INFLUENCE OF GENDER MAINSTREAMING IN LIVESTOCK MANAGEMENT ON THE SOCIO-ECONOMIC STATUS OF TURKANA PASTORALISTS, IN TURKANA COUNTY, KENYA

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A Thesis submitted to the Graduate School in Partial Fulfillment for the Requirement of the Award of Master of Arts Degree in Women, Gender and Development Studies of Egerton University

EGERTON UNIVERSITY

DECLARATION AND RECOMMENDATION

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This thesis is my original work and	has not been presented for the award of a degree or
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DEDICATION

To God who gave me the physical and mental health to undertake and accomplish this work and to my dear husband, Philip Ole Nakola who encouraged and supported me. To my parents and siblings who always believed in my ability even though doubts cropped up. Your love and prayers kept me going, you encouraged and gave the necessary help and space throughout my course work.

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ABSTRACT

Turkana women have experienced gender discrimination in livestock management for a long time. Male dominance in decision-making, control and access over resources prevent women from participating and benefiting from livestock activities. This is attributed to factors such as cultural beliefs, illiteracy levels, and insecurity among the Turkana pastoralists. factors cause low livestock productivity and income earning to both men and women. The result is endemic food insecurity among Turkana pastoralists' women and children. Nevertheless, with proper gender mainstreaming policies in place, issues pertaining to food insecurity, poverty, ignorance, and education will be addressed thus allowing both genders to rear and manage livestock in a more equitable and productive manner. Gender mainstreaming strategy has not been successful in Turkana County, despite interventions by the Kenya government. This study examined the influence of gender mainstreaming in livestock management on the socio-economic status of Turkana pastoralists, in Turkana County. The respondents who took part in the study are all livestock keepers from the Turkana communities, in Loima district. The district has a total population of 40,278 people. The estimated number of pastoralists fully engaged in Livestock keeping in Turkana County was 3800, a sample of 136 pastoralists were selected using simple random sampling technique, while 5 key informants (livestock officers and community leaders) were selected using purposive sampling. The study adopted a descriptive survey design. The data was collected by the use of a questionnaire and an interview schedule. The instruments were piloted using a sub-sample of 11 pastoralists from Loima district who did not participate in the main study. The Cronbach Alpha reliability coefficient of the questionnaire was 0.704 which was greater than 0.7 and thus adapted. Quantitative data collected was then analyzed with the aid of the Statistical Package for Social Sciences version 21.0. Qualitative was analyzed using textual analysis and presented in narrative form. The findings showed that the factors that inhibit gender mainstreaming in livestock management include: lack of technical skills among women, socio cultural beliefs, distant and risky location to water sources and market places for access by women, the traditions governing animal species ownership, unfavorable perception towards control of cash resulting from selling of milk products, and unfavorable perception towards equal participation in livestock production activities. The study also established that Turkana men play a major role in livestock management in their community. They are the key decision makers in regard to livestock production activities. The findings show that pastoralists' perceptions towards gender roles in livestock production and management are that men continue to dominate the decision making the process in production activities, animal species ownership, and insecurity issues. The findings from this study helps in improving gender mainstreaming in livestock and help the pastoralists understand the benefits which accrue when men and women are allowed to participate more equitably in livestock management decisions.

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LIST OF ACRONYMS

ASAL Arid and Semi-Arid Lands

AU African Union

CEDAW Convention on the Elimination of All Forms of Discrimination against

Women.

FAO Food and Agriculture Organization

GDP Gross Domestic ProductGoK Government of Kenya

HIV/AIDs Human Immunodeficiency Virus Infection/ Acquired Immunodeficiency

Syndrome

IFAD International Fund for Agricultural Development

ILRI International Livestock Research Institute

KNBS Kenya National Bureau of Statistics

MDGs Millennium Development Goals

NALEP National Agriculture and Livestock Extension Program

SDGs Sustainable Development Goals

SPSS Statistical Package for the Social Sciences

UN United Nations

WB World Bank

WHO World Health Organisation

MOA Ministry of Agriculture

FGD Focus Group Discussion

ILO International Labour Law

CHAPTER ONE

INTRODUCTION

1.1 Background Information

Globally, the role played by women in livestock production has been widely documented (FAO, 2011). Gender mainstreaming is an opportunity for transformative and sustainable development. In its twentieth preambular paragraph, the United Nations Convention to Combat Desertification (UNCCD) stresses "the important role played by women in regions affected by desertification and/or drought, particularly in rural areas of developing countries, and the importance of ensuring the full participation of both men and women at all levels in programmes to combat desertification and mitigate the effects of drought. Many pastoralists can be found in Africa, however, pastoralism is also practiced in dry and sub-humid lands in the Middle East, South and East Asia, South America and Europe (UNCCD, 1994).

Gender inequality is pervasive throughout the world, although the nature and extent of gender differences vary considerably across countries and regions. In India and Syria, grazing is the exception, with men doing an estimated 37 percent of the work. Women have little role in marketing and sale of the products which in most households is a male task. Rural women in these counties also tend to have little decision-making power within the household regarding the disposal of family income (UNDP, 2007).

In Sub-Saharan Africa, about 16% of the population relies on pastoralism, and in some countries, such as Somalia and Mauritania, pastoralists represent a majority of the population. In Africa there are cases where women take a leading role in livestock production yet, they are not involved in the management of livestock production. Men dominate livestock management. For instance the Hamar of Ethiopia where young wives are increasingly taking on herding activities, in order to promote the self-sufficiency of nuclear families (Hirut Yibabe 2001), The Heera of the Somali, the Gadaa of the Borana and the Finna of the Afar (Arsano, 2000), and in Egypt (IFAD, 2008).

Gender relations in Kenya have been molded by a combination of factors that draw from the influence of the various traditions, customs and cultural practices, and beliefs as well as levels of education and awareness, economic development and emerging patterns of social organization,

besides legislation. The socio-cultural- attitudes held by men and women, the socialization processes and women's perception of their own status, roles and rights are of particular significance in determining the status of women. Since young children are socialized by women at a very early age, they can change their attitudes or perpetuate negative perceptions (Akuma, 2014)

Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all level. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring, and evaluation of policies and programs in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality (UN, 1997).

Livestock is vital to the economies of many developing countries. Animals are a source of food, more specifically protein for human diets, income, employment and also foreign exchange. For low income producers, livestock can serve as a store of wealth; provide draught power organic fertilizer for crop, production and a means of transport. Consumption of livestock and livestock products in developing countries, though starting from a low base, is growing rapidly (Upton, 2004).

The Kenya livestock sector is dominated by small producers. The livestock population is concentrated in Arid and Semi-Arid Lands (ASALs), which cover about 75% of the total land surface. In ASALs the livestock sector accounts for 90% of employment and more than 95% of family incomes. In spite of good natural potentials, however these areas have the highest incidence of poverty about 65% and very low access to basic social services, such as infrastructure and education facilities (FAO, 2005)

Over 60% of all livestock in Kenya is found in the Arid and Semi-Arid Lands (ASAL). The livestock subsector accounts for about 10% of the entire GDP. It also supplies the domestic requirements of meat, milk and dairy products and other livestock products while accounting for about 30% of the total marketed agricultural products. The subsector earns the country substantial foreign exchange through export of live animals, hides and skins and dairy products. It employs 50% of the country's agricultural sector labor force (GoK, 2008).

In Kenya, over 80 % of women live in the rural areas where the majority is engaged in the farming of food and cash crops, livestock keeping and in agro-based income generating activities (Food Agricultural Organization (FAO), 2018). In many areas of the country, male migration to urban areas and large-scale farms in search of paid employment has left women in charge of the management of small scale farming activities. It is estimated that women constitute over 70 % of all employees in the agricultural sector. The majority is casual or seasonal employees with no security of tenure and no employment benefits such as housing, medical scheme, and pension. Their wages are low and uncertain, and they are classified as being among the poorest of the poor, with particular reference to those heading households (Kenya National Gender and Development Policy, 2000). Livestock plays an important socio-economic and cultural role in the Turkana community. The livestock sub-sector contributes to food and cash needs of the pastoralist and provides employment to 90% of the population of 855,399 (KNBS, 2009).

The agricultural sector contributes about 24% of GDP and about 19% of the formal wage employment. An estimated 60% of all households are engaged in farming activities, and 84% of rural households keep livestock. Given the importance of the sector to the economy, the sector (GoK, 2009). However, its dismal performance especially livestock is found in the ASALs

Livestock is also used as a medium for social exchange in the payments of bride price, fines, and gifts. The livestock sub-sector in Turkana has the potential to provide an adequate supply of all animal products and by-products to meet domestic needs and generate surplus for export. The stakeholders in the livestock sub-sector have recognized the role of the livestock industry to reverse poverty levels and contribute to the county's economic growth (Turkana County Livestock Development Plan-2013-2017)

Gender mainstreaming in Turkana County is almost untenable considering the fact that livestock production is amidst many challenges (UN Women, 2015). It is still far from being achieved. A study by Schilling *et al.* (2012) observed that there are many challenges facing the livestock subsector in Turkana County. Low livestock productivity is occasioned by recurrent drought (inadequate feeds and water), insecurity, the land tenure system, poor breeds and breeding practices, endemic livestock diseases and poor livestock husbandry. Other challenges include marketing constraints due to poor infrastructure, insecurity, diseases, quality of products, and

distance to the markets, insufficient market information, and lack of value addition initiatives (Schilling, *et al.* 2012). Despite the importance of the livestock sub-sector commensurate critical investment has not been accorded in the county (Wamuyu, 2014). For example, there is low funding, unavailable insurance services in ASAL areas, poor land use, cultural beliefs, poor infrastructure, insecurity, access to credit facilities, no favorable legal and policy framework (Turkana County Livestock Development Plan-2013-2017).

1.2 Statement of the Problem

Women's right in Kenya is supported by law and a number of key policy documents, including article 27 of the constitution. Kenya is also a signatory to various international instruments including CEDAW which guarantees equality of treatment between men and women in all spheres of life. An understanding of how gender mainstreaming is contributing to the implementation of the socio-economic status is important. Past studies reveal that implementation and application of these policies in order to lead to effective change for most of Kenya's women is constrained by challenges such as cultural traditions and beliefs. Gender mainstreaming is documented as an important strategy in the enhancement of the quality of livestock management. However, Turkana women have experienced gender discrimination in livestock management. Male dominance in decision-making, control and access over resources prevents women from participating and benefiting from livestock activities. Turkana society is patriarchal in nature. If this is not brought to the limelight the already situation may affect the socioeconomic status of the residents. In this arrangement, men mainly dominate leadership, decision-making, politics and economic means of production. While it is evident that women are central contributors to the economic, social and political development as well as environmental management, of the livestock economy they have received marginal benefits from economic growth and development, continue to be outside the decision-making sphere and barely enjoy any human rights. Nonetheless, women still face discrimination, exclusion, and marginalization and do not share equally the benefits from production. Thus, women are greatly disadvantaged. Moreover, there is limited research on the influence of gender mainstreaming in livestock management on the socio-economic status of Turkana pastoralists in Turkana County. Perceptions of Turkana pastoralists on the influence of gender mainstreaming in livestock management could be one of the factors contributing to low socio economic status of the residents of Loima district.

1.3 Purpose of the Study

The purpose of the study was to investigate the influence of gender mainstreaming in livestock management on the socio-economic status of Turkana Pastoralists, in Turkana County, Kenya.

1.4 Specific Objectives

The objectives of this study were to:

- i. Determine the gender mainstreaming practices in livestock management among Turkana pastoralists.
- Determine the Turkana pastoralists' perceptions on the influence of gender mainstreaming in livestock management on socio-economic status of Turkana Pastoralists.
- iii. Identify factors that inhibit gender mainstreaming in livestock management among Turkana pastoralists.

1.5 Research Questions

- i. What are the gender mainstreaming practices in livestock management among Turkana pastoralists?
- ii. What is the influence of gender mainstreaming in livestock management on the socioeconomic status of Turkana Pastoralists?
- iii. Which factors inhibit gender mainstreaming among the Turkana pastoralists?

1.6 Significance of the Study

The study results may help the policymakers formulate better livestock policies and could benefit all the pastoral communities in the country as gender mainstreaming can be integrated into the livestock sector. The study can help build a strong pastoral institution that can empower women to take equal and full participation in all areas pertaining to access, control, decision-making, ownership and benefits of livestock species. In addition, the study may lead to a high contribution to the country's economic well-being which is central to the achievement of vision 2030. Food and income from livestock can help reduce hunger and poverty. Thus, women can have a chance to control more income, hence reduce gender inequality. Therefore, the focus on Turkana women livestock keepers can help in attaining some of the Sustainable Development

Goals (SDGs) by providing requisite information that can be used in enhancing the quality of livestock management for higher productivity.

1.7 Scope of the Study

This study was restricted to the area under study that is, Loima District in Turkana Central in Kenya. Only residents of the area who keep livestock, both male and female who were aged above 18 years participated in the study. The confine of the study was an investigation the perceptions of the Turkana pastoralists on the influence of gender mainstreaming in livestock management on the socio-economic status of Turkana Pastoralists

1.8 Assumptions of the Study

- i. All livestock keepers in the study have the same socio-cultural background.
- ii. The respondents co-operated fully in the study and provided honest responses.

1.9 Limitations of the Study

The study was carried out in Loima District Turkana County, an area with distinct geographic and socio-economic backgrounds; therefore, it may not be easy to generalize the findings to the rest of the country. This is because the results are specific to the community. To overcome this, the researcher advises that generalization is possible but be done cautiously.

The researcher experienced the challenge of the language barrier, especially during the administration of the interview schedules. This was overcome by the use of research assistants and interpreters. The researcher also experienced a challenge of mapping and identification of spaces for meetings. This was overcome by the help of a local guide and interpreter.

In addition, the study relied heavily on the research questionnaire as the main instrument of data collection, and this would have affected the quality of the responses. To overcome this, the researcher adopted triangulation, whereby, interview schedules and focused group discussions were also administered.

1.10 Definition and Operationalization of Terms

- **Better livestock management-** refers to a situation where Turkana men and women fully engage in taking care of their livestock.
- **Environmental crisis-**An ecological crisis occurs when the environment of a species or a population changes in a way that destabilizes its continued survival. In this study, it refers to dangers within the Turkana community that brings about fear and affects their normal way of life.
- **Food security-** is the availability of food and one's access to it. In this study, food security refers to a situation where the Turkana community does not lack enough food.
- **Gender** -Refers to a socially constructed characteristic that defines and relate to men and women ways of being and behavior and specific contexts.
- **Gender division of labour** Refers to the facts that generally women and men are allocated different work role. In this study, it refers to roles undertaken by both male and female in the Turkana community.
- **Gender disparity** a situation in which men and women are situated unequally in terms of participation, access to resources, opportunities to make decisions and exercise control over resources. In this study, it refers to discrimination against one gender in the community in terms of roles being undertaken and decision making or lack of involvement in matters that affect the Turkana community.
- Gender mainstreaming -An organizational arrangement to bring a gender perspective to all aspects of an institutional policy and activities through building gender capacity and accountability. In this study, gender mainstreaming refers to the involvement of both women and men pastoralists in livestock management activities. Such activities include decision making, ownership, control and access of livestock species among the Turkana pastoralists.
- **Globalization -** a process where an increased proportion of economic, social and cultural activity is carried out across national borders. In this study, it refers to climatic weather conditions like drought and famine that directly affects the Turkana community.
- **Health and Welfare of Livestock -** In this study, it refers to better care given animals considering their wellbeing, feeding and general cleanliness.

- **Income levels-** this is what a community member earns or receives from the sale of livestock species depending on the number of livestock sold and money received, at the household level.
- **Level of education of children-**refers to a situation where more children are taken to school within the Turkana community so that they acquire knowledge and skills.
- **Livestock** –any animals kept for use or profit. In this study, it meant an animal that benefits the Turkana community or provides for the community in terms of food and means of transportation. These include; goats, sheep, cows, camel, donkey, and poultry.
- **Livestock management -** Includes aspects of animal health, animal welfare, biosecurity, and traceability. In this study, it refers to the general welfare given to the community's animals in terms of their feeding, treatment, and cleaning.
- **Pastoralists-** Are people who depend for their living primarily on livestock. In the study, it refers to the Turkana community who entirely depend on livestock for their survival.
- **Quantity of milk-** in this study, it refers to the increased number of liters of milk that a family gets in a day or a given period.
- **Socio-economic status-** is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation. In the study, it refers to economic activities undertaken by a member of a Turkana community, to earn a living.
- **Security-** this is the state of being free from danger or threat. In this study, it refers to an environment free from attacks within the Turkana community surroundings.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to this study. It focuses on gender issues around livestock management, gender participation in livestock management, policy issues around gender mainstreaming, socio-cultural factors in livestock management, gender division of labour, among others. It will also examines theoretical and conceptual framework of the study.

Overview of Gender Mainstreaming in Livestock Management

According to FAO, (2012a) livestock is considered a key asset for rural households worldwide and a primary livelihood resource for rural communities: about 752 million of the worlds poor keep livestock to produce food, generate cash income, manage risks and build up assets (FAO, 2012a). Livestock "widens and sustains three major pathways out of poverty: (1) securing the assets of the poor, (2) improving smallholder and pastoral productivity and (3) increasing market participation by the poor" (International Livestock Research Institute (ILRI), 2007). Especially in rural areas, the development of small-scale livestock enterprises must be seen as a key element of any efforts to eradicate extreme poverty and hunger (FAO, 2010b).

FAO (2011) noted that rural women perform a reproductive role, encompassing child bearing, child rearing, and housework. At the same time, they also fulfill a productive role, engaging in paid labour activities outside the house and/or being in charge of a number of tasks related to household farming activities, including livestock management. In some developing countries, they make on average up to 43 percent of the agricultural labour force and contribute substantially to livestock management (FAO, 2011).

Women worldwide play important roles in livestock keeping and provision of livestock services. However, a number of challenges face the livestock sector, including ensuring food and feed resources, and livelihood security for poor smallholder producers and processors. It is estimated that women comprise around two-thirds of the 400 million poor livestock keepers who mainly rely on livestock for their income (FAO, 2011; 2012).

According to WHO (2009), gender disparities can also have negative consequences on women's ability to earn a stable income and have an adverse impact on overall household income earned

at the household level from livestock production. In addition, the nature of the work women and men perform within the livestock sector may expose them to various health and safety related concerns, such as heightened exposure to zoonotic diseases.

The role that women play in the management of dairy cattle differs greatly among communities, countries, and regions, although some patterns and tendencies can be identified across most regional contexts. Among both mobile pastoralists and settled agro-pastoralists, women are traditionally responsible for milking animals, processing milk and collecting dairy products (FAO, 2010a). On the same note, a report by FAO (2009) on gender equity in agriculture and rural development revealed the negative impact of gender discrimination on productivity is more obvious in the livestock sector than in most other areas of agriculture. But the potential benefits of gender equality have made the sector a privileged entry point for gender mainstreaming.

In Sub Saharan Africa, preventing the confiscation of livestock upon the death of a husband is an important social protection mechanism. Heifer Zambia, an NGO, recognized the constraints women faced in owning and inheriting property, including livestock. Heifer worked with households and communities to establish joint ownership of livestock by the husband and the wife. A signed contract also allowed for a woman to inherit the livestock if her spouse died, which provided a form of social protection.

As keepers of local knowledge, women and men contribute to the enhancement of gene flow and domestic animal diversity (FAO, 2002). They also hold knowledge useful in the prevention and treatment of livestock illness. Men, women, boys, and girls will often have differing livestock knowledge and skills depending on their roles and responsibilities in animal husbandry. Women who process wool may have far different criteria for breed selection than men. Men herding cattle may have different knowledge of fodder and disease prevention than others in their household. Men's and women's reasons for keeping livestock may differ, as shown in a study conducted in Bolivia, India, and Kenya (Heffernan, *et al.*, 2011; International Fund For Agricultural Development (IFAD), 2004).

2.2 Factors affecting Gender Mainstreaming in Livestock Management

According to a report by FAO (2011), in many cases, gender roles are biased and favour certain social constituencies at the expense of others. Rural women, for instance, face serious obstacles

more regularly than men, since traditional structures and perceptions tend to prevent them from obtaining the necessary tools to reach their full potential in the agricultural sector. In fact, despite their major involvement in and contribution to livestock management, women tend to have limited access to resources, extension services and less participation in decision making compared to their male counterparts (FAO, 2011).

For many African women, tradition, and culture deny them the inheritance of the property of any form. The rationale is that the property inherited by females will eventually be taken over by their husbands and his family. Also in a number of traditional societies women cannot own property as the men are owners of everything including the women themselves (Kindervatter, 2001). This socio-cultural attribute works against Gender Mainstreaming in Livestock Management, given that women are denied their role to participate in Livestock management.

Many societies dictate what should happen to their men, women, boys, and girls no matter how odd the practice. They decide who should do what, who should show what emotion. Many of these practices have favored men while some have been harsh on women, for instance, wife inheritance, female genital mutilation, and dowry (MoA, 2005). Pastoralists women must work harder and longer than men, fulfilling female roles in the household, as well making money from tasks traditionally deemed to be women's work, including collecting firewood and making and selling handicrafts. This labour is in such demand that girls are often removed from school in order to work (Kipuri and Rigdewel, 2008).

Livestock plays an important economic and socio-cultural role among the Turkana community. The livestock sub-sector contributes to the food and cash need of the pastoralist and provide employment of 90% of the population of 855,399 (2009 population census). Livestock is also used as a medium for social exchange in the payments of bride price, fines, and gifts, in the Turkana community (Turkana County Livestock Development Plan 2013-2017).

According to Bravo-Baumann (2000), in many societies women are responsible for small stock as goats, sheep, and poultry, as well as for young and sick animals kept at the homestead. They are mostly involved in milk production, although not all women control the sale of milk and its products. Involvement in this task is not necessarily the women's choice but provides an opportunity to obtain some additional income within the given circumstances. The study investigated the socio-cultural factors in livestock management among the Turkana community.

2.3 Gender Issues around Livestock Management

Paudel *et al.* (2009) in an assessment of gender roles in daily livestock activities performed by the farmers revealed that women are mainly responsible for forage collection, cleaning the gutter and shed, and feeding animals whereas milking animals and selling of milk to provide for quick cash income was found to be men's domain. Because of the strong position of men in decision making in the family, their participation was found up to 75% in farmers' groups/organizations related to most important enterprises like cattle whereas women's participation was found higher only in the case of small ruminants and poultry. Women have only a little opportunity (less than 5%) to assume higher positions denoting that their participation in such organizations was not more than the symbolic representation.

Livestock activities can provide an important source of income generation food production, and poverty alleviation for men and women in rural areas. As a result of gender differences in resource allocation and responsibilities, male and female producers typically have different input and delivery system and requirement. These differences need to be taken into account in the process of animal resource and livestock project preparation, implementation, and monitoring and evaluation, if the female producers are to be effectively mobilized to support the project objectives (AU, 2008).

Women's typical role within a livestock production system is different from region to region, and the distribution of ownership of livestock between men and women is strongly related to social, cultural and economic factors. Generally, it depends on the type of animals they raise. In many societies, for example, cattle and larger animals are owned by men, while smaller animals – such as goats, sheep, pigs, and backyard poultry kept near the house – are more a woman's domain. When the rearing of small animals becomes a more important source of family income, ownership, management, and control are often turned over to the man (IFAD, 2003).

Gurung (2005) developed a framework of five themes on livestock management and livelihood opportunities of the communities. The framework highlighted the link between participation in livestock production and management and gender and social dynamics in sustainable livestock management (see Figure 1).

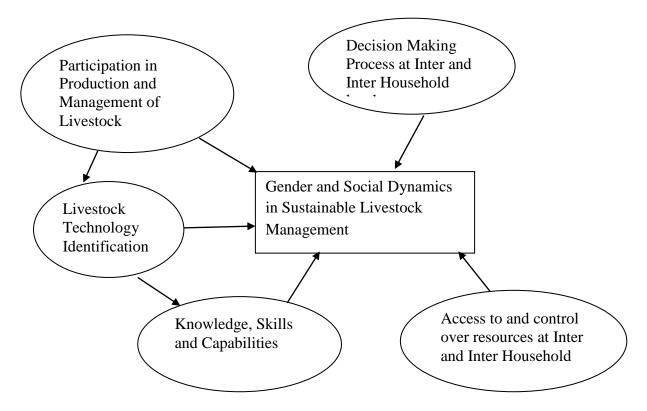


Figure 1: A Model on Gender and Social Dynamics in Sustainable Livestock Management Source: Gurung (2005)

Figure 1 demonstrates that gender mainstreaming in livestock management directly contributes towards the enhancement of Gender and Social Dynamics in Sustainable Livestock Management. According to the framework, gender mainstreaming of livestock management aspects such as livestock planning, livestock resources of control and decision-making have the potential to influence the socioeconomic status of pastoralists.

2.4 Gender Mainstreaming in Livestock Management

A study by Arshad *et. al.* (2010) in Pakistani established that women are playing a leading role in the livestock sector. They are responsible for 60 to 80% of the feeding and milking of cattle. They take responsibility for cutting fodder, cleaning sheds, milking dairy animals, processing animal products and looking after the health of the herd. Livestock management has always been considered to be the sole responsibility of women. Despite their incredible role in the livestock sector, their involvement in decision-making regarding livestock management still seems questionable. Age, male dominance and traditional belief system were the main factors which

had affected the involvement of rural women in the decision-making process. Their participation may be further enhanced by creating awareness among them about their social and civic rights in the livestock sector.

The Across the Sub Saharan region male livestock keepers also have far better access to training and technology. Males tend to dominate livestock management and this is a normal process. Extension programs are usually oriented towards men's livestock, and extensionists lack the incentive and communication skills needed to work with often illiterate women (FAO, 2009).

According to IFAD (2008), in Egypt, the buffalo is of high economic and social importance for the farming families, with women responsible for their feeding, milking and calf rearing. However, a high calf mortality rate was a major problem in the project region, creating severe financial losses for the families. Even with considerable time and financial investment, neither extensionists nor veterinarians could discern the root causes. Per tradition, women were throwing away the first milk of a cow (colostrum) due to its consistency and colour, thus depriving the newborn calf of its natural immunity. Also, the female farmers were allowing the young calves to suckle only two or three times a day, in effect starving the newborn of needed nutrition.

The FAO (2009) shows that although all household members are involved in livestock production, gender discrimination denies women access to resources, rights, and services. Secure land tenure, for example, is crucial to productivity increases. In most rural societies, however, women can only access land through their male relatives. The insecurity of title often extends to the animals themselves. In Namibia, it is still common (despite legislation to prevent it) for a husband's family to take livestock from a woman at her husband's death. Women tend to own and have the right to income from small animals, especially chickens, goats, and sheep, but this is not absolute. Evidence suggests that if there are a small number of these animals, women will maintain control over them. However, if the numbers increase, men will generally take over (Frank, 1999).

There is a division of labor in both genders with respect to animal size and type of activity like men have control over the large animals, whereas women tend to own small livestock and poultry (Baumann, 2000). Sheep and goats can be kept on small farms without large fodder resources. They are a fundamental component in many farming systems, but they rarely

dominate. In Niger, most women own some sheep, which during the day are sent to pasture. Several studies show that this activity, when all costs for medicine, salt, and straw are counted, provides little profit. Nevertheless, keeping sheep allows to women to realize some income, form part of their savings and is a source of prestige (SDC, 1999). This study investigated if there is inequality in gender mainstreaming in livestock management.

2.4.1 Understanding Gender Mainstreaming

Gender mainstreaming was established as a major global strategy for the promotion of gender equality in the Beijing Platform for Action from the Fourth United Nations World Conference on Women in Beijing in 1995. The ECOSOC agreed conclusions (1997/2) established some important overall principles for gender mainstreaming. A letter from the Secretary-General to heads of all United Nations entities (13 October 1997) provided further concrete directives. The General Assembly twenty-third special session to follow up the implementation of the Beijing Platform for Action (June 2000) enhanced the mainstreaming mandate within the United Nations. More recently, the Economic and Social Council adopted a resolution (ECOSOC resolution 2001/41) on gender mainstreaming (July 2001) which calls on the Economic and Social Council to ensure that gender perspectives are taken into account in all its work, including in the work of its functional commissions, and recommends a five-year review of the implementation of the ECOSOC agreed conclusions 1997/2 (UN, 2002).

2.4.2 Gender Division of Labour

The socially determined ideas and practices which define what roles and activities are deemed appropriate for men and women. Whilst the gender division of labor tends to be as natural and immutable, in fact, these ideas and practices are socially constructed. Gender division of labour is not necessarily rigidly defined in terms of men's and women's roles, as is sometimes assumed. They are characterized by co-operation in joint activities, as well as by separation. Often the accepted norm regarding gender division varies from actual practice (Reeves and Baden, 2000).

Historically, women's productive roles have been ignored or undervalued, particularly in the informal sector and subsistence agriculture. This has led to misconceived development projects, for example, the services of extension agents and agricultural inputs being targeted at men.

Because women's labor is undervalued, it is often assumed by mainstream development policies to be infinitely elastic (Reeve and Baden, 2000).

Pastoralist societies most often have patriarchy descent patterns and are male-dominated. Men usually make important decisions and own the animals, while women primarily care for children and perform domestic chores. Compared to pedestrian foraging societies, the economic and political power of most pastoralist women is very low. However, the division of labour is based primarily on gender and age in both foraging and pastoralist societies (Kandagor, 2005).

According to Baumann (2000), in most countries in Asia, Africa, and Latin America, animal husbandry services are mainly oriented towards men. Veterinary services and extension programmes and advisory services have been mainly designed by men for men. Extension personnel are often not trained to teach technical subjects to women or to react to their specific questions. Due to limited resources in time and material, attention is first given primarily to men's animals. Extension work with women often requires special didactic knowledge and communication skills because women often speak only the local language or dialect and illiteracy is high. In the deeply patriarchal society of South Sudan, women are seen as inferior to men and stark inequalities between men and women persist. As heads of households, men have the decision making power within their families and women are expected to be subservient to their husbands.

Omolo (2010) in a study in Northern Kenya reported that women take care of the animals and are also involved in farming. Women also carry out domestic duties including cooking, child care, and water and firewood collection. Men are mostly involved in herding animals, marketing animals, farming, digging water wells. Fetching water still remains a female role (for women and girls) in pastoral communities.

Although the agriculture-related tasks of women, men and children usually differ, women often put in the most hours. That is before taking into account the many other unpaid care tasks that they do, including housework, cooking, and caring for children and sick or elderly household members. Furthermore, women are far more likely than men to be classified- both by themselves and by the men in their household – as unpaid 'family helpers' (Budlender and Alma, 2011).

African women have always had the painful duty of doing all the household chores including collecting firewood, looking after the children, cooking, fetching water, in addition to farming. On the other hand, African men spend a considerable amount of leisure time under a tree eating cola nuts and drinking locally distilled spirits or palm wine (Kindervatter, 2001). This study will investigate the various roles played by men and women in the Turkana community.

In Sub-Saharan Africa, transportation of supplies for domestic use fetching fuelwood and water is largely done by women and girls on foot. In Ghana, Tanzania and Zambia women spend most of their energy on load-carrying activities involving transport of fuel water, and grain for grinding (WB, 2009).

In pastoral societies, women care for all animals kept near the home and are responsible for the health of animals when they return from pastures at night. Herding responsibilities are often gendered, with men herding larger animals and women and children herding sheep and goats. Decisions about moving animals to pastures or water sources, as well as selling or gifting livestock are usually made by men (Miller 2011).

Women are usually responsible for feeding large animals, cleaning the barns, milking dairy cattle, processing milk and marketing livestock products, but they received the assistance of men, female, and other relatives. Younger children, especially girls between the ages of 7 and 15 years, are mostly responsible for managing calves, chickens and small ruminants, while men and older boys are responsible for treating sick animals, constructing shelters, cutting grass and grazing of cattle and small ruminants (Tegegne, 2004).

2.4.3 Policy Issues around Gender Mainstreaming

According to Christensen (2011) mainstreaming a gender, perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring, and evaluation of the policies and programmes in all political, economic, and societal spheres so that women and men benefit equally and inequality is not perpetuated.

During the Fourth World Conference on Women, held at Beijing in 1995, states unanimously agreed that it was essential to design, implement, and monitor, with the full participation of women, effective, efficient and mutually reinforcing gender-sensitive policies and programmes. These include developing policies and programs at all levels and foster the empowerment and advancement of women. This would ensure effective implementation of the Beijing Platform for Action (UN, 1997).

Equality between men and women is a matter of human rights and a condition of social justice and is also a necessary and fundamental prerequisite for equality, development, and peace (Budlender & Alma, 2011). A transformed partnership based on equality between men and women is a condition for people-oriented sustainable development. A sustained and long term commitment is essential so that women and men can work together for themselves, for their children and for society to meet the challenges of twenty-first century (UN 1995).

Kenya is a signatory to the Beijing Platform for Action, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Millennium Declaration and the Millennium Development Goals (MDGs). At the national level, Kenya has taken concrete steps to ensure systematic gender mainstreaming in the entire development process (NALEP, 2010). The Ministry of Gender, Children and Social Development is guided by the national policy as the national machinery leading gender mainstreaming in the country, recognizes that in the past its work has proceeded without a gender policy (Ministry Of Gender, Children And Social Development, 2011) At the Ministry we have embraced gender mainstreaming as a programmatic approach whereby attention to gender equality is integrated into its programme analysis, planning, performance, policy, monitoring, and evaluation. Therefore, gender equality work must be visibly anchored on an internal accountability standard that influences the practices within the Ministry at the organizational level.

Baumann (2000) noted that in many parts of the world, women and men are involved in livestock production, but, compared to women, men have easier access to technology and training, mainly due to their strong position as head of the household and greater access to off-farm mobility. In most countries, research and planning activities in the livestock sector, such as breeding, handling, feeding, and health care, are largely dominated by men. Official livestock

services are often controlled by men and extension personnel are primarily men who are not accustomed or trained to teach technical subjects to women. Extension programmes and educational materials are mainly designed by and oriented towards men. Although in most societies all household members are involved in some way or another in livestock production, the decision making processes within the family and the division of labour for activities such as feeding, milking, health care, processing, and marketing differs between regions, societies and households.

The constitution of Kenya is an important milestone towards the achievement of gender equality and women's empowerment in the country. Article 27(3), of the bill of rights, states that women and men have the right to equal treatment including the right to equal opportunities in political, economic, cultural and social spheres (GoK, 2007).

2.5 Gender Mainstreaming in Livestock Management and Socio-Economic Status

Eddis (2016) in a study titled emerging interconnections between food security, gender, and pastoralism in Ethiopia, noted that although generally men own the animals it is often the women who are responsible for the milk and its by-products. More and more women are getting together to form cooperatives to valorize trading of pastoralist commodities across East Africa. By pooling resources and responsibilities to support each other, women cooperatives are innovating and pioneering these trades.

Baumann (2000) noted that generally, men and women tend to own different animal species. In many societies, cattle and larger animals are usually owned by men, while smaller animals, such as goats and backyard poultry which are kept near the house, are more women's domain. However, ownership patterns of livestock are more complex and are strongly related to the livestock production system and to social and cultural factors.

Livestock plays a critical role in farming systems, nutrition, incomes, and as well as a ladder for asset accumulation. Both men and women are involved in the livestock sector. They are involved in different ways and face different constraints. An estimated two-thirds of poor livestock keepers are women. They have important roles in managing dairy cattle, poultry, and other small ruminants often being involved in feeding, watering and milking animals reared close to home such as in intensive and mixed systems and in processing and marketing of livestock products

(ILRI, 2012). This, therefore, means that gender mainstreaming in livestock management has a positive effect on the socioeconomic status

Ownership of larger animals is often related to ownership of the land. How can a woman own a cow while the land she uses belongs to her husband? This question raised by projects in Africa illustrates the strong influence of cultural and traditional aspects. In the southern highlands of Tanzania, even if a married woman signs the ownership contractor pays for a cow, the animal still belongs to the husband, and even in case of divorce, the wife cannot take the animal with her. Similar experiences are related to pastoral societies in Niger, where livestock is often a part of the dowry, but the control over the animals after marriage belongs to the man.

The perception of these cultures implies that with marriage all the belongings of the women, including herself, reverts to the ownership of men. The Nuer society in Sudan do not permit women to own cattle and goats, but they are often charged with the responsibility for grazing these animals. However, in extensive animal husbandry systems in Pakistan, women continue to own the animals they brought as a part of their dowry. They can decide by themselves what to do with them, but if they want to sell livestock, then they need the men's agreement (Dohmen, 1992). Thus, even if women are the rightful and legal owners of livestock, they still depend largely on decisions and agreements made by men

In Kenya, currently over 10 million people suffer from chronic food insecure and poor nutrition, and between two and four million people require emergency food assistance at any given time. Nearly 30% of Kenya's children are classified as under-malnourished, and micronutrient deficiencies are widespread (National Food and Nutrition Security Policy, 2012).

In the last Ten years, the Kenyan agricultural sector has played a key role in efforts to ensure that the country remains food secure for its increasing population. Thus, various initiatives have been launched aimed at addressing production bottlenecks that in the past have led to reduced food production. At the policy level, the sector has formulated the national food nutrition security policy that is supported by commodity-specific policies (MoA, 2012).

The agricultural sector, which forms a large part of the informal sector, is rife with gender issues and concerns. Many cultural norms do not favor women as farmers, which in turn impacts

negatively on production and impoverishes women (MoA, 2005). In communities where there is a traditional division of labor by gender between agricultural tasks and household work, the domestic labor burden of women increases disproportionately. This increased workload may greatly reduce their time to participate in agricultural activities, leading to a decline in agricultural production especially since they are the major agricultural producers. Since women are overburdened; they no longer have time for non-farm activities such as artisan crafts, market gardening food processing, and others, activities that previously contributed to the family budget. This impacts negatively on women's' livelihoods (MoA, 2009).

Men are more likely to scale up livestock production and management and then use livestock as a business. Women .instead, mainly keep and manage livestock for immediate welfare at the household. Small livestock products meet the immediate nutritional needs of the children, ensuring a level food security, while selling of small livestock gives them a small and immediate amount of money to meet special needs of the household (Njiuki and Distefano, 2011).

Policies that support the participation of women in decision-making and production of improved grain varieties not only could improve efficiency, but could also improve household food consumption and children's nutritional status. Women's' income and the time they spend in household maintenance activities are significantly positive factors in improving child, nutrition (Kumar, 1994).

Women mainly keep and manage livestock for the immediate welfare of the household. Small livestock products meet the immediate nutritional needs of the children, ensuring a level of food security, while selling of small livestock gives them a small and immediate amount of money to meet special needs of the household (FAO-ILRI, 2011).

According to Quisumbing (2008), higher food prices increase the burden for women, who must stretch the limited food budget even further. Women often end up being the shock absorbers of the household food security, reducing their own consumption to leave more food for other household members. In Bangladesh, almost 60% of households reported that women skip meals more often than men. Horenstein (1989), states that women play a key role in producing and providing food for the family, managing and allocating household resources, and caring for children. Alleviating their constraints is the single most important way to improve food security.

2. 6 Theoretical Framework

2.6.1 Socialist Feminist Theory

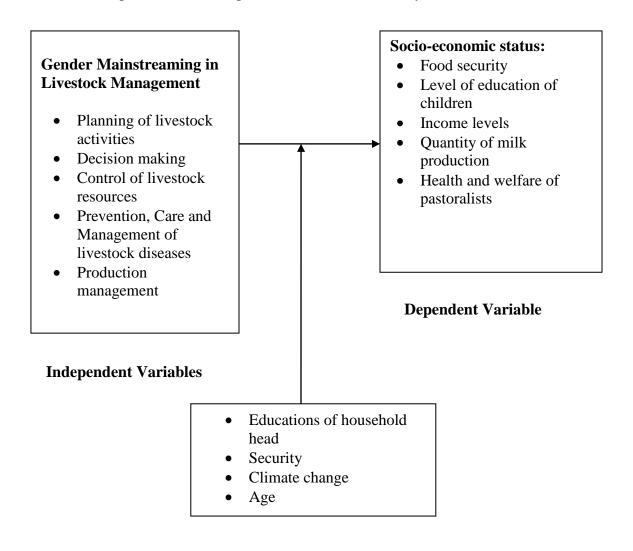
The study used social feminist theory advocated by Alison Jaggar. The theory focuses mainly on the analysis of historical and socio-economic class factors that relate to the position of women in a capitalist society. Socialist's feminists aim to understand the relationship among different types of class struggles over the control of the means of production in a given capitalist society and the gendered nature of the social relations of production in that society. The theory also seeks to understand how the gendered construction of society under patriarchy interacts with other social forces of domination and subordination under capitalism. Socialist feminism argues that the division of labour based on sex perpetuates patriarchal capitalist values because different types of labour are neither equally valued nor equally compensated. This theory maintains that women in their domestic role have an important place in the maintenance of capitalism, although they are unpaid. This theory is relevant to this study because the study focuses on the perceptions of Turkana pastoralist on gender mainstreaming in livestock management and this can create an environment where gender equity in livestock activities can be incorporated.

2.6.2 Social Learning Theory

The theory of social learning was developed by Albert Bandura in 1977. The theorists stipulated that Behavior is learned from the environment through the process of observational learning. Social learning theory explains human behavior in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences. According to Bandura, there must be four mediation processes for behavior imitation to take place: attention (an individual must pay attention to the behavior of the model (boys must pay attention to the behavior of men and girls must pay attention to the behavior of women); retention (people must code and store the observed gender-appropriate behavior in long-term memory); reproduction (individuals must be capable of imitating the gender-appropriate behaviour); and motivation (individuals must have good reason for reproducing the gender-appropriate behaviour). In the context of this study, community members have learned over time that livestock management is a preserve for men. They have learnt that there are specific roles that are supposed to be performed by men. The learning is embedded in the cultural beliefs and traditional systems. Gender mainstreaming aspects such as livestock planning, livestock resources control and decision-making appears to work against the customs and beliefs, and thus is likely to face some form of resistance.

2. 7 Conceptual Framework

This section presents the conceptual framework of the study.



Intervening variables

Figure 2: Conceptual Framework Showing Relationship between Variables

Gender mainstreaming which is the independent variable has an influence on socio-economic status indicators which includes; better livestock management, levels of education of children, income levels, the quantity of milk production and health and welfare of livestock. Intervening variables are the education of household head, security, and climate change which affects the entire Turkana community, and the pastoralists' age. Only the pastoralists who were over 30 years participated in the study. Most of these pastoralists have not gone beyond standard 8 level of education. Thus, the household heads have same level of education.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methods that the researcher employed to collect data. It includes the study area, research design, target population, sample size and sampling procedure, instrumentation, and data collection procedure and data analysis.

3.2 Research Design

Mutai (2000:120) defines research design as a specific plan for studying the research problem. It constitutes the blueprint for the collection, measurement, and analysis of data. The study used descriptive survey design. This design was considered appropriate since it allowed the use of questionnaires and interview schedule to collect data from respondents to determine the influence of the independent variable on the dependent variable. The design allowed the collection of views and opinions of the pastoralists and key stakeholders in Turkana County on the influence of gender mainstreaming in livestock management.

3.3 Study Area

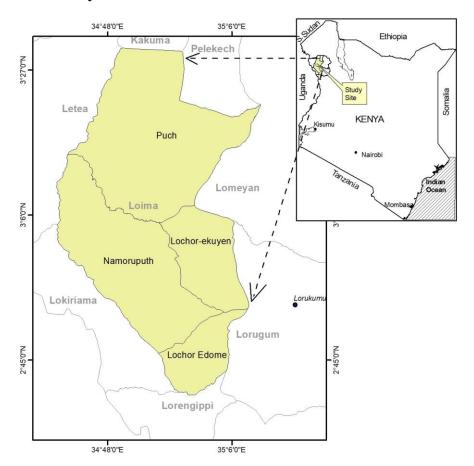


Figure 3: Map of Loima Sub County, Turkana County, Kenya.

Source: Maina (2019): ENSC Dept., Egerton University.

The study was conducted at Turkana Central, Loima District. The study focused on the influence of gender mainstreaming in livestock management on the socio-economic status of Turkana pastoralists, in Turkana County, Kenya. This is because Loima sub county is one of the most populated areas in the county but the area has unimpressive livestock performance (low livestock per household ratio) compared to other sub-counties such as Turkana North and Turkana South (Oxfam, 2014).

3.3.1 Administrative Profile

According to the Kenya County Guide (2015), Turkana district is the largest in Kenya. It is also one of the poorest in Kenya with frequent droughts and famines. Turkana borders Uganda to the west, Sudan and Ethiopia to the north, Marsabit and Samburu Counties to the east and Baringo

and west Pokot Counties to the south. It lies between latitude 0°50 and 5° 30 N and longitude 34°and 36°40 E. It has a total area of 68,680.3Km². The district whose administrative headquarter is at Lodwar Town, is divided into 11 divisions.

3.3.2 Topography and Climate

A report by the Turkana Basin Investments (2015) shows that the major topographical features in the county are low-lying plains interspersed with isolated mountains and hills. Most rivers are seasonal except, Turkwel and Kerio rivers. Volcanic rocks cover about one-third of the district and outcrops from the basement rocks in several hills and mountains scattered in the district. The soils are poor and shallow, which combined with low vegetation cover, leads to a rapid run-off. The altitude ranges from 369 meters at the shores of Lake Turkana to the Koilongoi peak at 2067 metres. Rainfall amounts range from 120 to 430 mm and the district is classified as arid. The low rainfall is also highly erratic and unreliable. The long rain season occurs between April and August, while the short rains occur in October and November. The district experiences rather high temperatures with a daily average of 24-38°C. The area also experiences strong winds which, together with high temperatures, lead to high evaporation.

3.4 Target Population

According to Turkana District Population Projections, 2009, Turkana County has a total population of 534,441 and Loima sub-county has a total population of 40,278. The study used Mugenda and Mugenda 2003 formula to determine sample size. The estimated number of pastoralists fully engaged in Livestock keeping in Loima Sub County was approximately 3800 (Oxfam, 2014).

3.5 Sampling Procedure and Sample Size

The study employed a multi-stage sampling approach, where the respondents were accessed in geographical strata, then clustered to either male or female. The strata included Locher Edom and Namoruputh. Within the strata, simple random sampling was used in selecting the respondents. Purposive sampling technique was used in identifying participants for the interview schedule. This is because only those who keep livestock were considered. According to Mugenda and Mugenda (2003: 50), Purposive sampling is a sampling technique that allows a researcher to use cases that have the required information with respect to the objectives of his or

her study. The sample size in social science research can be determined using the following formula (Mugenda, 2003).

$$n = \frac{Z^2pq}{d^2}$$

Where:

n= the desired sample size (if the target population is greater than 10,000).

Z= the standard normal deviate at required confidence level which is 1.96

p= the proportion in the target population estimated to have characteristics being measured, which is 0.5

$$q=1-p=0.5$$

d= the level of statistical significance set

$$n = (1.96^2 \times 0.5 \times 0.5) / (0.1)^2 = 96$$

Using this formula a sample size of **96** people was selected. However, during the data collection exercise more people expressed interest to participate. Consequently, the study was able to administer **102** questionnaires. 40 pastoralists were targeted for the FGD sessions, and 5 key informants for the interview schedules

3.6 Instrumentation

Three instruments namely a questionnaire, an interview schedule, and focused group discussions were used to collect data. The data collection was basically administered questionnaires which comprised open and closed-ended questions that required the participants to answer questions in the way they understood best. Questionnaires were used given their simplicity in administration. All the 106 respondents were targeted to complete the questionnaire. Interviews and focused group discussions were also used to obtain in-depth information from the respondents. These methods were preferred for they allowed the researcher to collect more information as we as probe further on unclear issues. Participants willing to provide information were guided in the questionnaire filing process and questions were asked by the researcher for clarity. The researcher conducted 4 focused group discussions in the four Loima sub-location at Loima Location namely; Puch, Namoruputh, Locher Ekuyen and Locher Edome. There were 2 male only and 2 female only FGDs.

3.6.1 Piloting

The study carried out a pilot study in Locher Ekuyen, in Loima Sub County using 11 pastoralists (10% of the sample size). This did not form part of the sampled pastoralists in the main study. Eleven pastoralists were able to provide sufficient data for the purpose of instrument reliability. The pilot study revealed deficiencies in the design of a proposed research procedure and these were then addressed. The findings of the pilot were useful in guiding the study reliability and to revise the questionnaires.

3.6.2 Validity

The validity of the research instruments should be confirmed prior to actual data collection (Drost, 2011). In social sciences and human services research, validity and reliability of research instruments are important. It ensures that a test can be trusted and can be referred to when forming opinions and conclusions about clients. Reliability and validity of the instruments in research also ensure that the study can assist in future actions and decisions (Drost, 2011). Content validity was established by the use of experts to determine if the items are a representative sample of the skills and traits that comprise the area to be measured. The experts provided guidance on the content of the instruments that is, ensuring that all the research objectives had been addressed by the information sought in the instruments. The manner of construction of the questionnaires was also checked to ensure that the questions were not misinterpreted and only relevant information is obtained. The findings from the pilot study were used to improve on the questionnaire, thus enhancing its validity.

3.6.3 Reliability

Reliability according to Mugenda and Mugenda (2003) refers to the consistency of a measure. A test is considered reliable if the same results are achieved repeatedly. Care was taken to ensure that the pilot pastoralists were not used in the main study. Piloted data were analyzed to find out if the questionnaires were reliable in answering the key research questions. The results of the pre-test survey helped in restructuring of the questionnaire by incorporating the missing information, omitting irrelevant questions and paraphrasing questions that appear ambiguous to the respondents. The questionnaires were tested for reliability using Cronbach's reliability test and the questionnaire was considered sufficiently reliable since it yielded a reliability coefficient

of 0.704, which is greater than, the minimum of 0.7 suggested by Kathuri and Pals (1993). The questionnaire instrument yielded a reliability coefficient of 0.709, across the 49 items (variables).

3.7 Data Collection Procedure

The researcher sought a permit from the National Commission for Science, and Technology and Innovation (NACOSTI) through Graduate School, Egerton University to conduct the research. The researcher also visited relevant offices such as the chief's office in Turkana County to seek permission to carry out research in Loima Ward of Loima Sub-County. The researcher visited Loima sub-county so as to identify participants in the study area. The researcher personally administered the instruments. Given that the majority of the pastoralists communicated in their native language, the researcher engaged the services of a translator. In addition, the services of research assistants were engaged.

3.8 Data Analysis

The researcher filled the questionnaires, coded data, edited and analyzed them after the data had been collected. Data collected were computed for descriptive statistics (frequencies, means, and percentages) using SPSS computer software (version 21.0, IBM) and results presented as in the form of tables and charts. Qualitative data was drawn from interview schedules and focused group discussions. These were analyzed through summarizing the set of observations drawn from the respondents (textual analysis). These data were classified and analyzed according to categories and sub-categories or themes and sub-themes based on the study objectives and research questions thereafter inferences and conclusions drawn. The results from qualitative data were presented using descriptive analysis in prose form (narratives).

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the study analyzed using the research methodology discussed in Chapter 3. The findings were presented thematically under the sub headings namely: general characteristics of the respondents; Factors that inhibit Gender Mainstreaming in Livestock Management among the Turkana Pastoralists; Perceptions of Turkana Pastoralists' on Gender Mainstreaming in Livestock Management; and Influence of Turkana Pastoralists' Perceptions on Gender Mainstreaming in livestock management on Household Incomes. The study was able to get a response rate of 122 respondents, way above of the targeted 136, which is 75% of the target response. The findings also include information collected using four focus group discussion method.

4.2 General Characteristics of the Respondents

This section presents the general characteristics of the respondents from the findings.

4.2.1 Age of the Respondents

The finding with respect to the age of the respondents was as provided in Figure 4.

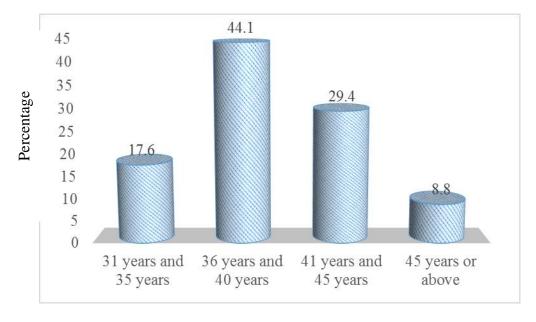


Figure 4: Age of the Respondents in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

The findings in Figure 4 show that 17.6% of the respondents were aged between 31 years and 35 years, 44.1% were aged between 36 years and 40 years, 29.4% were aged between 41 years and 45 years, while 8.8% were aged 45 years or above. This implied that almost all the respondents (82.4%) were aged above 35 years. This shows that most of the persons involved in livestock management were aged above 35 years, that is to say, there was less involvement of the youth in the management of livestock keeping. This outcome is attributed to socio-cultural practices which demand that elder persons make management decisions relating to livestock keeping.

4.2.2 Gender of the Respondents

The findings with respect to the gender of the respondents that provided information were as provided in Table 1.

Table 1: Gender of the Respondents in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

Gender	Frequency	Percentage
Male	75	73.5
Female	27	26.5
Total	102	100

As provided in Table 1, the study was able to reach 75 males and 27 females. This was due to the availability and willingness to participate in the study by males compared to females. It is also an indication that more males than male were involved in livestock management. The turnout was an exact picture of gender discrimination in livestock management. However, the study is able to capture useful information from both genders represented in the study. It is noted by earlier studies that there is gender inequality in livestock management, for instance, Silale and Nyambegera (2014) noted that gender inequality was a chief cause of poverty and was also affecting economic transformation in Turkana County. Therefore, with such a background gender mainstreaming becomes almost untenable.

4.2.3 Respondents' Marital Status in Gender Mainstreaming in Livestock Production, Turkana County, Kenya.

The response in respect to the Respondents' Marital Status was as provided in Figure 5

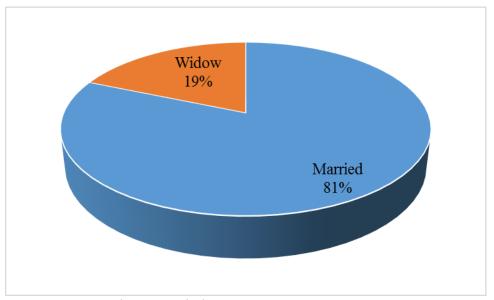


Figure 5: Respondents' Marital Status in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

The findings in Figure 5 show that 81% of the livestock keepers interviewed were married, while 19% were widows. This implied that livestock keeping was a household practice, that even upon the death of a spouse the widows were allowed to keep and own livestock. However, it was noted that unmarried persons in the area did not own livestock, given that owners in the area were either married or widows owing to socio-cultural practices and the belief systems.

4.2.4 Highest Level of Education Attained

The response with respect to the respondents' highest level of education attained was as provided in Table 3.

Table 2: Highest Level of Education Attained in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

Level of Education Attained	Frequency	Percentage
Never gone to school	38	37.3
Primary	64	62.7
Secondary	0	0
Tertiary	0	0
Total	102	100

The findings show that whereas 62.7% indicated that their highest level of education attained was primary level, 37.3% indicated that they had never gone to school. This implied that the highest level attained by most livestock keepers was the primary school level. This was very low and perhaps a reason why most residents could not easily appreciate the value of gender mainstreaming. The findings are in line with a study by Omolo (2010) which established that in Turkana, illiteracy rates are high overall, but are higher among women. Eighty-four percent of Turkana respondents are illiterate. For women, illiteracy rates are about ninety-two percent, while for men it is closer to eighty percent. Literacy and education in Turkana are lacking overall, but the situation for women is worse. The finding is interesting considering that there are more male respondents in this study, this means the situation for women is worse. Livingstone and Ruhindi (2012) reported that as of 2005, only 18,000 girls in Turkana were enrolled in primary school, as compared to nearly 30,000 boys, and many girls are married in their teens and do not continue their education.

4.2.5 Income Generating Activities

The respondents were asked to rank the household activities so that the main activities could be identified from a list of choices. The results were subjected to mean scores and the results were as provided in Table 3.

Table 3: Income Generating Activities among the Turkana Pastoralists of Kenya

	N	Minimum	Maximum	Mean	Std. Deviation
Cnons	102		9	7.55	.991
Crops	102	6	9	1.33	.991
Fisheries	102	4	8	6.01	.970
Remittances	102	1	8	4.22	1.669
Firewood	102	2	5	3.09	.662
Charcoal	102	1	5	2.26	.954
Livestock	102	1	2	1.09	.285
keeping					
Valid N (listwise)	102				

The findings show that the selected household income generating activities recorded mean scores as follows: Remittances (4.22); Crops (7.55); Livestock keeping (1.09); Fisheries (6.01); Charcoal (2.26); Firewood (3.09). This implied that the best three in the order of ranking according to most respondents were as follows: Livestock keeping, Charcoal business, Firewood business followed by remittances. Remittances, in this case, included money sent to them via *M-Pesa* by family, relatives, and friends. According to the Focus Group Discussions, these activities were noted for instance in areas like Namoruputh, Locher Edome and Locher Ekuyen where both women and men were highly involved in the selling of firewood, while men are more involved in businesses such as charcoal burning and selling. The findings are in line with a report by Turkana Environmental Resources Association (TERA, 2012) which noted that the Turkana being a pastoralist community, cattle rearing are the main source of livelihood for the locals. Apart from their livestock, this nomadic community relies on relief food.

4.2.6 Animal Acquisition by Turkana Women and Men

According to the women in the Focus Group Discussions at Namorupoth and Locher Edome it was established that the animal sources included: during wedding ceremonies from their fathers or relatives as a gift; Family visits- those you are visiting for the first time after a long period of time; from friends; through buying; Can borrow or request to be given when the life becomes a little hard for any member; a woman can, for example, be given a donkey so as to facilitate transportation; from the in-laws side or relatives as a gift to the bride; through barter

trade where a goat can be exchanged for 25 bags of rice or sugar; as she gives birth; during community ceremonies such as child naming; death of a spouse.

Through the Namorupoth Village FGD, it was found that men acquire livestock: through raids, buying, given as gifts, inheritance from the father, through barter trade, and during marriage ceremonies as a gift from family or relatives. In the Locher Edome FGD, the men indicated that their source raids, inheritance, as gifts, restocking that is buying, and leasing. The FGD findings how that most (6 out 9 participants) of women claimed to own between 20 and 50 heads of livestock. However, they did not have control over them and neither were they able to make decisions about them.

4.3 Perceptions of Turkana Pastoralists on Gender Mainstreaming in Livestock Management

This section presents the findings with respect to objective one, which sought to determine the gender mainstreaming practices in livestock management among Turkana pastoralists. Using several statements purporting perceptions of Turkana pastoralists on gender mainstreaming in livestock management.

4.3.1 Perception of Equal Participation in Livestock Production Activities

The respondents were asked to indicate whether or not they felt that male and female should participate equally in livestock production activities and the response was as given in Figure 6.

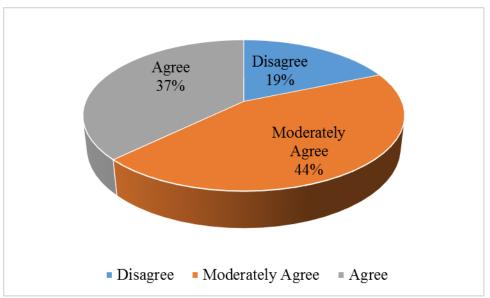


Figure 6: Perception towards Equal Participation in Livestock Production Activities among Turkana Pastoralists

The findings in Figure 6 show that 44% of the respondents moderately agreed that male and female should participate equally in livestock production activities, whereas 37% agreed, while 19% disagreed. This implied a large proportion of the respondents appreciated the importance of equal participation in livestock production activities. A transformed partnership based on equality between men and women is a condition for people-oriented sustainable development.

The women felt that if they are being consulted, and their brilliant ideas put into consideration then that will bring about improving the livelihood of the family. It is a good thing and a productive idea that will improve family life; Food security will be improved because two heads are involved. Most of the women agreed that it was a better step for them to work together with the men because that would reduce poverty in the community. The FGDs in Locher Edome and Namorputh revealed that equal participated can help uplift the family, allows harmony in the family, creates a better understanding that women too can contribute to the livestock management. The interview schedules revealed that equal participation in livestock management can help eradicate poverty once women are allowed to participate in all activities that involve livestock in the community. it will also bring about better financial management in the families because women and men would be able to better budget on cash from the sales and give priorities on the needs of the family hence improving food security not only at home but in the larger society. This finding is in line with Flintan (2011) who established there was unequal

participation in livestock production activities as well as livestock management in the Turkana pastoral community. They recommended that women need to be capacity build so as to enhance their chances of equal participation.

4.3.2 Perception of Male Participation in Livestock Management

The respondents were asked to indicate if they agreed that society despised male who participates in livestock management. The response was as provided in Figure 7.

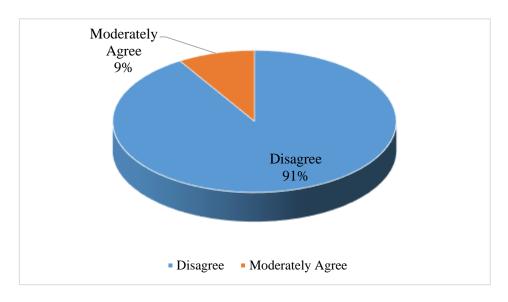


Figure 7: Perception towards Male for Participation in Livestock Management among Turkana Pastoralists

The findings in Figure 7 show that 91% of the respondents disagreed to the statement purporting that the society despised male who participates in livestock management, while 9% moderately agreed. This implied that male participation in livestock management was an acceptable practice in the Turkana community. Men did not feel out of place when participating in the management of livestock.

4.3.3 Livestock as a Woman's domain in the Turkana Community

The finding with respect to whether or not the respondents agreed that livestock keeping was a woman's domain and should remain a woman's job. The results were as presented in Table 4. Table 4: Livestock as a Woman's domain in the Turkana Community

Response	Frequency	Percentage
Disagree	39	38.2
Moderately Agree	9	8.8
Agree	54	52.9
Total	102	100

The findings in Table 4 show that 52.9% of the respondents agreed that livestock keeping was a woman's domain and should remain a woman's job, 38.2% disagreed, while 8.8% moderately agreed. This implied that despite the traditional practices that inhibited women from participating in livestock management, most pastoralists had now come to terms with the reality that it was beneficial for women to participate in livestock management. In other words, most of the pastoralists today believed that livestock keeping was a woman's domain and should remain a woman's job. A report by the International Labour Organization (ILO) (2008) shows that in the gendered division of labor, women perform a variety of tasks, including general agricultural work and raising cattle, as well as maintaining the household and family. Their responsibilities range from seed management to planting to processing and marketing of agricultural products. In livestock farming, women feed the animals, clean their stalls and compost manure.

The FGD findings in Namoruputh and Locher Edome revealed that the domain of women Turkana Pastoralists included milking, construction of livestock sheds, and watering animals at home. The men, on the other hand, are responsible for herding; locating safer grounds for the livestock and makes decision as to where the home can locate to in search for greener pastures for the animals. Only in the absence of women, can men milk.

4.3.4 Adequacy of Money received from Livestock Keeping

The respondents were asked to indicate to whether or not they agreed that the money received from livestock was always enough to cater for family needs. The results were as presented in Table 5.

Table 5: Adequacy of Money received from Livestock Keeping among Turkana Pastoralists

Response	Frequency	Percentage
Disagree	36	35.3
Moderately Agree	46	45.1
Agree	20	19.6
Total	102	100

The findings in Table 5 show that 19.6% of the respondents agreed that the money received from livestock was always enough to cater to family needs, 45.1% moderately agreed, while 35.3% disagreed. This implied that most of the pastoralists (64.7) moderately agreed if not, agreed that the money was enough. This shows that a lot of importance was attached to livestock activities and this makes it necessary for all gender in the household to be involved.

4.3.5 Perception towards Women participation in Livestock Management

The respondents were asked to indicate whether in their opinion they agreed that livestock production activities are best done by women than men. The results were as shown in Figure 8.

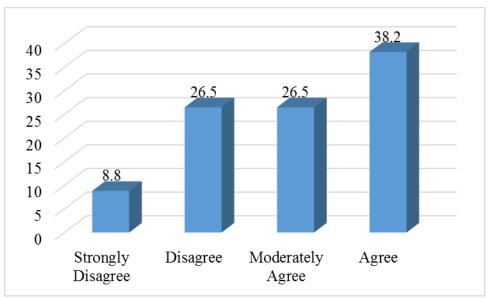


Figure 8: Perception of Women participation in Livestock Management among Turkana Pastoralists

The findings in Figure 8 shows that 38.2% of the respondents agreed livestock production activities are best done by women than men, 26.5% moderately agreed, 26.5% disagreed, and 8.8% strongly disagreed. This implied most pastoralists believed that women can do better in managing livestock compared to men. This finding is in agreement with an earlier study by Baumann (2000) who noted that women play an important role in activities dealing with livestock such as care and management or transformation and marketing of certain livestock products. Baumann further argued that in many societies women are responsible for small stock such as goats, sheep, and poultry, as well as for young and sick animals kept at the homestead. They are mostly involved in milk production, although not all women control the sale of milk and its products.

In fact, studies show that when women are given certain roles traditionally belong to men, they are often rejected. For instance, In Mozambique, a goat programme which promoted women ownership of livestock was in the beginning rejected by men and women due to the fear to disrespect cultural aspects. Though a gender balanced approach including men and women and giving special attention to women headed households the programme turned to be successful including women ownership and with the participation of women and men in meetings on livestock issues.

4.3.6 Gender Mainstreaming Status among Livestock Keepers

Using select and carefully thought statements, the respondents were asked to indicate to what extent they agreed with the arguments in the statements. They answered using a scale of 1-5 (strongly disagree to strongly agree), and the result is provided in Table 6.

Table 6: Gender Mainstreaming Status among Livestock Keepers of Turkana Pastoralists

	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Disagree
Choice of animals to slaughter is solely a man's activity				80.4	19.6
Inequality between men and women is one the means of	35.3	8.8		46.1	9.8
Division of work in livestock activities at household level should be eliminated				75	27
Men should also respect decisions made by women in respect to livestock production activities		64.7	8.8	26.5	
Cash resulting from selling of milk products is controlled by men and is invested in sectors than livestock.			35.3	54.9	9.8
Men and women tend to own different animal species. Often lager animals are owned by men, while smaller animals are owned by women.			26.5	53.9	19.6
Turkana men are the key decision makers in regard to livestock production activities.				90.2	9.8

The findings in Table 6 show that most of the respondents believed that specific responsibilities were meant for men and therefore did not support the idea of women being allowed to partake in them. The findings reveal that 64.7 of the respondents disagreed with the fact that men should also respect decisions made by women with respect to livestock production activities. According

to findings from the focus group discussions, men are considered to play a major role in livestock management in the Turkana community. However, this is not in agreement with an examination of the household division of labour by Amuguni (2001) which revealed that women also play a significant role in livestock management. It appears that practically the trend has changed but theoretically men have stuck on their traditional roles locking out women from all the practices.

The findings in Table 6 show that according to the majority of the respondents Turkana men are the key decision makers in regard to livestock production activities. The findings reveal that 80.4% of the respondents agreed that the choice of animals to slaughter is solely a man's activity. This shows that men dominated livestock management. The focus group discussions revealed that women are not consulted when it comes to decision making in the course of livestock production activities. The decision relating to stocking, choice of animals for slaughter or sale were solely the responsibility of men. This is a traditional practice and the community is not ready to go against such practices. This is not different from what emerges in past studies. For instance, Wallace and March (1991) had earlier noted that there was plenty of rhetoric within non-governmental organizations (NGOs) about the need to involve women in all their programmes, at every level of decision making, and at every stage in the process of programme design and implementation. Some NGOs specifically mention agro-pastoralist women in this respect but, despite the rhetoric, the impact so far in terms of carrying out interventions is meager. If agro-pastoralist women are involved at all, it is usually not in relation to animal production activities, but to other activities, such as primary health care, literacy, and handicrafts.

The findings in Table 6 show that according to most residents there was a belief that men and women own different animal species. Often larger animals are owned by men, while smaller animals are owned by women. The findings show that 53.9% of the respondents agreed that Men and women tend to own different animal species. Often lager animals are owned by men, while smaller animals are owned by women. According to the focus group discussion findings, the small animals owned by women include sheep, goats, and poultry. The big animals owned by men include cattle and camel. This form of segregation inhibits women participation in the management of big animals. The findings also point to the fact that in cases where the small

animals account for a higher percentage of household income, the woman loses control of management and production activities. This finding is in line with a study by IFAD (2003) which established that when the rearing of small animals becomes a more important source of family income, ownership, management, and control are often turned over to the man.

4.3.7 Cash resulting from Sale of milk products

It was established from the focus group discussion that men dominated the livestock production process and controlled the proceeds and cash resulting from livestock production activities. Table 6 shows that 64.7% of the residents agreed that cash resulting from the sale of milk products was controlled by men and was invested in sectors other than livestock, and 35.3 moderately agreed. This implied that in most homes men controlled the cash received from milk products, and thus women could not easily make cash flow related decisions.

The focus discussion point revealed that Turkana is male-dominated society, where men are against any practice that tries to make them equal to women. For women, vulnerability is rooted in their responsibility to the family, as well as their hampered daily activities. First, as resources become scarce, women's workloads increase. Since they are responsible for resource procurement for household work as well as caring for livestock, they must walk further distances to find water and fodder and to secure food and water for their livestock. Often, the journey to find water can take between two and six hours round trip, and since they can only take what they can carry, they often have to do multiple trips per day. When women in Turkana spend more time doing household chores, their opportunities for employment decrease. Additionally, when livestock dies due to lack of food and water, household incomes suffer.

During the Focus Group Discussion at Namorupoth, Locher Edome and Locher Ekuyen villages of Turkana County, the respondents were asked to indicate whether they thought agreed that both genders should be accorded equal participation in livestock management. To this, they all agreed that there should be equal participation. This is because they believed that it can help uplift the family, allows harmony in the family, and creates a better understanding that women too can contribute to the livestock management. Equal participation can help eradicate poverty once women are allowed to participate in all activities that involve livestock in the community. It will

also bring about better financial management in the families because women and men would be able to better budget on cash from the sales and give priorities on the needs of the family hence improving food security not only at home but in the larger society. Khazan (2016) observed that all over the world, women are doing work they're not getting paid for. In rich countries, it might be folding the laundry or staying home to take care of a sick child. In developing countries, unpaid labor tends to be more physically arduous, like hauling water and chopping wood. Wherever you are, it's considered women's work. This finding is in agreement with a study by Devereux and Tibbo (2012) who found that inequalities in Turkana were greatly affecting women socioeconomic status.

4.4 Influence of Pastoralists' Perceptions about Gender Mainstreaming in livestock management on Household Incomes.

This section presents the findings with respect to objective two, which sought to establish the influence of Turkana pastoralists' perceptions on gender mainstreaming in livestock management on household incomes. The findings are presented as follows

4.4.1 Distribution of Income from Livestock Sales

The respondents were asked to indicate what they did with income received from sales to which they responded as shown in Table 7.

Table 7: Distribution of Income from Livestock Sales within Turkana Pastoralists' Households

Uses	Frequency	Percentage of Respondents
Pay school fees	45	44.1
Buy more livestock	48	47.1
Save in case of emergency	9	8.8
Total	102	100

The findings in Table 7 show that 44.1% of the respondents indicated that income received from livestock sales was used to pay school fees, 47.1% said they used the income to buy more

livestock, while 8.8% managed to save part of the money for use in case of emergency. In a male-dominated society, the male would prefer to exercise control of the money received and have women take lesser roles in livestock. Generally, such an understanding may trigger conservatism or make one gender remain in charge, thus limiting household capacity to generate more income.

4.4.2 Division of Work in livestock Production activities among Turkana Pastoralists

The respondents were asked to indicate the extent to which division of work in livestock production activities negatively affected gender mainstreaming in this area. The results were as provided in Figure 9.

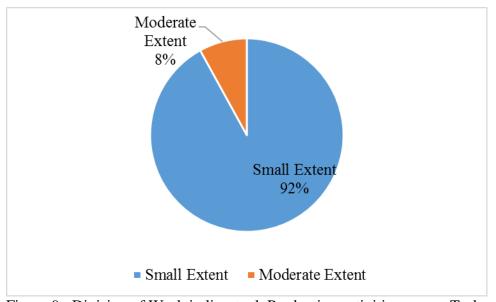


Figure 9: Division of Work in livestock Production activities among Turkana Pastoralists

The findings in Figure 9 show that 92% of the respondents indicated that the division of work in livestock production activities negatively affected gender mainstreaming, while 8% indicated the effect was to a moderate extent. This implied that according to most pastoralists the manner of work division did not suit livestock production. This is study was in line with that of Kandagor, (2005) which stabled that division of labour is based primarily on gender and age in both foraging and pastoralist societies. There is a division of labor in both genders with respect to animal size and type of activity like men have control over the large animals, whereas women tend to own small livestock and poultry (Baumann, 2000).

According to the roles played by women in the community including: Milking, Milk product processing, care of sick animals, and constructing an animal shed. The roles played by men in the community included: building fences, marketing, treating sick animals, decision making, and providing security.

4.4.3 Male dominance in Decision Making in Production Activities

The response as to whether or not male dominated the decision making in production activities was there and the result was as provided in Table 8.

Table 8: Male dominance in Decision Making in Production Activities

	Frequency	Percentage
Small Extent	39	38.2
Moderate	12	11.8
Large Extent	51	50
Total	102	100

The findings in Table 8 show that 50% of the respondents indicated that there was male-dominated the decision making in production activities to a large extent, 38.2% indicated a small extent, while 11.8% indicated that male-dominated the decision making in production activities to a moderate extent. This implied that male-dominated the decision-making process in the study area. The argument is that women should not perform tasks that belong to men. The findings also show that men continue to dominate decision making in production activities. Men make decisions stocking levels, production levels, product sales, and pricing and women are only left with basic decisions such as how to feed the animals, and the timing of milking timings. The argument by most respondents during many Focus Group Discussions is that there are some of the decision making functions that would positive influence household incomes if taken by women. Such functions include product pricing, setting stocking prices and budgeting for animal feeds.

The focus group discussion at Namorupoth and Locher Edome villages of Turkana County, revealed that men are the decision-makers, in Turkana community women have no right to property. It is the men who own everything. The women do not have many roles because they do not participate so much in decision making. This adds to the complexity associated with Gender Mainstreaming in the area. This is in line with a study by FAO (2009) which established that males tend to dominate livestock management and considers this as a normal process.

A similar study by Mupawaenda, Chawatama, and Muvavarirwa (2009) in a study on the role of gender in smallholder livestock production in Zimbabwe established that for mainly traditional and historical reasons men continue to dominate livestock production although the situation is gradually changing. Men eclipse women in terms of ownership of more valuable stock, the making of decisions and the control of livestock production. This suggests that gender is important in livestock production and must be considered among other factors. The complexity of the system is noted but more gender disaggregated quantitative data is required if gender is to be effectively mainstreamed in livestock development programmes.

The findings from the FGDs revealed that most decisions are made by males in the Turkana community. They are the key decision makers and any final say comes from them. For example, men decide on the selling, slaughter or giving out the goat or a cow to a friend as a gift. This shows that males dominate the decision-making process.

4.4.4 Animal Species Ownership among Turkana Pastoralists

The respondents were asked to indicate the extent to which animal species ownership negatively affected gender mainstreaming in this area. The results were as provided in Table 9.

Table 9: Animal Species Ownership among Turkana Pastoralists

Response	Frequency	Percentage
Small extent	36	35.3
Moderate	46	45.1
Large Extent	20	19.6
Total	102	100

The findings in Table 9 show that the 45.1% moderately agreed that animal species ownership negatively affected gender mainstreaming, whereas 35.3% indicated that it was to a small extent, while 19.6% indicated that it was to a large extent. This implied that animal species ownership by males limited women's participation in their management since decisions were supposed to be made by the owners. The findings show that animal species ownership by gender in most

households has a great influence on household incomes. Income levels depend on animal size. In the case of the Turkana, women own small animals while men own big animals. The challenge here according to the study is that most animals owned by the respondents are small, yet it emerges that most of the respondents are men. This seems to suggest that in most households, the main source of income is usually owned by men. This perception makes it difficult for women to effectively contribute to household incomes.

According to the FGD results in Namorupoth, when the women were asked whether they were part of decision-makers in livestock activities. They said that it was a man's role in the community and said that this was because the men are the owners of this livestock. This finding is in agreement with a study by IFAD (2003) which established that Women's typical role within a livestock production system is different from region to region, and the distribution of ownership of livestock between men and women is strongly related to social, cultural and economic factors. Generally, it depends on the type of animals they raise. In many societies, for example, cattle and larger animals are owned by men, while smaller animals – such as goats, sheep, pigs, and backyard poultry kept near the house are more a woman's domain.

FGD findings from the two centers revealed that men and women pastoralists acquired livestock differently. The study revealed that women acquired livestock during wedding ceremonies from their fathers or relatives as a gift; family visits- those you are visiting for the first time after a long period of time; from friends; through buying; can borrow or request to be given when the life becomes a little hard for any member; a woman can, for example, be given a donkey so as to facilitate transportation; from the in-laws side or relatives as a gift to the bride; through barter trade where a goat can be exchanged for a 25 bag of rice or sugar; as she gives birth; during community ceremonies such as child naming; and death of a spouse. The FGDs also revealed that men acquired livestock: through raids, buying, given as gifts, inheritance from the father, through barter trade, and during marriage ceremonies as a gift from family or relatives.

4.4.5 Control of Cash Resulting from Sale of Milk Products among Turkana Pastoralists

The results as to whether or not control of cash resulting from the selling of milk products affected gender mainstreaming in livestock production and management were as presented in Table 10.

Table 10: Control of Cash Resulting from Sale of Milk Products among Turkana Pastoralists

Response	Frequency	Percentage
No Extent	9	8.8
Small Extent	27	26.5
Moderate	27	26.5
Large Extent	39	38.2
Total	102	100

The findings in Table 10 show that 38.2% indicated control of cash resulting from the sale of milk products affected gender mainstreaming in livestock production and management to a large extent, 26.5% indicated to a moderate extent, whereas 26.5% indicated to a small extent while 8.8% indicated it was to no extent. This implied that the manner in which cash was controlled did not favour gender mainstreaming in livestock management.

According to the two women focus group discussions at Namorupoth and Locher Edome, the women indicated that they were never involved in livestock cash control. They indicated that in these communities' women were being discriminated against given that the cash received from livestock sale, for example, women are given a small amount which at times knowing the children demands might not be enough.

One female respondent (Jane- Not real name) said that "We are so much discriminated by men. Only a fraction of it and the rest of the money the men share it with friends in a drinking spree".

Florence (Not real name) complained "Men use the money for show-off for other men. It is like some men are competing amongst themselves".

According to the findings of the interview schedules, the Turkana men controlled cash and at times drafted a budget on what priorities to consider at the household level. His decision was to be respected by the woman and failure to that, a woman would be punished. This study is in agreement with an earlier study by Bravo-Baumann (2000) which found that women were mostly involved in milk production, although not all women controlled the sale of milk and its

products. Men controlled the cash resulting from the selling of milk products. This discrimination has not changed in the community.

4.4.6 Adequacy of Money received from Livestock Activities

The respondents were asked to indicate to what extent they agreed that money received from livestock was always enough to cater for family needs, and the findings were as provided in Figure 10.

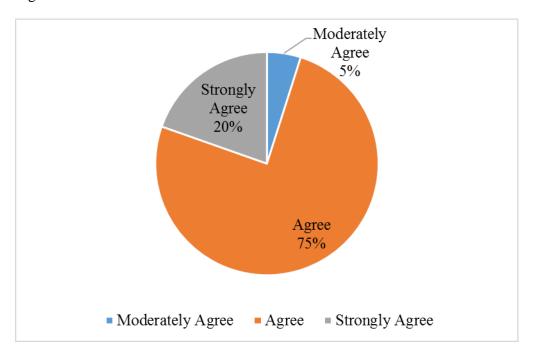


Figure 10: Adequacy of Money received from Livestock Activities among Turkana Pastoralists

The findings show that 75% of the respondents agreed that money received from livestock was always enough to cater to family needs, 20% strongly agreed, while 5% moderately agreed. This implied that livestock activities generated enough money for family needs of most pastoralists. This explains perhaps why men wanted to dominate its management. With the belief of women being lesser, they felt they should not be allowed to manage livestock activities. The focus group discussions also show that according to both men and female in Namorupoth and Locher Edome, most decisions are made by males in the Turkana community. They are the key decision makers and any final say comes from them. For example, men decide on the selling, slaughter or giving out the goat or a cow to a friend as a gift. In addition, the information from livestock officers, and Community elders locally referred to as "Ngaskou", pastoralists' perceptions towards the

division of work between men and women was negatively influencing household incomes. Men continue to shut women's participation in important livestock production activities especially when they realize that the revenue collected is substantial. They do this hiding under the long known Turkana traditional which have always limited women's participation. Women are therefore assigned less and unimportant livestock production roles.

The findings from the interview schedule show that livestock production was the only reliable source of income to the Turkana community and thus livestock is extremely important to the community at large. Every family in Turkana entirely depends on livestock for their survival. This implied that livestock had a significant effect on socio-economic status of Turkana pastoralists. The respondents indicated that if gender mainstreaming was done then their socioeconomic status would be enhanced, the respondents agreed if a woman is given chance to fully participate and engage in livestock activities that are, make decisions in regards to what to sell and at what time and make priorities regarding family needs, then the issue of food insecurity and poverty may reduce among the Turkana families.

The findings were in line with a study by Njiuki and Distefano (2011) who noted the importance of livestock activities in contributing to household incomes. They reported that small livestock products meet the immediate nutritional needs of the children, ensuring a level food security, while selling of small livestock jives them a small and immediate amount of money to meet special needs of the household.

It is important to note However an earlier study by Kipuri and Rigdewel (2008) established that pastoralists women must work harder and longer than men, fulfilling female roles in the household, as well making money from tasks traditionally deemed to be women's work, including collecting firewood and making and selling handicrafts. This labour is in such demand that girls are often removed from school in order to work. This just shows that in Loima Sub County, livestock can generate adequate income if women are allowed to participate in its management.

4.4.7 Equality of Participation in Livestock Production Activities among Turkana Pastoralists

The response as to what extent there was equal participation in livestock production activities affected gender mainstreaming on household incomes among the Turkana pastoralists was as provided in Table 11.

Table 11: Equal Participation in Livestock Production Activities among Turkana Pastoralists

	Frequency	Percentage
No Extent	36	35.3
Small Extent	7	6.9
Moderate	4	3.9
Large Extent	45	44.1
Very large Extent	10	9.8
Total	102	100

The findings in Table 11 show that 53.9% of the respondents indicated equal participation of men and women in livestock production activities affected gender mainstreaming on household incomes among the Turkana pastoralists to a large extent, 35.3% indicated that equal participation was to no extent, 6.9% to a small extent, and 3.9% to a moderate extent. This implied that unequal participation of both men and women in livestock production activities was in itself a barrier to gender mainstreaming on household incomes among the Turkana pastoralists.

According to the focus group discussions, it emerged that there was no equal participation of men and women in livestock production activities. The participants, mostly men argued that equal participation was necessary because, sometimes men tended to misuse resources, and women were better in planning and controlling than the men were. Women felt that the Turkana men treated them as children since HE was always the head of the household. Equal participation was also seen as a necessity because when both men and women worked together they would be able to uplift the family and improve on their children lives. In Namorupoth, the women categorically stated that both men and women should exercise influence over, to suggest or dictate the behaviour of animals or oversee them. They believed that they too had brilliant ideas

that may influence the leadership of the home. The respondents suggested there is a need for Couple counselling so that people do not just marry for the sake of marrying. The pastoral community should do away with cultures and traditions that discriminate against women. They also suggested that education and training so that women may be taught about their rights. The government should enact laws that enhance equal participation in livestock among the pastoralist communities. According to a study done by Hassan *et al* (2007), they found out that wives performed more of livestock activities compared to men. Wives participated more than husbands in livestock management activities.

4.4.8 Perception towards Insecurity Issues and Women Involvement in Production Activities

The respondents were asked to indicate the extent to which insecurity issues and women involved in production activities affected gender mainstreaming on household incomes, and the result was as provided in Table 12.

Table 12: Perception towards Insecurity Issues and Women Involvement in Production Activities among the Turkana Pastoralists

Response	Frequency	Percentage
Moderate	5	4.9
Large Extent	70	68.6
Very large Extent	27	26.5
Total	102	100

The findings in Table 12 show that 68.6% of the respondents indicated that insecurity issues and women involved in production activities affected gender mainstreaming on household incomes to a large extent, 26.5% indicated that it was a very large extent, while 4.9% indicated that it was a moderate extent. It emerges from this study that insecurity issues and women involved in production activities were not taken lightly by the pastoralists. The level of insecurity made them skeptical in allowing women to take a leading role in livestock management. The perception that

there are insecurity issues associated with women involvement in production activities makes their role limited. It was established that some of the water sources are located in distant and risk locations, and thus the community does not want to involve women. Risky in the case that women can be physically attacked and at times raped by rivalry tribesmen. This situation results in limited women movement for fear of being attacked, and this affects the households' productive capacity, subsequently negatively influencing household incomes.

4.4.9 Perception towards Reversal of Defined Gender Roles in Livestock

The respondents were asked to indicate the extent to which reversal of defined gender roles in livestock production activities affected gender mainstreaming on household incomes, and the result was as provided in Table 13.

Table 13: Perception towards Reversal of Defined Gender Roles in Livestock production activities among the Turkana Pastoralists

Response	Frequency	Percentage
Small Extent	63	61.8
Moderate	12	11.8
Large Extent	27	26.5
Total	102	100

The findings in Table 13 show that 61.8% of the respondents indicated that reversal of defined gender roles in livestock production activities affected gender mainstreaming on household incomes to a small extent, 26.5% to a large extent, while 11.8% to a moderate extent. The implied that most of the pastoralists did not find it a big challenge the fact that gender mainstreaming would call for reversed gender roles. They had come to the realization that gender mainstreaming was closely linked to a shift in gender roles.

The women at Locher Edome during one of the focus group discussions indicated that women do the milking, construction of livestock sheds, watering animals at home. In a similar interview for men at Locher Edome, the men in attendance indicated that the role of women included: shedding construction for the animals, cleaning the animal shed, and taking care of the sick animals and at the same time take care of the family. As shown in the findings men seem not to acknowledge the role of women. They were unaware of what exactly women were doing.

During the focus group discussion at Locher Edome the women were asked to indicate the role played by men in livestock management and in response they indicated that the men were responsible for herding, locating safer grounds for the livestock and makes a decision as to where the home can locate to in search for greener pastures for the animals. Only in the absence of women, can men milk. Men on their part indicated that their roles included: providing security to the family and community as a whole, treating sick animals, decision maker as in regards to livestock activities, and providing for the family.

4.5 Factors that inhibit Gender Mainstreaming in Livestock Management among the Turkana Pastoralists.

This section presents the findings in respect to objective three, which sought to establish factors that inhibit gender mainstreaming in livestock management among the Turkana Pastoralists.

4.5.1 Community Belief on Gender roles in respect to Livestock Production Activities among the Turkana Pastoralists of Kenya.

Using a selected number of livestock production activities, the respondents were asked to indicate the ones carried out by men and women in this community, as was the usual practice. The responses are provided in Table 14.

Table 14: Community Belief on Gender roles with respect to Livestock Production Activities

Livestock Production Activities	Men %	Women %
Selling milk and milk products	17.6	82.4
Grazing animals	81.4	18.6
Taking animal in and out of the shed	72.5	27.5
Watering the animal	63.7	36.3
Offering food to animal	27.5	72.5
Making Ghee	27.5	72.5
Care of sick animal	18.6	81.4
Storage of milk	17.6	82.4
Cleaning of shed	8.8	91.2
Milking	8.8	91.2

The findings show that the main livestock production activities carried out by men grazing animals (81.4%); taking the animal in and out of the shed (72.5%) and watering animals (63.7%). On the other hand the main livestock production activities carried by women included: selling of milk and milk products (82.4%); Offering food to animal (72.5%); making ghee (72.5%); care of sick animal (81.4%); storage of milk (82.4%); cleaning of shed (91.2%); and milking (91.2%). This is also shown diagrammatically shown in Figure 6. These findings corroborate with Bravo-Baumann (2000), who reported that in many societies women are responsible for small stock as goats, sheep, and poultry, as well as for young and sick animals kept at the homestead. They are mostly involved in milk production, although not all women control the sale of milk and its products.

According to the focus group discussion, traditionally, there is a division between the roles of men in Turkana's pastoral societies and those of women. Women take care of animals; carry out domestic duties such as cooking, childcare, water, and firewood collection; and are involved in farming. Men are involved in herding and marketing animals, farming, and digging water wells, though fetching water remains a woman's. These findings are similar to those of a study by Amuguni (2001) who established that women mainly care for young stock of all species, care for sick animals and treat them with traditional medicines, have full responsibility for milking and

milk distribution, waters herd and water stock, particularly when men and boys are engaged in other activities away from home.

4.5.2 Respondents' main Sources of Drinking Water

The respondents were asked to indicate the main source for drinking water for their household and livestock, and to which they responded as provided in Figure 11.

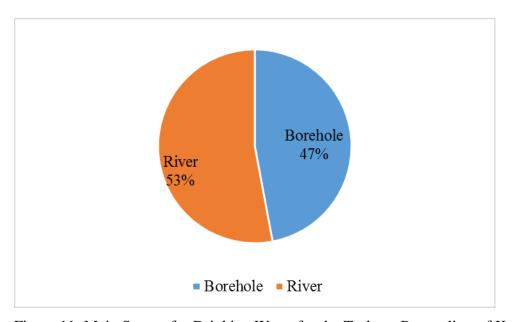


Figure 11: Main Source for Drinking Water for the Turkana Pastoralists of Kenya

The findings in Figure 11 show that 53% of the respondents indicated that their main source of drinking water for their household and livestock was the river, while 47% indicated that their main source of drinking water was the borehole. This implied that the river and the borehole were the main sources of water. According to the focus group discussions, most water sources were located far away from home and therefore, it was risky for women to access them. Gender mainstreaming, therefore, becomes tricky considering the fact that in most cases water sources are at distant and risky locations that may not favour women participation. This report is in agreement with a study by Human Rights Watch (2014) which established that the reduced water levels in Lake Turkana have a devastating impact on the environment and people of Turkana County. Women and girls often walk extremely long distances to dig for water in dry riverbeds. Many children become sick because their families are unable to provide them with sufficient food and clean water.

4.5.3 Identification and Treatment of Livestock Diseases

The findings with respect to whether or not the respondents had received training on how to treat and identify livestock disease are as provided in Figure 12.

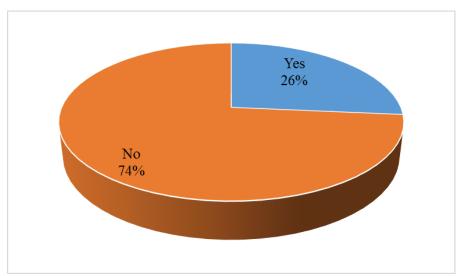


Figure 12: Identification and Treatment of Livestock Diseases in Turkana Area

The findings in Figure 12 show that 74% of the respondents indicated that they had not received training on how to identify and treat livestock disease, while only 26% had received such training. This implied that the majority of the respondents did not have knowledge on how to identify and treat livestock disease. The focus group discussion findings revealed that women and other members of the community lack technical knowledge on livestock issues. This actually could limit effective gender mainstreaming in livestock management among the Turkana Pastoralists. These findings are in line with an analysis of the SNV/CAPE Community-Based Animal Health Project (CBAHP) which revealed that women are not generally involved in the initial planning meetings and hence have a low level of awareness and understanding of the aims and activities of the project (Animal Health Project, 2012). The staff, in general, does not gender aware and has not received any training to help them to overcome this.

4.5.4 Sources of Trainings in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

The response in respect to sources of training in gender mainstreaming is as given in Table 15. Table 15: Sources of Trainings in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

Sources of Training	Frequency	Percentage
Others	75	73.5
NGO	18	17.6
Church Organizations	9	8.8
Government Agency	0	0
Total	102	100

The findings show that those respondents who had received training in livestock management from NGOs (17.6%) and Church Organizations (8.8%). This implied that there were no governmental organized training and thus policy implementation in respect to gender mainstreaming was almost impossible. The findings further revealed that this form of training is only available to the residents when a problem arises. The training activity is mainly supported by NGOs. This finding appears not to totally agree with a report by UNDP (2014) showing that UNDP through the drought response programme funds interventions as a medium-term measure to support the urgent recovery of communities affected by the drought and to strengthen institutions responsible for recovery and disaster risk reduction work. However, according to the UNDP, there is some form of partnership with the Government of Kenya to ensure women training in business management skills. In partnership with the government of Kenya under the National Drought Management Authority (NDMA), UNDP targeted some of the worst hit areas in the recent drought and also some of the most under developed. Through this initiative targeting protection of the remaining livelihoods, assets and mitigation of the impact of continued dry conditions from a gender perspective; several women groups were given goats as part of an initiative to restock livestock after the effects of the drought that left most livestock herds seriously depleted. One such group is Koroirok women group who benefited from restocking of 20 indigenous goats and also received business management training to equip them with the necessary skills to handle finances and source for market.

4.5.5 Adequacy of Pasture

The response as to whether or not inadequate pasture presented a problem facing production was as provided in Figure 13.

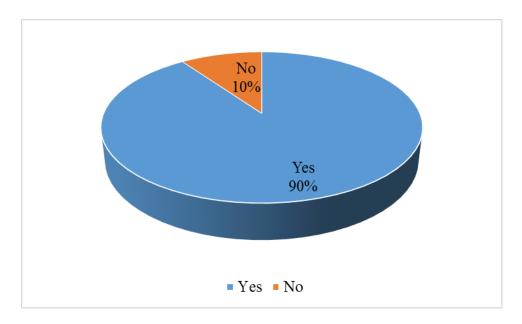


Figure 13: The Challenge of Pasture in Livestock Production among the Turkana Pastoralists

The findings in Figure 13 show that 90% of the respondents indicated that they experienced the problem of inadequate pasture, while 10% did not see this as a challenge facing livestock production. This implied that indeed inadequate pasture presented a great challenge facing livestock production in the area. Pasture was inadequate mainly because of recurrent drought in the area, an aspect that is usual in the ASAL areas. This finding is in line with the study by Miller (2011) who in addition noted decisions about moving animals to pastures or water sources, as well as selling or gifting livestock are usually made by men. If women are to equally participate in livestock management as men do, then they also need to participate in making decisions on pasture source.

4.5.6 Water and Drought Challenge in Livestock Management

The response as to whether or not inadequate water and drought presented a problem facing production was as provided in Figure 14.

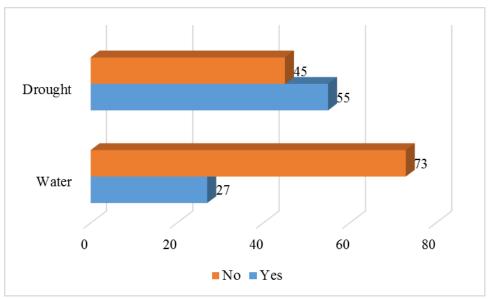


Figure 14: Water and Drought Challenge in Livestock Management in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

The findings in Figure 14 show that 73% of the respondents cited water as a great challenge facing livestock production in the area, and 55% cited drought as a key problem. The rest of the respondents, 27% and 45% felt that water and drought respectively did not pose as serious challenges. It implies that these challenges did exist but respondents' perception was based on personal experience. The water resource is very important and thus, equal participation of both genders is vital. In the absence of water, the women may not take an active role in livestock management. The distance to water access points is far that men find it difficult to engage women. Animals need to be taken to distant locations for water. There is a scramble for water resulting in conflicts, which is normally unsafe for women. A publication by Cultural Survival (2015) shows that in Turkana five species of livestock are kept: camels, cattle, goats, sheep and donkeys. Each species has different food and water requirements. Camels are browsers; sheep, cattle and donkeys are grazers; and goats can be classified as either. Browsers must include a large amount of leafy vegetation in their diet, while grazers favor grasses. The majority of the people and most of the milking animals live in the major homestead which remains in the plains throughout the year but moves frequently as forage and water resources are depleted.

4.5.7 Diseases facing Livestock Production

The response as to whether or not livestock diseases presented a problem facing production was as provided in Table 16

Table 16: Diseases facing Livestock Production in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

Response	Frequency	Percentage
Yes	84	82.4
No	18	17.6
Total	102	100

The findings in Table 16 shows that majority of the respondents (82.4%) indicated that disease was an impediment to successful livestock production, while 17.6% did not see this as a problem. This implied that livestock disease was an aspect that needed to be tackled by all stakeholders considering the fact that most of the respondents saw it as a problem. Gender mainstreaming therefore needed to acknowledge this aspect and women could also have a positive input considering their role in livestock keeping. According to the Parry, *et al.* (2007), climate change has already altered the distribution of some disease vectors, such as mosquitoes and ticks that have an active role in transmitting a pathogen from one host to another, and which carry a range of diseases such as malaria, dengue fever, spotted fever rickettsioses, and Rift Valley fever. These diseases pose great challenges to livestock production. Mochabo *et al.* (2005) and Eregae (2003) described the main diseases that affect livestock in Turkana South District. The diseases identified as being important include trypanosomosis, manage, tick infestation, haemorrhagic septicaemia and non-specific diarrhoea in camels; anthrax, contagious bovine pleuropneumonia, and rabies in cattle; anthrax, contagious caprine pleuropneumonia, pox in sheep and goats and anthrax, black quarter, trypanosomosis and impaction in donkeys.

4.5.8 Security in Livestock Production

The respondents were asked to indicate whether or not insecurity was a problem facing production was as provided in Table 17.

Table 17: Security in Livestock Production in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

Response	Frequency	Percentage
Yes	93	91.2
No	9	8.8
Total	102	100

The results in Table 17 show that majority of the respondents (91.2%) indicated that insecurity was a problem facing livestock production among Turkana pastoralists, while 8.8% did not view this as a challenge. This implied that insecurity was a key problem in the area. According to Wawire (2003), security is an issue which needs to be handled diligently. It is the responsibility of men to provide security for their family members and livestock. Providing security to the animals and household members. This is because the area is prone to cattle raiding and bandit attacks from neighbouring ethnic communities. Wawire noted that if women are not protected in the course of livestock management, they may be attacked by bandits or rapists on their way. To counteract this, women walk in groups. Transporting the water for long distances is also a problem because the women have to carry the water on their heads, making many trips. They have to carry the water in heavy traditional wooden troughs (ng'ageterin) that were originally meant to be carried by donkeys before the drought killed them.

4.5.9 Limited Drugs for Animals and Inadequate Skills on How to Treat the Animals on Livestock Production

The pastoralists were asked to indicate whether or not limited drugs for animals and inadequate skills on how to treat the animals were problems facing livestock production in the study area. The results were as provided in Figure 15.

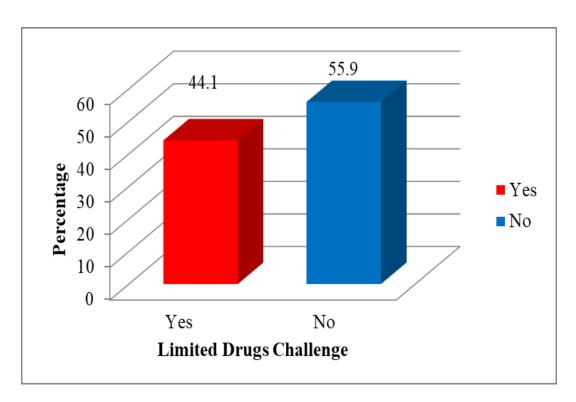


Figure 15: Distribution of responses on the availability of livestock drugs in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

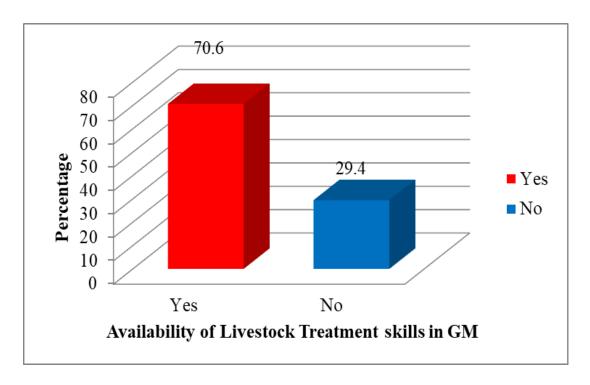


Figure 16: Distribution of responses on the availability of livestock treatment skills in Gender Mainstreaming in Livestock Production, Turkana County, Kenya

The findings in Figure 16 show that 44.1% of the pastoralists indicated that limited drugs for animals affected livestock production, 55.9% did not experience this challenge. This implied that that limited drugs for animals, though a problem seems not to have been experienced by most of the pastoralists. They preferred to treat their own animals using traditional means and this was mostly treated as men's preserve. This is in line with a study by Bett, *et al.* (2008) in Kenya which revealed that most herders opt to treat their own animals due to limited access to animal health services. The distribution of community animal health workers (CAHWs) is poor while some of them are no longer active.

The study findings in the same Figure 16 show that 70.6% of the pastoralists indicated that inadequate skills on how to treat the animals affected livestock production, 29.4% did not experience this challenge. It appears that Turkana herders are not familiar with how livestock acquire and transmit. This implied that this challenge was felt to a great extent and could not be taken lightly.

The findings from the focused group discussions revealed that only men had adequate skills on how to treat the animals on livestock production. The majority and in fact almost all women had fid no have requisite skills of treating livestock. This is because they own the animals and at times use the animal drug to inject human beings who are sick and has never had any negative effects, but the person gets better.

Pamela – Not real name said "Men feel they are the only ones who should train in livestock treatment since they own the animals"

However, 4 out of 9 FGD respondents argued that even the men did not have adequate training. No training but they just buy from the chemist and they know what medication is for what illness and people here survive that way.

Similarly, an earlier study by Heffernan (2001) revealed that access to veterinary services rather than affordability is the primary constraint. However, few herders and farmers were spending close to the estimated 'ideal' on livestock drugs. Knowledge regarding livestock health was poor, further contributing to the overall low uptake of veterinary goods and services. Unfortunately,

these challenges were considered too complex by the Turkana community who felt that tackling them was a preserve for men.

The findings from the interview schedules show that basic veterinary training was sometimes done by NGOs and church organizations but only attended by men and this happens whenever there is an outbreak of a given disease or an introduction of a new project in the community. Hence government involvement was low.

4.5.10 Marketing of Livestock Products among the Turkana Pastoralists

The response in respect to whether or not limited marketing was a problem facing livestock production in the study area was as given in Table 18.

Table 18: Marketing of Livestock Products among the Turkana Pastoralists

Frequency	Percentage
54	52.9
48	47.1
102	100
	54 48

The findings in Table 18 show that 52.9% of the respondents indicated that limited marketing was a problem facing livestock production in the study area, while 47.1 did not see this as a problem. This implied that in the area, livestock production was also affected by limited marketing. Access to marketing information was a tricky issue and this was a serious impediment to gender mainstreaming in the area.

During all the four FGD sessions the respondents were asked whether information on market opportunities for livestock products was shared to both male and female livestock owners. The women indicated that they did not get it in time and in fact, went ahead to say, that the information came from men. The women had at times to walk long distances to the town centres to get such information, which included the price of livestock. So anything to do with livestock market information is from them. The FGDs show that majority of the women indicated that women did not have adequate market information. Felister (Not real name) Market information is with the men because at times they walk long distances to the town centres and come up with news on the price of livestock. So anything to do with livestock market information is from them. This finding is in line with a study by Tegegne (2004) who established that women were usually responsible for marketing livestock products, but they received the assistance of men.

According to FGD results, there are several factors that inhibit women from taking full participation in decision making. These included cultures and traditions that has been there and promotes men dominance in decision making; Fear that the women do not want to be considered big mouths because if a woman is married she automatically becomes the man's property and her responsibility to take care of the family give birth; avoidance to traditional songs usually being

composed by men to mock women who misbehave in society; a woman is considered as a child by the husband and their input not taken into consideration. For instance, women may be allowed or invited to meetings presided over by men, but theirs is to listen and not contribute even to matters that involve them directly; and women avoid to be reported to the elders.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The first objective sought to determine gender mainstreaming practices in livestock management amongTurkana Pastoralists. The study shows that Turkana community members believe that it is not socially alright to send women on risky ventures such as getting water for animals or food at a distant location. The rivers mentioned in this study are streams which in most cases are located far away from the community settlements. The belief system also places the man in a position of not only heading the household but controlling and owning all forms of livestock. However, where fairness is applied, men own large animals, while women own small animals. The small animals owned by women include sheep, goats, and poultry. The big animals owned by men include cattle and camel. This form of segregation inhibits women participation in the management of big animals. There is the unfavorable perception towards control of cash resulting from the selling of milk products, yet the study shows that women do the selling. Generally, the finding reveals the unfavorable perception of equality participation in livestock production activities. Women lack requisite knowledge for livestock management. These factors will continue inhibiting gender mainstreaming in livestock management unless checked. Technical knowledge of livestock issues and thus involving them in core livestock management areas is considered not prudent.

The second objective sought to determine the Turkana Pastoralists' perceptions on the influence of gender mainstreaming in livestock management on the socio-economic status of Turkana Pastoralists. The findings revealed that Turkana perceptions of gender mainstreaming negatively influenced individual household incomes. Men continue to shut women's participation in important livestock production activities especially when they realize that the revenue collected is substantial. They do this hiding under the long known Turkana tradition which has always limited women's participation. Men make decisions stocking levels, production levels, product sales, and pricing and women are only left with basic decisions such as how to feed the animals and milking timings. The argument by most respondents during many FGDs is that there are some of the decision making functions that would positively influence household incomes if

taken by women. Income levels depend on animal size. In the case of the Turkana, women own small animals while men own big animals. The challenge here according to the study is that most animals owned by the respondents are small, yet it emerges that most of the respondents are men.

The third objective sought to identify factors that inhibit gender mainstreaming in livestock management among Turkana Pastoralists. It was established that in Turkana community men continue to give themselves preferential treatment and look down upon women. According to the findings men are supposed to be accorded greater roles in livestock management compared to women. Key decisions related to purchasing of animals, selling of livestock and/or livestock products, and management of the proceeds are left to men, yet much farm work, for instance, feeding the animals, treating the animals, fetching water is considered a woman's job in the Turkana County. The current state of affairs seems to be enjoying the local government administrations support. The thinking in the community is that if women are to be involved in the business at all, it is usually not in relation to animal production activities, but to other activities, such as primary health care, literacy, and handicrafts.

5.2 Recommendations

The Government of Kenya should consider mobilizing resources to train the community and create awareness of the Turkana community on the advantages of gender mainstreaming in livestock management. Specific workshops themed and targeted workshops need to be organized for men pastoralists, with the aim of promoting their support for gender mainstreaming in livestock management.

There is a need to strengthen the database on women in animal health and livestock production, much data exists but could be further disaggregated by sex to build strong cases for immediate redress in gender imbalances in livestock management.

The Government of Kenya should consider increasing the number of women with technical knowledge of livestock issues. Women and other members of the community need technical knowledge of livestock issues to enhance the pace of gender mainstreaming. This information can be identified through gender-sensitive planning in focus groups.

The Government of Kenya should consider mobilizing resources aimed at scaling scale up security provision in Loima Sub County and its surroundings, thus, creating a favorable environment for equal gender participation in livestock management.

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APPENDICES

Appendix 1: Questionnaire for Livestock Keepers

I am Lokia A. Asunta, an M.A, student Gender, and Development Studies, Egerton University. I am conducting research on the perceptions of pastoralists on the influence of gender mainstreaming in livestock management on socio-economic status.

The purpose of this study is to fulfill my academic requirement. Therefore, I kindly, request you to answer the following questions.

Note: Your responses will be treated with the highest degree of confidentiality.

Please tick where appropriate write in the spaces provided.

1. Age	
a) 15-19 ()	d) 31-35 ()
b) 20-25 ()	e) 36-40 ()
c) 26-30 ()	f) 41-45 ()
g) 45 and above ()	
2. Sex	
a) Female ()	b) Male ()
3. Marital status	
a) Married ()	c) Single ()
b) Separated ()	d) Divorced ()
4. What is the highest Level of education attained?	
a) Never gone to school ()	
b) Primary ()	
c) Secondary ()	
d) Other(specify):	
5. What type of livestock do you own?	
a) Cattle ()	d) Donkey ()
b) Sheep ()	e) Camel ()
c) Goat ()	f) Poultry ()
g) Other (specify);	

6. Indicate the major household income generating activities and rank them in order of priority.

Number	Sources of Income	Rank	Percentage
1.	Remittances		
2.	Crops		
3.	Livestock keeping		
4.	Fisheries		
5.	Charcoal		
6.	Firewood		
7.	Others(specify)		

7. Among the following livestock production activities, indicate the ones carried out by men and women in this community.

Activity	Men	Women
Cleaning of shed		
Grazing animals		
Offering food to animal		
Watering the animal		
Milking		
Storage of milk		
Making Ghee		
Taking animal in and out of the shed		
Selling milk and milk product		
Care of sick animal		
Others(specify):		

8. Please indicate whether or not you agree with following statements in respect to male and female participation in livestock production activities.

Activity	Strongly	Disagree	Moderately	Agree	Strongly
	Disagree		Agree		Agree
Male and female should					
participate equally in					
livestock production					
activities					
The society despises male					
who participates in livestock					
management					
Livestock keeping is a					
woman's domain and should					
remain a woman's job					
The money received from					
livestock is always enough					
to cater to family needs					
Livestock production					
activities are best done by					
women than men					
Choice of animals to					
slaughter is solely a man's					
activity					
Inequality between men and					
women is one the means of					
poverty					
Division of work in					
livestock activities at the					
household level should be					

eliminated					
Men should also respect					
decisions made by women					
with respect to livestock					
production activities					
Cash resulting from the					
selling of milk products is					
controlled by men and is					
invested in sectors than					
livestock.					
Activity	Strongly	Disagree	Moderately	Agree	Strongly
	Disagree		Agree		Agree
Men and women tend to	Disagree		Agree		Agree
Men and women tend to own different animal	Disagree		Agree		Agree
	Disagree		Agree		Agree
own different animal	Disagree		Agree		Agree
own different animal species. Often lager animals	Disagree		Agree		Agree
own different animal species. Often lager animals are owned by men, while	Disagree		Agree		Agree
own different animal species. Often lager animals are owned by men, while smaller animals are owned	Disagree		Agree		Agree
own different animal species. Often lager animals are owned by men, while smaller animals are owned by women.	Disagree		Agree		Agree
own different animal species. Often lager animals are owned by men, while smaller animals are owned by women. Turkana men are the key	Disagree		Agree		Agree

To what extent do you feel the following community perceptions on equal involvement of women and men in livestock production activities negatively influence your household incomes.

	No	Small	Moderate	Large	Very
	Extent	Extent	Extent	Extent	Large
					Extent
Division of Work in					
livestock Production					
activities					
Men dominating decision					
making in production					
activities					
Animal Species					
Ownership					
Control of Cash resulting					
from selling of milk					
products					
Money received from					
livestock is always					
enough to cater for					
family needs					
Equal participation in					
livestock production					
activities					
Perception towards					
insecurity issues and					
women involved in					
production activities					
Perception towards the					
reversal of defined					
gender roles in livestock					

Challenges			Tick
Inadequate pasture			
Water			
Drought			
Diseases			
Insecurity			
Limited marketing			
Limited drugs for animals			
Inadequate skills on how to	treat t	he animal	ls
Other(specify):			
Start a business Pay hospital bills	-]	
Buy more livestock	[]	
	_	_	
• •	_	_	
Save in case of emergency			
Others (specify):			
Others (specify);			
			r your household and livestock?
	inking	g water fo	r your household and livestock?
What the main source for dr	inking	g water fo	or your household and livestock? c) River ()
What the main source for dr a) Public tap b) Borehole	inking () ()	g water fo	r your household and livestock?
What the main source for dr a) Public tap b) Borehole e) Other(specify):	inking () ()	g water fo	or your household and livestock? c) River () d) Unprotected dug well ()
What the main source for dr a) Public tap b) Borehole e) Other(specify):	inking () ()	g water fo	c) River () d) Unprotected dug well ()
a) Public tap b) Borehole e) Other(specify):	inking () () ning or	water fo	c) River () d) Unprotected dug well ()

d)	Other (specify	y):			
13. How f	requent is the s	ervice available to you?			
a)	Daily ()		d)	Annually ()	
b)	Weekly ()		e)	When a proble	em arises ()
c)	Monthly ()				
14. Are yo	ou aware of any	livestock agency?			
1= Yes	s 2= No				
15. From v	which sources	do you receive agricultural inform	atio	n?	
a)	Ngo	()	d)	Radio	()
b)	Government	()	e)	TV	()
c)	Dol	()			
	f) Other	(specify)			
	Do we	omen attend meetings of the soc	ial (occasions at w	hich men make
	decisio	ons that affect the whole commun	ity?		
	1= Yes	2= No			

Thank you

Appendix 2: Focus Group Discussion Questions.

The FGD were guided by the following questions:

- 1. What type of livestock do you own?
- 2. How many livestock do you own?
- 3. What challenges do you face in livestock management?
- 4. Are the roles played in livestock management different from one gender?
- 5. Who makes most of the decisions in livestock activities?
- 6. Are women consulted on any given activity?
- 7. Who controls the income from livestock sales?
- 8. What do you think about men and women making equal decisions?
- 9. Do you feel discriminated against livestock activities?
- 10. Do you share equally the benefits of livestock sales?
- 11. Do you access any basic training on animal treatment?
- 12. Are you aware of any market opportunities for your livestock products?
- 13. How do you acquire livestock? Do men and women acquire livestock differently?
- 14. Does livestock have value to you as a woman? What are these values?
- 15. What are the perceptions of men and women working together in livestock activity?
- 16. Are there factors that inhibit women from taking full participation in decision-making?

Appendix 3: Interview Guide for Key Informants' Interview

- 1. What type of livestock species are owned in this community?
- 2. Who is responsible for what tasks for the following tasks?

Task	Men	female
Building Fences		
Milking		
Milk product processing		
Marketing		
Care of the sick animal		
Treating a sick animal		
Constructing animal shed		
Decision making		
Providing security		

3. What type of livestock is owned and controlled over by each gender?

Animal species	Controlled by men	Controlled	by	Percentage
		women		
Goats				
Sheep				
Donkeys				
Cattle				
Camel				
Chicken				
Other(
specify)	_			

4. From what animal products do women or men get income?

Animal output	Men	Women
Meat		
Milk		
Wool		
Hides/skin		
Eggs		
Other(specify):		

- 5. Who controls cash from livestock sale?
- 6. What are women's roles in livestock activities?
- 7. If animals are to be issued, who will receive them?
- 8. Do the benefits received from livestock vary between genders?
- 9. What economic activity do men and women engage in?
- 10. Do women in the Turkana community take part in any decision-making processes?
- 11. Are women consulted during livestock sales or slaughter?
- 12. Can ownership and access to livestock generate more income?
- 13. Is livestock ownership considered to increase women's decision-making power?
- 14. How important is livestock keeping for the Turkana community?
- 15. Do men and women have different skills and knowledge in livestock management?
- 16. Does the community receive any basic veterinary training? How often and by whom?
- 17. What are the men's perceptions of women owning larger animals, and involvement in the decision making in this community?