than men. Nonetheless, men made most of the decisions to adopt ALSs and it was easier for them to access the resources needed for adoption. Further, men controlled the benefits accrued from the ALSs and, despite being slower than women, the few that they had adopted, were of higher returns. Given the necessary resources, women were more willing than men to either drop or reduce livestock keeping and adopt ALSs. Generally, adoption of ALSs in the pastoral community was characterized by gender differentials, slow, and was a recent phenomenon (not more than 30 years by the time of this study) implying that livestock production remains the major source of livelihood.

The second objective of the study sought to examine the factors which influenced adoption of ALSs by men and women in the community. These were found to be a host of socio-cultural, environmental, and technological factors. Others were the existing policies and development interventions employed by development actors (state and non-state). All these factors acted, albeit differently to either pull or push men and women out of pastoralism, thereby causing gender differentials and determining the rate of adoption of ALSs.

Under the third objective, which was to evaluate the effects of adoption of ALSs on households, the study established three ways in which this happened. First, it resulted in the blurring of the boundaries that separated men and women in terms of household roles. Thus, there was a rise in the number of household members performing household roles traditionally dominated by the opposite gender such as household provision and caregiving in the case of women and men, respectively. Second, adoption of ALSs affected the way household members related to each other. Therefore, in some households, there were disharmony and friction as members adjusted to their new status since adoption of ALSs created a new social order. Men, in particular, were not happy that the higher status and power they had enjoyed were being taken up or shared with women who had been empowered by ALSs. Some spouses, who pursued ALSs which caused long absences from the matrimonial home such as long-distance trade, were also suspected of infidelity and adultery. This led to an increase in domestic violence, separation, and divorce rates. In some households,

however, members who had adopted ALSs to the extent that they afforded their households better standards of living were appreciated and respected. Thirdly, adoption of ALSs caused an improvement in the socioeconomic status of most households, such that they were able to enjoy improved food security, housing, health, and education. Overall, adoption of ALSs had more positive effects on households, including narrowed gender gap and a reduction in dependence on pastoralism, harmful cultural aspects, and poverty levels. This implied general improvement in well-being.

Lastly, guided by the fourth objective which aimed at identifying gender-responsive strategies that could enhance adoption of ALSs, the study established that only three of the fourteen strategies interrogated, attained the threshold of gender responsiveness. Nonetheless, implementation of all the existing legislations and approaches aimed at achieving gender equality, inclusivity, and women empowerment, such as the gender mainstreaming policy and the two-thirds gender rule, could improve the gender responsiveness of all the strategies employed by stakeholders, thereby catalyzing adoption of ALSs in the community. Strategies that could be made gender responsive include: The County Government‟s vocational training, youth empowerment project, and campaign against harmful cultural aspects; the National Government‟s security services and microfinance facilities; the Non-state actors‟ agricultural and capacity building programmes; and the pastoral community‟s support to development agencies.

5.3 Conclusions

This study concludes that a vast majority of men and women in the pastoral community of West Pokot County have adopted ALSs. However, the ALSs are mostly of low returns and in the informal sector, especially those adopted by women. The rate of adoption is also slow and characterized by gender differentials that are skewed in favour of men. This state of affairs is a result of myriad socioeconomic, cultural, technological, and ecological factors, acting either in isolation or combination to influence the rate at which men and women adopt ALSs. Regarding the effects, adoption of ALSs has both positive and negative outcomes on households. Nevertheless, the positive effects supersede the negative ones implying that ALSs generally contribute to improved standards of living in households. Furthermore, this study concludes that there are few gender-responsive strategies that could promote adoption of ALSs in the community. However, most strategies employed by development agencies to promote adoption of ALSs, directly or indirectly, could be made gender responsive and, therefore, more effective.

Overall, adoption of ALSs in the community is marked by huge gender differentials. This slows down a process that scholars and development actors generally consider the best pathway out of the socioeconomic challenges which face the community, notably gender inequality, violent inter-communal conflicts over livestock resources, and pervasive poverty.

5.4 Recommendations

Based on the findings of this study, the following recommendations are made for enhanced adoption of ALSs by both men and women in the pastoral community of West Pokot County:

1. In order to address the needs of both men and women to participate optimally in adoption of ALSs in all sectors of the economy, all development stakeholders should ensure gender mainstreaming happens in the formulation and implementation of all their policies, projects, and programmes. In addition, the following gender and stakeholder-specific measures are required. First, the Gender and Culture Departments at both the County and National levels of Government should ensure the removal of barriers that restrict women from more gainful ALSs despite them being faster and more willing to adopt the ALSs. The measures can include: accelerating women‟s access to control rights over the means of production and eliminating restrictive patriarchal and cultural ideologies. Second, in order to address the reluctance to adopt ALSs among men, the community elites should collaborate with the County Government and educate the men and other community members on the dangers of continued reliance on pastoralism in the face of rapidly declining rangeland resources.

2. All development actors should conduct research to clearly understand the dynamics and complexity around pull and push factors influencing adoption of ALSs among men and women in the community. Based on this understanding, they should

promote aspects of culture, technology, environment, and institutions/organizations which increase the capacities of both men and women while reducing their vulnerabilities. In particular, the following strategies should be considered:

a) The County Government ought to augment the National Government‟s efforts and increase access to affordable credits for entrepreneurial development, by gender. For example, a County Women Enterprise Fund can be constituted to complement the National Government‟s Women Enterprise Fund (WEF). The devolved unit of governance should also initiate efforts to eradicate retrogressive cultures and customs.

b) The National Government‟s Micro and Small Enterprises Authority, needs to improve accessibility to Microfinance Facilities for enterprises, more so among women. This can be achieved by increasing the number of facilities and designing them to specifically suit the socioeconomic situation in West Pokot County. The National Government through the Ministries of Interior and Defence should also ensure a reduction in security risks which are rampant in the County, by employing participatory enforcement of the rule of law and order. In particular, the government should increase the involvement of women, and policing of the vast County. In addition, the National Government‟s Ministry of Education, ought to guarantee inclusive and equitable quality education for the community by considering its unique cultural, ecological, and socioeconomic conditions. For example, the number of mobile and boarding schools should be increased to not only accommodate

its nomadic lifestyle, but also mitigate gender-specific and contextual needs and concerns of education and skills acquisition.

c) The Non-State Actors should constantly research to establish new and innovative solutions, structures, and mechanisms specific to the pastoral community while discouraging the importation of one-size-fits-all interventions.

d) The Community elites should help develop a culture in the community which is amenable to change and is in tandem with the realities of the modern world through structured educational, mentorship, and capacity-building programmes.

3. Additionally, development agencies ought to curb the negative effects of adoption of ALSs, while leveraging on the positive ones. Specifically, the County Government needs to address the problem of increased workload and time constraints among the women to enhance their participation in adoption of ALSs. This can be achieved by investing in affordable, reliable, and sustainable labour-saving technologies such as piped water, efficient cooking, and transport technologies. To address the problem of strained gender relations in households, the elites can influence the community towards adapting to the inevitable changes in gender roles and social order. This can be achieved through role modeling, robust community sensitization, and mentorship programmes. They could also support other development actors in their efforts to eradicate harmful customs and traditions.

4. For strategies to attain gender responsiveness and, therefore, be effective in enabling adoption of ALSs in the community, all development actors should undertake gender mainstreaming with the help of gender experts. Implicit in this is a provision of adequate capital, especially finances and gender experts. Both County and National Governments should also ensure the implementation of all the existing legislations, policies, and programmes aimed at bridging the gender gap. Examples include the gender mainstreaming policy and affirmative action plan (such as the two-thirds gender rule). Lastly, all stakeholders in ALSs should intensify the gender sensitivity of their strategies.

5.5 Areas for Further Research

This study makes the following recommendations for further research:

a) The current study can be replicated in other pastoral communities to help identify and offer solutions that are unique to their respective contexts.

b) A study to trace the history of pervasive gender inequality among pastoral communities. This may help unearth its root causes and provide practical solutions to end it.

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APPENDICES

Appendix A: Informed Consent to the Respondent

Emmanuel Psongol Kondoltiony

P.O Box 9813-30100

Eldoret.

20th January 2019

Dear Respondent,

RE: Research Data Collection

I am a PhD student from Kenyatta University‟s Department of Gender and Development Studies. I am carrying out a research on: **“Gender Differentials in Adoption of Alternative Livelihood Strategies (ALSs) in the Pastoral Community of West Pokot County, Kenya”.** I am requesting you to be one of the respondents of this study. Your role is to provide information to the best of your knowledge. I assure you that the information you will provide will be treated with confidentiality and will be used for academic purposes only. There are two research assistants who will assist me in the conduct of this research. I look forward to your kind consideration. Thanking you in advance.

Yours faithfully,

Emmanuel Psongol Kondoltiony

Appendix B: Questionnaire for Households

This questionnaire seeks to investigate gender differentials in adoption of ALSs in the pastoral community of West Pokot County, Kenya. You are among the many participants who have been selected for this study. Your co-operation and assistance in completing this questionnaire will be highly appreciated. All the information given will be considered and treated with utmost confidentiality. Kindly take time to respond to the following questions by either placing a tick [✓] or writing on space provided as applicable. My research assistants will be available in case you require some assistance. Do not write your name anywhere on this paper. Your honest and accurate response will be highly appreciated.

Let me take this opportunity to thank you in advance for taking part in this study.

Part A: Demographic Information

1. Kindly indicate your age group:
   [ ] 18 – 25 years [ ] 26 – 35 years [ ] 36 – 45 years
   [ ] 46 – 55 years [ ] 56 – 65 years [ ] 66 years and above
2. Kindly indicate your gender: [ ] Male [ ] Female
3. Please indicate your highest education level **(Tick one option)**

[ ] No education [ ] Dropped out before KCPE [ ] Primary certificate

[ ] Secondary certificate [ ] Diploma/certificate [ ] Degree

[ ] Masters [ ] Other qualifications……

4. Marital status: [ ] Single [ ] Married [ ] Separated [ ] Widowed [ ] Divorced
5. Please indicate the head of your household:

[ ] Male headed (married couple)

[ ] Female headed (married couple)

[ ] Male headed (Single/widowed/separated/divorced)

[ ] Female headed (Single/widowed/separated/divorced)

[ ] Male child-headed

[ ] Female child-headed

[ ] Other……

6. Type of your family: [ ] Monogamous [ ] Extended [ ] polygamous
7. Form of your employment: [ ] Formal [ ] Informal/Self [ ] both formal and informal/self-employment.

Part B: Status of Adoption of ALSs

8. The following statements describe status of adoption of ALSs by men and women in your community. Rate each of the statements based on your agreement: **Key: 1. Strongly Disagree (SD) 2. Disagree (D) 3. Undecided (U) 4. Agree (A) 5. Strongly Agree (SA).**

No	Description	SD	D	U	A	SA
A	Women are faster than men in adopting ALSs					
B	Women have adopted more ALSs than men					
C	Decision to adopt ALSs is mostly done by men					
D	It is easier for men than women to get resources to adopt ALSs					
E	Men control the benefits accrued from adopting ALSs					
F	Men have adopted more lucrative ALSs than women					

9. Given the resources, are you willing to adopt ALS(s)? Yes [ ] No [ ]

10. Please indicate the extent to which you have adopted ALSs in each of the following broad livelihood categories: **Key:** (**1) Not at all (2) In a small way (3) In medium**

way (4) In a big way (5) Fully. Note that: **"not at all"** means you don"t spend any of your time in doing the ALS, **"in a small way"** means you spend less than half of your time doing it, in **"a medium way"** means you spend half of your time doing it, in **"a big way"** means you spend more than half of your time doing it and **"fully"** means you spend all of your time doing it.

No	**Livelihood Category**	**Specify the Livelihood (Where Applicable)**	**Rate**				
			1	**2**	**3**	**4**	**5**
A	Crop farming						
B	Business/trade						
C	Formal employment						
D	Informal/self-employment						
E	Sports or Art						
F	Poultry keeping						
G	Dairy Farming						
H	**Other(s) specify……..**						

11. Please indicate the duration (in years) in which you have adopted ALSs in each of the given broad livelihood categories:

No	**Livelihood Category**	**1-15 Years**	**16-30 Years**	**31-45 Years**	**46-60 Years**	**Above 61 Years**	**Not at all**
A	Crop farming						
B	Business/trade						
C	Formal employment						
D	Informal/self-employment						
E	Sports or Art						
F	Poultry keeping						
G	Dairy farming						
H	**Other(s) specify……**						

Part C: Factors that Influence Adoption of ALSs

12. The following statements outline factors that influence adoption of ALSs in your community. Rate each of the statements based on your agreement: **Key: 1. Strongly Disagree (SD) 2. Disagree (D) 3. Undecided (U) 4. Agree (A) 5. Strongly Agree (SA).**

I. Socio-cultural Factors

No	Description	SD	D	U	A	SA
A	There are ALSs that men think are for women					
B	There are ALSs that women think are for men					
C	There are ALSs that people discourage spouses from adopting					
D	Most ALSs adopted by women are decided (chosen) by men					
E	It is believed that Women should stick to domestic chores and child bearing/raising					
F	Any man without livestock is perceived poor					
G	There are beliefs, norms, values, and practices in the community that do not favour/encourage adoption ALSs					
I	There are beliefs, norms, values and practices in the community stimulating adoption of ALSs					
J	**Any other**……					

II. Environmental Factors

No	Description	SD	D	U	A	SA
A	Livestock-related conflicts make people opt for ALSs					
B	Conflicts/insecurity discourage adoption of ALSs					
C	Climate/weather change influence adoption of ALSs					
D	Shrinking pastureland makes people to opt for ALSs					
E	People living in towns have higher chances and options of adopting ALSs					
F	Diversity in physiographic and natural conditions in the County, stimulate adoption of ALSs					
G	**Any other**……					

III. Role/Activities of State Actors (employees, programmes, projects, policies by government)

No	Description	SD	D	U	A	SA
A	Education provided by government enables adoption of ALSs					
B	There is awareness by state actors for people to engage in ALSs					
C	There are loans and funds from the government that encourage adoption of ALSs					
D	State actors encourage members of community to register groups that enable adoption of ALSs					
E	There are government policies enabling women to adopt ALSs					
F	There are government policies enabling men to adopt ALSs					
G	County government plays a bigger role than National government in enabling adoption of ALSs					
H	**Any other**……					

IV. Role/Activities of Non-State Actors (NGOs, FBOs, civil society, etc)

No	Description	SD	D	U	A	SA
A	Education sponsored by non-state actors encourages adoption of ALSs					
B	There is awareness creation by non-state actors for community members to engage in ALSs					
C	Resources provided by Non-state actors such as loans and funds encourage adoption of ALSs					
D	There are strategies by non-state actors to specifically enable women to adopt ALSs					
E	There are strategies by non-state actors to specifically enable men to adopt ALSs					
F	Non-state actors play a bigger role than state actors in enabling adoption of ALSs					
G	**Any other**……					

V. Technological Factors

Please indicate by ticking (✓) whether you are able to access and control the listed technological aspects:

Technology	**Access**	**Control**
Mobile Phone		
TV and Radio		
Internet/Online Media profiles		
Computer		
Copiers/ printers/scanners		
Tractor		
Irrigation equipment		
Certified hybrid seeds for crops grown		
Inorganic fertilizers		
Pesticides		
Animal feeds e.g., hay and straw		
Modern poultry houses and feeds		
Milk Cooling plant		
Modern beekeeping equipment		
Modern fishing equipment		

Part D: Effects of Adoption of ALSs on Households

13. The following statements outline the effects of adoption of ALSs on gender roles in households in your community. Rate each of the statements based on your agreement: **Key: 1. Strongly Disagree (SD) 2. Disagree (D) 3. Undecided (U) 4. Agree (A) 5. Strongly Agree (SA).**

No	Description	SD	D	U	A	SA
A	With adoption of ALSs, men and women have performed tasks/duties not theirs traditionally					
B	With adoption of ALSs, household leadership role is no longer the preserve of the man					
C	With adoption of ALSs, decision making in the household is no longer the preserve of the man					
D	With adoption of ALSs, role of household provider is no longer the preserve of the man					
E	Women who have adopted ALSs, have increased workload					
H	**Any other**……					

14. The following statements outline the effects of adoption of ALSs on gender relations in households in your community. Rate each of the statements based on your agreement;

Key: 1. Strongly Disagree (SD) 2. Disagree (D) 3. Undecided (U) 4. Agree (A) 5. Strongly Agree (SA).

No	Description	SD	D	U	A	SA
A	Men are not comfortable with women adopting ALSs					
B	Adoption of ALSs led to increase in adultery, separation and divorce					
C	Adoption of ALSs has led to decrease in domestic violence					
D	Adoption of ALSs has led to shift in centre of power and respect					
F	Adoption of ALSs has increased respect and recognition for women					
G	**Any other**……					

15. The following statements outline the effects of adoption of ALSs on socioeconomic status of households in your community. Rate each of the statement

based on your agreement: **Key: 1. Strongly Disagree (SD) 2. Disagree (D) 3. Undecided (U) 4. Agree (A) 5. Strongly Agree (SA).**

No	Description	SD	D	U	A	SA
A	With adoption of ALSs, households are able to diversify livelihoods hence minimize risks					
B	Adoption of ALSs has led to increase in household food security					
C	Adoption of ALSs has led to improved health care					
D	Adoption of ALSs has led to general improvement in education of all household members					
F	Adoption of ALSs has led to general improvement in housing					
G	**Any other**……					

Part E: Gender Responsiveness of Strategies to Enhance Adoption of ALSs

16. The following are strategies that are applied to enhance adoption of ALSs by men and women in your community. Rate each of the statements based on your agreement:

Key: 1. Strongly Disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly Agree.

I. The Following Strategies by the County Government to Enhance Adoption of ALSs are Gender Responsive

No	Description	SD	D	U	A	SA
A	Education and training programmes					
B	The youth empowerment centres					
C	Cooperative societies					
D	Agricultural services and infrastructure					
E	Public participation programmes					
F	Campaign against harmful cultural aspects					

II. The Following Strategies by the National Government to Enhance Adoption of ALSs are Gender Responsive

No	Description	SD	D	U	A	SA
A	Education and training programmes					
B	Security services					
C	Micro finance facilities					

III. The Following Strategies by Non-State Actors to Enhance Adoption of ALSs are Gender Responsive

No	Description	SD	D	U	A	SA
A	Education services					
B	Capacity building and development strategies					
C	Agricultural Programmes					

IV. The Following Strategies by the Community to Enhance Adoption of ALSs are Gender Responsive

No	Description	SD	D	U	A	SA
A	Mentorship programme by community elites					
B	Support rendered to development agencies					

Thank you for your participation

Appendix C: Interview Schedule for Key Informants

This interview is meant to collect information on your views concerning "**Gender Differentials in Adoption of Alternative Livelihood Strategies (ALSs) in the Pastoral Community of West Pokot County, Kenya".** All the given responses will be treated with full confidentiality and will not be made in reference to you or any particular interviewee.

1. Name the ALSs adopted by men and women
2. What is your assessment of the pace and extent of adoption of ALSs?
3. What barriers/obstacles/challenges do men face in adoption of ALSs?
4. What barriers/obstacles/challenges do women face in adoption of ALSs?
5. What enabling factors do men have in adoption of ALSs?
6. What enabling factors do women have in adoption of ALSs?
7. In your opinion, how has the adoption of ALSs affected households in the pastoral community?
8. In your opinion, to what extent/level are the strategies applied to enhance adoption of ALSs in the community gender responsive?
9. How can the strategies applied to enhance adoption of ALSs in the community be made gender responsive?

Thank you for your participation

Appendix D: Focused Group Discussion Guide

Part A: Date…. Sub-county……Village……

Gender of respondents: No. of males……. No. of females……. Total…...……

Part B: In your own view, what is the status of adoption of ALSs by men and women in the pastoral Community of West Pokot County? (*Probe for overall community status types of ALSs by gender, number of ALSs by gender, extend and duration of adoption of ALSs by gender and by community in general).*

Part C: What factors influence adoption of ALSs by men and women in the pastoral community of West Pokot County? (*Probe for cultural, environmental, technological factors and roles/activities of both state and non-state factors).*

Part D: What are the effects of adoption of ALSs on households in the pastoral community of West Pokot County? (*Probe for both positive and negative effects on gender roles, status, relationships and living standards).*

Part E: (a) To what extent are the strategies applied to enhance adoption of ALSs in your community gender responsive? (*Probe for programmess, policies and projects applied by the community itself and both state and Non-state actors).*

Thank you for your participation

Appendix E: Letter of Research Approval from Kenyatta University

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: kubps@yahoo.com
dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 57530

Internal Memo

FROM: Dean, Graduate School

DATE: 23rd November, 2018

TO: Ms. Emanuel P. Kondoltiony
C/o Department of Sociology, Gender & Development Studies
Kenyatta University

REF: C82/33516/14

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

We acknowledge the receipt of your revised Research Proposal entitled "Gender Differentials in Adoption of Alternative Livelihood Strategies among Pastoralists in West Pokot County, Kenya" as per recommendations raised by the Graduate School Board of 11th October, 2018

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed supervision Tracking Forms per semester. The form has been developed to replace the progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

By copy of this letter, the Registrar (Academic) is hereby requested to grant you substantive registration for your Ph.D. studies.

Thank you.

REUBEN MURIUKI
FOR: DEAN, GRADUATE SCHOOL

c.c. Registrar (Academic) Att; Mr. Likam
Chairman, Department of Sociology, Gender & Development Studies

Supervisor

1. Dr. Pacificah Okemwa
   C/o Dept. of Gender & Development Studies
   Kenyatta University
2. Dr. Leah Wanjama
   C/o Dept. of Gender & Development Studies
   Kenyatta University

RM/cao

Committed to Creativity, Excellence & Self-Reliance

Appendix F: Research Clearance from West Pokot County Commissioner

THE PRESIDENCY
MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telegrams: "**DISTRICTER**"
COUNTY COMMISSIONER
Telephone
Email: ccwestpokot@gmail.com

County Commissioner
West Pokot County,
P.O BOX 1-30600,
KAPENGURIA.

REF: OOP.CC.ADM.15/14 VOL.I/242

6TH MARCH, 2019

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION
MR. EMMANUEL PSONGOLKONDOLTIONY

Reference is made to the Director/CEO, National Commission for Science, Technology and Innovation's letter Ref. No. NACOSTI/P/19/2976/27470 of 14th February, 2019 on the above subject.

This is to inform you that the above named person, who is a student from Kenyatta University has been dully authorized to carry out research on "***Gender differentials in adoption of alternative livelihood strategies among pastoralists in West Pokot County, Kenya" for the period ending 14th January, 2020.***

The purpose of this letter therefore, is to request you to accord him your cooperation, guidance and necessary assistance he may require during his tour of research within the County as mentioned above.

(APOLLO O. OKELLO)
COUNTY COMMISSIONER
WEST POKOT COUNTY

Copy to;
COUNTY DIRECTOR OF EDUCATION
WEST POKOT COUNTY

Appendix G: Research Authorization from NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/2976/27470**

Date: **14th February, 2019**

Emmanuel Psongol Kondoltiony
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Gender differentials in adoption of alternative livelihood strategies among pastoralists in West Pokot County, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **West Pokot County** for the period ending **14th January, 2020.**

You are advised to report to **the County Commissioner and the County Director of Education, West Pokot County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
West Pokot County.

The County Director of Education
West Pokot County.

Appendix H: Research Permit from NACOSTI

THIS IS TO CERTIFY THAT:
MR. EMMANUEL PSONGOL KONDOLTIONY
of KENYATTA UNIVERSITY, 9318-30100 ELDORET,has been permitted to conduct research in *Westpokot County*

on the topic: *GENDER DIFFERENTIALS IN ADOPTION OF ALTERNATIVE LIVELIHOOD STRATEGIES AMONG PASTORALISTS IN WEST POKOT COUNTY,KENYA.*

for the period ending:
14th January,2020

Permit No : NACOSTI/P/19/2976/27470
Date Of Issue : 14th February,2019
Fee Recieved :Ksh 2000

Applicant's Signature

Director General
National Commission for Science, Technology & Innovation

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke

REPUBLIC OF KENYA

NACOSTI

National Commission for Science, Technology and Innovation

RESEARCH LICENSE

Serial No.A 23103

CONDITIONS: see back page