

**GENDER ROLES IN A DAIRY VALUE CHAIN IN UASIN GISHU
COUNTY, KENYA.**

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DECLARATION

This project is my original work and has not been presented to any other university or institution for award of degree.

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Date:

This project has been submitted for examination with my approval as the university supervisor.

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Prof. Isaac Nyamongo

Date:

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God bless you all.

DEDICATION

This thesis is dedicated to my entire family. I love you all.

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LIST OF ABBREVIATIONS

ECA – Eastern and Central Africa

FAO – Food Agricultural Organization

FGDs – Focus Group Discussions

ILRI – International Livestock Research Institute

KNBS – Kenya National Bureau of Statistics

MoDL - Ministry of Livestock Development

PGNs – Practical Gender Needs.

SGNs – Strategic Gender Needs

SSA – Sub-Saharan Africa

ABSTRACT

This paper discusses the gender roles in a dairy value. It builds from an assumption that women are confined in the lower levels of the value chain where daily routine work is performed and no income is realized at these levels while men are mostly involved in the higher levels where income is generated for example in the sale of milk. Apart from being confined in the levels that do not generate income, women are also not allowed to share equally in the proceeds despite their active involvement in most of the activities along the dairy value chain. This is because their contribution is not visible by the other stakeholders in the industry. From the research, there is evidence that women are being recognized as equal players and their roles being recognized. Women are now engaged in activities that generate income like selling of milk.

The paper also looks at how the society looks at the various activities along the dairy value chain in terms of cultural beliefs, taboos and other restrictions and how these beliefs impact on the gender roles in a dairy value chain. Research showed that there are some men who do not do certain activities because it is a taboo in their culture. Others felt that some jobs are demeaning and therefore, not fit for them.

In terms of decision making, women are actively involved since they are in joint ownership of property with their husbands. This is an improvement from what was previously known where women were seen as property custodians and not owners.

The paper makes a conclusion that women's roles in the society are being recognized and appreciated and suggests that more opportunities and resources should be given to women to achieve gender equity in a dairy value chain.

CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 Introduction

In Kenya women play a key role in smallholder dairy production but for most women access to livestock is by virtue of their relationship to men as their husbands, fathers or sons. Despite their participation in dairy farming, women still face considerable constraints including lack of ownership and controlling of land and animals on which their dairying depends (Dolan 2001).

Traditionally, men also control the cash commodities so, as the dairy sector becomes more commercialized, it seems to be male-dominated thus limiting women's participation. However, research has shown that this traditional culture is slowly dying away as more women are seen to be engaged in areas previously dominated by men like managerial positions in the dairy value chain (Njarui et al 2012). Men have also changed their attitude towards work at the different levels of a dairy value chain (ibid). The purpose of this proposal is to examine gender roles in a dairy value chain in Uasin Gishu County, North Rift Kenya.

1.2 Statement of the problem

Gender issues shape the totality of production, distribution and consumption within an economy but have often been overlooked in a value chain development. From production, processing and marketing, gendered patterns of behaviour condition women's and men's jobs and tasks, distribution of resources and benefits derived from income generating activities in the chain.

A value chain refers to all the sequence of production and marketing steps of a product ranging from primary production, processing, and distribution up to the retail sale till it reaches the final consumer (Kaplinsky and Morris 2001, pg. 8)

Previously, women who participated in dairy farming were confined to lower levels of the chain where a lot of work that is done almost on a daily basis is concentrated (Francis 1998). Women took part in activities such as weeding of the fields, feeding, watering and milking cows and cleaning of the sheds and suffered more inequalities in the upper levels of the value chain where benefits are shared and distributed (Njarui et al 2012). They also lacked the ability to make decisions regarding the use of proceeds from the dairy farming venture. Based on this literature, the research will seek to establish any changes/shifts in this trend.

A gender approach to a value chain development focuses on the inequalities within the particular stages along value chain. It is, therefore, important to consider both the different levels at which men and women participate in the value chain and how gains of participation are shared or distributed. This study will, therefore, address the following research questions:-

1. What is the gender division of roles in the dairy value chain?
2. Who makes decisions in regard to sharing benefits accrued in a dairy value chain?
3. What is the perception of men and women regarding activities in the dairy value chain?

1.3. Research objectives

1.3.1 General objective

To explore the emerging shifts in gender roles in the various levels/stages of a dairy value chain in Uasin Gishu County.

1.3.2. Specific objectives

1. To determine the gender roles in the dairy value chain.
2. To determine who decides on sharing benefits accrued in a dairy value chain.
3. To determine the perceptions of men and women regarding the activities in the dairy value chain.

1.4 Assumptions of the study

An assumption is a statement or explanation that is suggested by knowledge or observation. It can also be defined as a tentative prediction about the nature of the relationship between two or more variables.

This study makes the following assumptions:-

1. More women are engaged at the high level of the dairy value chain.
2. Gender sensitization/awareness in Uasin Gishu County has contributed to the shifts in gender roles in the dairy value chain.
3. The benefits accrued from dairy farming have led to the shifts in gender roles in the dairy value chain.

1.5 Justification of the study

This study is important as it will assist other researchers to come up with other potential ways of balancing gender roles and benefits in a dairy value chain. Policy makers may also adopt some of the recommendations in making sound policies that will ensure that both men and women enjoy maximum benefits and rewards from their income generating ventures, i.e., dairy farming.

1.6 Scope and limitations of the study

1.6.1 Scope of the study

This study will be done in Uasin Gishu County and will focus on cattle dairy farmers. The study will focus on gender roles in a dairy value chain and will be guided by Caroline Moser's empowerment theory. The study will be done in Ainabokoi and Kesses wards in Uasin Gishu County.

1.6.2 Limitations of the study

Observation as data collection method may not give accurate data as the participants may alter their behavior since they will know that they are being observed.

1.7 Definition of terms

Value chain means all the sequence of production and marketing steps of a product ranging from primary production, processing, and distribution up to the retail sale till it reaches the final consumer

Gender is a socially and culturally constructed identity as male or female.

Dairy farming is a class of agricultural husbandry that deals with milk production from cows, goats and sheep. The study will focus on dairy farming in cows.

High level of the dairy value chain – this is the stage along the dairy value chain where benefits are seen or accrue, for example sale of the milk.

Low levels of the dairy value chain – these are stages along the value chain that mostly deal with inputs rather than the outputs, e.g., weeding fields, feeding and watering of cows cleaning sheds.

Gender roles are the social and behavioural norms that are generally considered appropriate for either a man or a woman in society.

Gender needs are needs that are specific to women as a result of their triple role and subordination in society.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

There are differences in development of the dairy sub-sector between countries within the Eastern and Central Africa (ECA) region with Kenya having a longer history in dairy farming. Exotic dairy cattle were first introduced in Kenya from Europe by white settlers in the 1920s, who established dairy farms in the Central highlands and Rift Valley region. Although few farmers in the semi-arid region of eastern Kenya commenced dairy farming in the 1960s, it was not until the 1980s that there was accelerated adoption of dairy farming (Njarui et al. 2009). On the other hand, dairy farming is relatively young in Uganda with the first introduction of dairy cattle from Germany in the 1980s.

The expanding dairy industry in the ECA region is fuelled by increased urbanization and improved income, resulting in high demand for milk and milk products. Kenya is the largest milk producing country in Sub Saharan Africa with a cattle herd larger than all of the rest of East and Southern Africa, and dairy is the single largest agricultural sub sector (14%) in the country (Staal et al. 2008). Dairy production in Kenya is concentrated in the Rift Valley and Central region with 53% of dairy cattle found in the Rift Valley and 25% in Central region respectively (FAO and Land O'Lakes 2010). From there milk moves either to milk deficient areas or to Nairobi and other urban areas.

In the recent past, there has been a steady growth of dairy farming in the country and it has increasingly become an important source of livelihoods. For example, Kenya produced 3.8 billion litres of milk in 2007 (MoDL, 2008) and this rose to 5 billion litres in 2011, with some being consumed at household level and some sold to generate income (ibid). Studies by Njarui et al. (2011a) showed that milk and milk products are an important dietary component for all social strata.

In the coastal lowlands of Kenya, Nicholson et al (2004) found that for each cow owned, mean household income increased by 53% compared with households without dairy cows. The dairy cow is one of the most important investments a farmer can make to improve their standing (ILRI 2007) because of its inherent value, the nutritional valuable milk produced, the work it can perform, and the way it can help diversify farming activities. Not only does livestock currently contribute up to 80 per cent of the agricultural gross domestic product in developing countries but also the fastest growing industry (ILRI 2007). The World Bank classifies livestock as a high value market and reports that this market is the fastest-growing agricultural market in most developing countries (The World Bank, 2008). Thus dairy farming as an industry plays an important role in food security, employment creation, income generation and enhancement of the livelihoods of dairy farmers, traders, processors and all participants engaged in the entire milk supply chain (Muia et al. 2011).

Further, many dairy farms have been established in peri-urban areas of major commercial urban centres with increased adoption of improved dairy cattle of European breed (*Bos taurus*), namely Holstein-Friesian, Ayrshire, Guernsey and Jersey, and their crosses with local zebu (*Bos*

inducus). The production is mainly dominated by smallholders who own few dairy cattle. In Kenya at 60%, Holstein-Friesian is the most widely kept breed (Njarui et al. 2009). Muia et al. (2011) found that on average farmers kept 5.3 head of cattle with 40% being cows.

2.2 Feed resources

Feed availability is key to productivity of dairy animals. Feed resources can be grouped into four main categories, namely, natural grasslands, established pastures, crop residues, and agricultural by-products. In Kenya, 23-40% (0.2 ± 0.17 to 0.8 ± 0.7 ha) of total land per household is devoted to feed production with only about 8% planted with improved forages and the rest under natural pastures or fallow (Njaruai et al. 2011b). Napier and Rhodes grass are the major cultivated forages with the former being more widely grown. Crop residues, particularly maize stovers, are the major feed during the dry seasons. The stovers are usually high in roughage, but low in nutritive value (ibid).

2.3 Milk production and marketing

In Kenya, the dairy industry has been growing in the current decade after years of decline and disruption largely highlighted by the notable collapse of the Kenya Cooperative Creameries (K.C.C) in 1997. The recent growth in the dairy production has been driven by increases in the yield per cow. The yield ranges from 3.4 litres/cow/day during the dry season to 9 litres/cow/day during wet seasons in the peri-urban areas of Kenya for example. Thus milk production per cow varies according to season and is generally low during dry seasons. Farmers report that milk production is high during the wet seasons and declines by over 50% during the dry seasons, largely due to inadequate and low quality feeds and water.

In 2007, dairy farming remained the leading enterprise among all other livestock in Uasin Gishu from which farmers earned Kes. 1.93 billion from the sale of 107 million kgs of milk. This was a 20% increase from the 2006 production. The main market outlets are New Kenya Cooperative Creameries (KCC) Ltd., private processors, mini dairies, milk bars and small scale mobile traders. In 2007 it was estimated that there were about 359,644 cattle in the larger Uasin Gishu district of which 76,556 were pure bred, 251,480 were crosses, and 31,608 were indigenous. Of this population, the number of lactating cows was estimated at 134,868 (GoK, 2007).

Where milk is sold to catering services and milk bars, it is mainly transported by bicycles and on foot. Most of the milk is sold raw since there is limited processing. However, during the milk glut period, the extra milk is fermented to extend its shelf life and either consumed by the household or sold to neighbours (GoK, 2007).

2.4 Gender roles in dairy cattle farming

The activities performed in the dairy enterprise are numerous. Most of these are performed daily, implying that dairy farming is a labour intensive enterprise. The availability of labour, capital and land (in terms of quality and quantity) in a given situation determines to a large extent which cattle management system is the most appropriate e.g., zero-grazing (intensive system), tethering, paddocking, herding (extensive system).

Different systems require different land, labour and capital input, and they vary in quantities of milk produced. Special attention should be paid to the role of women in this respect. As part of their domestic, agricultural and community duties, women often perform important tasks related

to dairy husbandry, including looking after the animals, feeding and watering them, cleaning sheds, milking and processing (Dieckmann 1994)

Due to these constraints notable changes are being seen in the division of labour meaning that both genders are actively participating in all activities. In peri-urban Machakos, for example, on average, men contributed more labour (17%) in the dairy unit than women (12%). Women contributed higher labour in milking (32-34%) than in any other activity while men contributed highest in spraying against ticks and planting of forages (20-29%) (Njarui et al. 2012). From these figures, it is easy to tell that men are actively engaged in dairying sign of shifts in gender roles but again it also has to be noted that there is still gender disparity at the lower level (milking) of the chain, a reason for undertaking this study to explain the shift.

Generally, it is assumed that women tend to contribute highest labour to tasks that are performed daily while for men it is mainly in tasks performed weekly or seasonally. For example, planting of forage is carried out during the wet season while spraying is on weekly basis and is mostly done by men while milking is carried out daily, a chore that is mostly performed by women. Similarly, in the neighbouring Uganda, labour contribution to the dairy unit is skewed towards women who contribute over 50% of labour requirement in all dairy production activities (Njarui et al. 2012). It is important to note that men/husbands are largely the decision-makers on how the dairy unit should be managed.

2.5. Labour aspects of dairy development

Milk production implies a basic and compulsory daily routine of milking, feeding, watering and taking care of the animals. Other major activities related to milk production are the production, harvesting and cutting of fodder crops and the processing, marketing and transport of inputs and outputs. Seasonal differences in feeding, watering and milking have to be taken into account as well as seasonal changes in the labour input of different household members and their relationship to other farm and non-farm activities (Dieckmann 1994).

Apart from the farm level activities mentioned above in dairy farming there are also other activities like health management where animals are dewormed, sprayed to control ticks, vaccinated against diseases and treatment for diseases, procurement of animal supplementary feeds, drugs used in disease and pest control, veterinary services and research and development where the farmer needs to find information on the best breeds to keep, and improve on breeding practices, general animal care for high productivity (K'obonyo et al, 2011).

In many smallholder cattle-raising enterprises the role of women, which varies according to region, culture and class is crucial. Unfortunately, this is frequently insufficiently recognized, as is the usefulness of local beliefs and knowledge (Dieckmann 1994).

2.6 Access to and control over resources

The accessibility of major resources such as land, water, livestock and capital determines to what extent (categories of) people can participate in dairy development activities. Participation not

only means taking part in the work, but also being in the position to take management decisions concerning the allocation of resources and the production process itself (Dieckmann 1994).

Women and the rural poor are less likely to have control over resources. Constraints must be identified and special strategies to overcome these should be developed. Land, water and capital are major resources and the rights to them are intricately interwoven with the social structure of the community. The ownership of cattle and/or its use is another realm with a variety of arrangements (ibid).

2.7 Theoretical Framework

A theory is a well-established principle that has been developed to explain some aspect of a phenomenon. This study uses the empowerment theory as a guide.

2.7.1 Empowerment theory

This theory was derived from Caroline Moser's Moser Gender Planning Framework. This theory is based on Moser's concepts of gender roles and gender needs, and policy approaches to gender and development planning (Moser,1993)

The theory tackles inequality between men and women through its policies that address the challenges faced by women in their subordination within the society. Below are the policies through which gender inequality is addressed.

- ❖ **Welfare:** It recognizes the reproductive role of women and seeks to meet practical gender needs in that role through top-down handouts.
- ❖ **Equity:** Its purpose is to gain equity for women, who are seen as active participants in development. It challenges women's subordinate position
- ❖ **Anti-poverty:** Its purpose is to ensure that poor women increase their productivity. It recognizes the productive role of women, and seeks to meet the practical gender needs to earn an income, particularly in small-scale income-generating projects.
- ❖ **Efficiency:** A women in development (WID) approach. Its purpose is to ensure that development is more efficient and effective through women's economic contribution, with participation often equated with equity.
- ❖ **Empowerment:** Its purpose is to empower women through greater self-reliance. It recognizes the triple role, and seeks to meet SGNs indirectly through bottom-up mobilization of PGNs

The empowerment theory is relevant to this study as it tries to address the issue of gender inequality in the society through its policies. Equity and anti-poverty policies recognizes the active role played by women in development and therefore, encourages equal opportunities for both men and women and Equity further challenges women subordination.

Empowerment theory in this study will also explain the issues of women subordination, their gender roles, needs and empowerment. The goal is to free women from subordination and allow them to achieve equality, equity, and empowerment.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The researcher employed various methods of data collection to obtain both qualitative and quantitative data. Questionnaires, direct observations and interviews were used in the study.

3.2 Research Site

3.2.1. Physical features

This study was done in Uasin Gishu County. Uasin Gishu County is very cosmopolitan particularly around Eldoret town and covers 3,345 sq. km. Uasin Gishu County lies in the mid-west of the Rift Valley and borders six counties, namely Elgeyo-Marakwet to the East, Trans Nzoia to the North, Kericho to the South, Baringo to the South-East, Nandi to the South-West and Bungoma to the West. The county is named after the Ilwuasinkishu Maasai clan who originally inhabited (Daily Nation, 2011)

In terms of climate/weather the temperatures range from a minimum of 8.4⁰C to a maximum of 27⁰C. It has two rainy seasons with average rainfall from 900mm to 1,200mm per annum. The wettest season in Uasin Gishu County is experienced between the months of April and May while the driest season comes between January and February (ibid).

3.2.2. Economy

The economy is dominated by agriculture and is one of the largest contributors to food - security in Kenya. Large scale maize, wheat farming and dairy farming are the leading farming activities.

Dairy farming is widely practised in the County especially in Ainabkoi, Turbo and Kapseret. Many dairy farmers grow their own feeds which include corn, alfalfa and hay (Daily Nation, 2011).

Other economic activities include sports tourism (athletics), manufacturing and agro processing. Some industries to note include Raiply Wood factory, Rupa Textiles, Rivatex, Kenya Pipeline Company, Kenya Cooperative Creameries as well as corn, wheat and pyrethrum factories all within Eldoret town.

3.3 Research Design

This research was cross-sectional and both qualitative and quantitative data was collected through structured and open ended questionnaires, observation and interviews using an interview guide. Data was analyzed using the Statistical Package for Social Sciences (SPSS) and findings were presented in form of graphs and charts using simple statistics.

3.4. Sample Size and sampling procedure

The sample size for this study was sixty individuals. The unit of analysis was individuals, i.e., man and wife and both must agree to be interviewed.

The sample population was selected using simple random sampling. This was to give an equal opportunity for anyone to be included in the study. Selection of households was purposive based on those keeping dairy cattle and willing to participate in the study.

3.5 Data collection methods

3.5.1 Survey

A survey questionnaire was administered to individuals from the sampled households. The questionnaires had both open ended and closed questions focusing on the value chain system under study.

3.5.2 Key informant interviews

These interviews were carried out on five milk collectors and two veterinary officers working within the area. These respondents gave insights on how information is shared among the value chain actors and identified the level of participation for men and women along the value chain. Their responses were also used to triangulate the information received from the individual respondents in a household.

3.5.3 Focus Group Discussions (FGDs)

FGDs were carried out to verify some information given by the individual respondents. The FGDs captured the social interaction and spontaneous thought process that inform decision making. The FGDs were held in groups of 6-12 participants. The focus groups discussions gave more information on the perceptions of men and women regarding the activities along the value chain. A focus group discussion guide (appendix 4) was used to guide the discussion.

3.5.4 Observation

The researcher employed direct observation to see the systems in place to gather information being sought for in the study. Point sampling as a way of observation was also employed.

3.5.5 Secondary sources

Books and journals were used to collect materials on dairy value chain.

3.6 Data processing and analysis

This process started right from the study field and was done as below:-

Sorting data

This was done by ensuring that questionnaires/interviews administered to each HH were well identified. Different codes were used as a way of identification.

3.7 Data analysis

This was done using Statistical Package for Social Science (SPSS) and results were presented in forms of simple charts, graphs for quantitative data. Qualitative data was analyzed systematically and presented in form of narrations and descriptions.

3.8 Ethical considerations

In this research the major ethical issues were:-

Informed consent

The researcher sought consent from village leaders to be allowed to carry out the study in their area. The researcher also got an informed consent from the participants before recruiting them in the study. The researcher gave the participants all the information they needed to know before engaging them.

Privacy and confidentiality

All the information was treated with confidentiality as the researcher did not allow the information to be shared with unauthorized persons.

Anonymity

The participants' identity was concealed. This was done by giving the participants coded names or numbers that was only identified by the researcher.

Researcher's responsibility

The researcher had the responsibility of sharing the findings with the other researchers, policy makers donor etc. interested in making a positive impact in this area and those who want to do further research in the dairy value chain.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1 Introduction

The purpose of the study is to determine gender roles in a dairy value chain. In this chapter, the researcher presents the research findings revealed after data analysis. The information is also interpreted and presented in form of graphs and pie charts. The of the respondents in this research were farmers aged between forty and sixty years.

The researcher had five key informants; three were milk collectors and two veterinary officers. All the milk collectors had a form four level of education while the veterinary officers one had a diploma level of qualification and the other had university degree in veterinary medicine. The veterinary officer with a diploma is forty three years of age and is employed by the government while the other one with a degree is self-employed. He is thirty two years old and has been in practice for about five years.

The chapter is organized according to the research questions of the study. To determine the questionnaire return rate, there were sixty questionnaires administered to the farmers and all of them were returned. The in-depth questionnaires return rate was also a hundred per cent.

4.2 Gender division of roles in a dairy value chain

A list of chores along the dairy value chain was listed and from the list men and women were asked to choose the tasks they perform. These chores were preparation of land for fodder

planting, planting of fodder, weeding of the fodder, harvesting feeds, buying of supplementary feeds, feeding of the animals, watering of the dairy cows, shed cleaning, parasite/disease control (spraying and vaccinations), milking and selling of milk. They were also asked to indicate the time taken to perform the tasks and frequency at which they perform the tasks.

Men and women involved in land preparation

From the research all respondents said this is an activity undertaken by men. Some respondent's answers were based on the fact that men own the land and have the authority to decide which part of land and how much of it should be put under fodder cultivation. Others said that this is a labour intensive activity that can only be done by men.

From the focus group discussions one responded said,

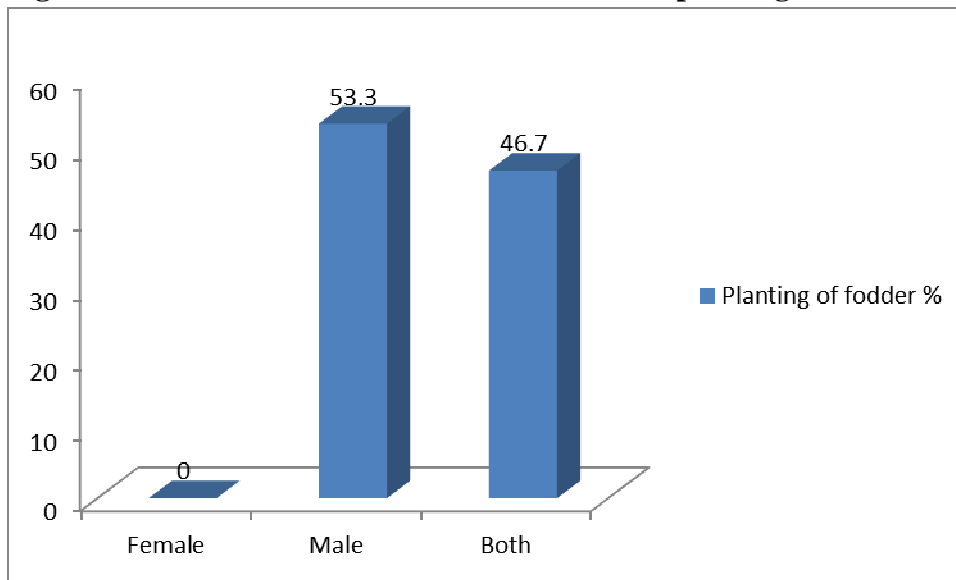
“Mimi mwenyewe hulima shamba ya kupanda nyasi ya ng’ombe kwa sababu ukiachia bibi, atapanda shamba lote nyasi na mtakosa mahali pa kupanda chakula” (I personally prepare land for fodder as wives can easily put all land under fodder leaving no land for planting food stuff). (A man, male focus group discussion, Kesses village)

Another respondent a said,

“Kazi ya kulima shamba halijalimwa na ‘tractor’ au ng’ombe in ngumu sana kwa mwanamke kwa sababu hii kazi inahitaji nguvu nyingi” (Ploughing land that has not been ploughed by either a tractor or by use of oxen is very difficult for women as this is a job that required a lot of energy). (A woman, female focus group discussion, Kesses village)

On the issue of planting fodder after the land has been prepared, some respondents said it is still a man's activity while others said that it is a chore that is done by both men and women as shown in the figure below.

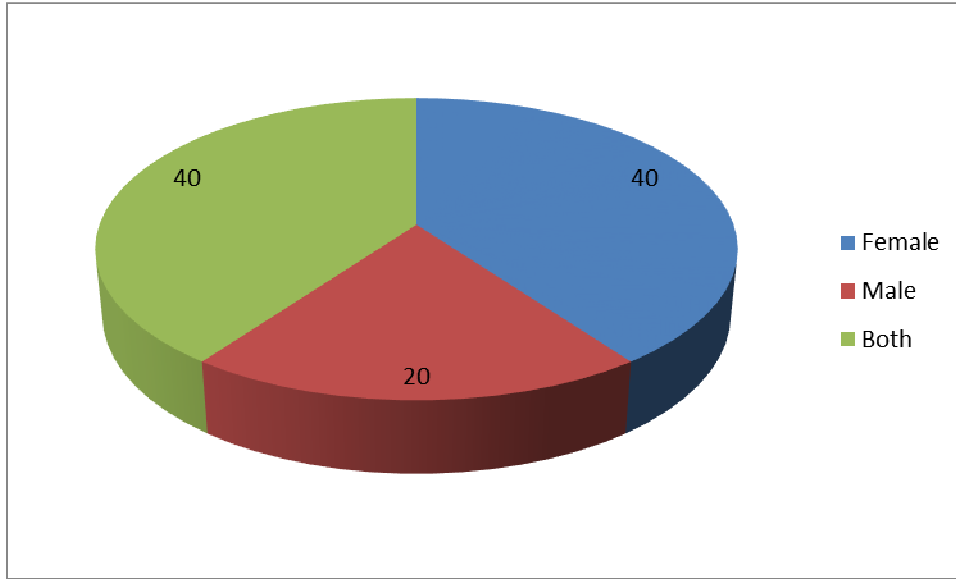
Fig. 4.1 Men and women involved in animal feed planting



53.3% of the respondents said this is a man's chore while 46.7% said this is a chore performed by both men and women. None of the respondents said it is an activity undertaken by women alone.

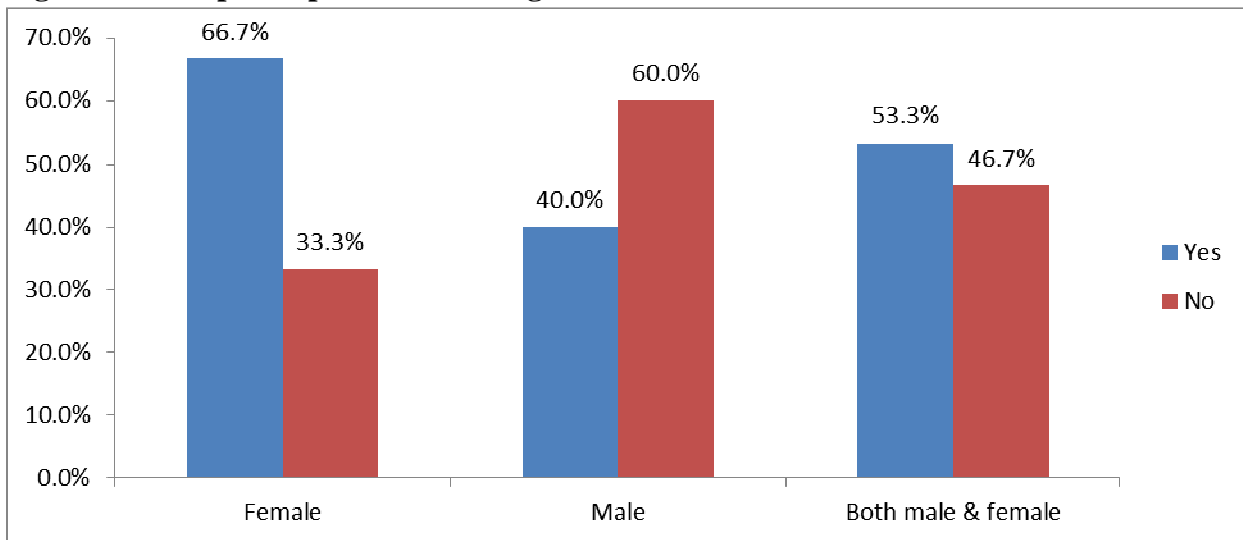
Weeding as an activity along the value chain is also performed by both men and women as shown in Fig.4.3. Although this chore is shared by men and women as per the 40% respondents, it also has to be noted that the chore is done mostly by women alone at forty per cent compared to the number of men alone at twenty per cent as shown in Figure 4.3.

Fig.4.2Percentage of men and women taking part in animal feed weeding



From observations, it was also evident more women than men took part in weeding the fields including animal feeds. Men would be seen walking along the farm and according to the respondents, they supervise the work on the farm.

Fig.4.3 Gender participation in milking



According to the research, milking is seen as a woman's task at 66.7% of the respondents agreeing to this while 40% said it is a man's job. These responses were informed by the respondents' culture which is diverse in this part of the County. From the focus group discussions it was noted that the participants felt that milking was a woman's job as said by one participant and this was almost unanimously supported by other participants. The respondent said,

“Kukamua ng'ombe ni kazi ya wanawake, ni aibu sana mwanamume mzima kupatikana akikamua ng'ombe” (Milking cows is the work of women, it is embarrassing for a mature man to be caught milking cows). (A man in a male focus group discussion, Ainabkoi village)

Another respondent said,

“Kazi ya kukamua ng'ombe ni ya wanawake tangu zamani, wazee watakupiga faini wakikupata unakamua ng'ombe”.
(Milking is the work of women since time immemorial, the elders will have you fined if they caught you milking cows). (A man in a male focus group discussion, Ainabkoi village).

This statement was also supported by majority of the participants who said their culture does not support men milking cows. Those who said both men and milk do milk were at 53.3% and this came from those whose culture does not prohibit them from milking and others felt that milking is work like any other and is just a means to an end which is getting money and milk for family use.

From observations, women were seen milking cows very early in the mornings, between six and seven in the mornings and also in the evenings between five and six. One of the milk collectors who collects milk directly from the farmers said,

“Wamama ndio hukamua ng’ombe kwa sababu saa ingine nikienda kuchukuwa maziwa, hupata bibi wa boma akikamua. Pia kimila yetu haikubali wanaume kukamua ng’ombe na hatuwezi enda kinyume na kimila yetu”,

(Women are the ones who milk because sometimes when I go to collect milk, I find the woman of the house milking. Besides, our culture does not allow men to milk and we cannot act contrary to our culture) (A man aged 27 years, key informant, Ainabkoi village).

Table 4.1 Gender roles in supplementary feed purchases

			Purchase feed		Total
			Yes	No	
Gender	Female	Count	17	13	30
		Percentage	56.7%	43.3%	100.0%
	Male	Count	26	4	30
		Percentage	86.7%	13.3%	100.0%
Total		Count	43	17	60
		Percentage	71.7%	28.3%	100.0%

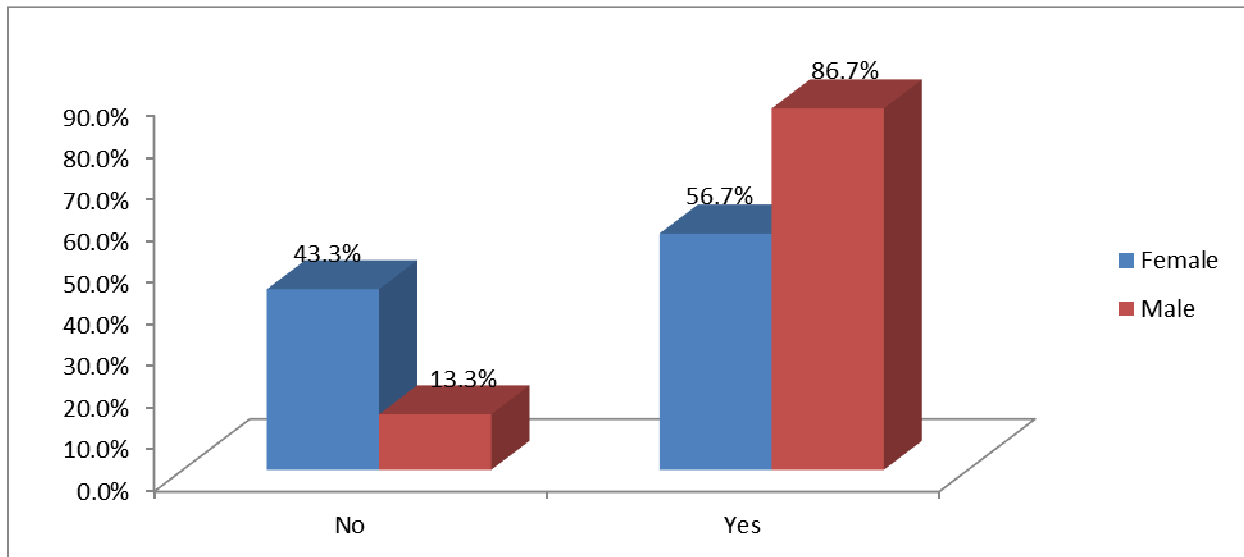
A part from normal grazing of the dairy cows, farmers also buy supplementary feeds for their animals to cater for or boost the nutrition required for the cows. For example lactating cows and those being milked are fed extra feeds to improve their health and increase milk production. In this activity, the number of men involved is higher at 86.7% than that of women at 56.7% as seen in Table 4.1. This is attributed to the domestic gender roles where most women are confined at home unlike men who find time to do other activities away from home.

A veterinary officer agreed with the individual respondents that more men than women buy animal feeds but the number of women doing so is increasing. The vet officer said,

“Kwa hii duka yetu ya kuuza vitu vya ng’ombe, sanasana utapata wazee wakinunua madawa na chakula ya ng’ombe kuliko wamama but pia wamama siku hizi wanajikakamua. Wamama saa ingine wanaachiwa pesa na wazee wao ili wanunulie ng’ombe chakula, wachache sana hujituma”, (In this agrovet shop, most of the time you will find men buying drugs and animal feeds for the cows but sometimes women will also come. Sometimes these women are given money by their husbands to buy the animal feeds and very few do so on their own initiative). (A man aged 29 years old, key informant, Iten market)

At the agro vet shop, the researcher observed more men than women asking and buying supplementary feeds for the cows. They would come on bicycles but mostly on motorbikes.

Fig.4.4 Selling of milk



From the data analyzed, more men at 86.7 per cent are involved in selling milk compared to the women at 56.7 per cent. According to the milk collectors, they receive milk from men more often than women and men are the ones who check and confirm delivery reports from and at the factories. One of the milk collectors said,

“Kila kitu kwa boma ni ya mzee, hata maziwa kwa sababu inatoka kwa ng’ombe wake. Hii ndio sababu wazee wengi wanaleta maziwa kwetu na kuhakikisha records ziko sawa kama njia moja ya kulinda mali yake”.

(Everything in a homestead belongs to men including milk because it comes from their cows. That is why most men deliver milk to us and also check and confirm delivery records as a way of taking care of his property) (A man aged 27 years, key informant, Maili tisa market).

In the focus group discussions it also emerged that more men are involved in selling milk more than women but some gave different reasons from that of ownership. For example one participant said,

“Men deliver milk to the collection points more than women because women have a lot of things to do at home like preparing children for school, washing and cleaning up. It also saves time when men deliver milk as we can take it on bicycles or motorbikes unlike women *wenye watapeleka kwa miguu*”. (A man in a focus group discussion).

4.3 Decision making in regard to sharing accrued profits.

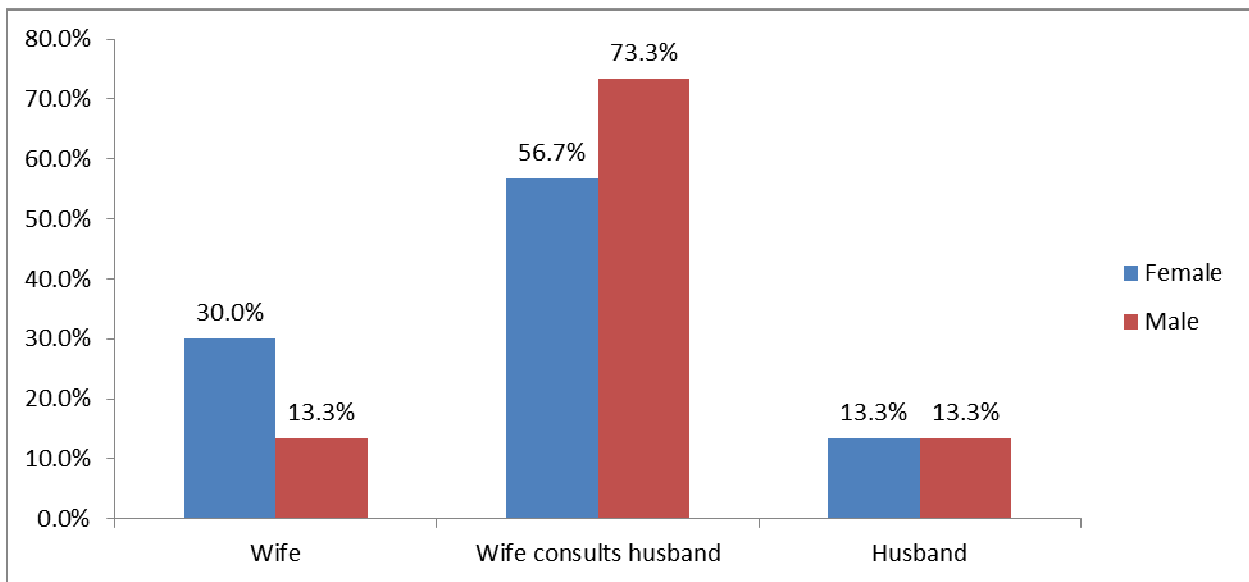
To determine who makes decision when it comes to sharing of profits accrued along the dairy value chain, men and women were asked to list other stages apart from sale of milk along the dairy value chain where revenue is accrued and who collects proceeds and how the proceeds are shared. They also responded to the question of property ownership which does influence decision making process and the results are shown in Table 4.2 and Figure 4.6.

Table 4.2 Property ownership

		Property ownership				Total
		Men ownership	Women ownership	Joint ownership		
Gender	Female	Count	9	4	17	30
		Percentage	30.0%	13.3%	56.7%	100.0%
	Male	Count	8	4	18	30
		Percentage	26.7%	13.3%	60.0%	100.0%
Total		Count	17	8	35	60
		Percentage	28.3%	13.3%	58.3%	100.0%

On the thirty women respondents, 30 per cent said property is owned by men, 13.3 per cent said property is owned by women and 56 per cent said it is a joint ownership. For the men respondents, 26 per cent said men own property, 13 per cent said property belongs to the women and 60 per cent said it is a joint ownership. Generally, joint ownership of property is more common in this county and this fact plays an important role in decision making.

Fig.4.5 Decision maker in sharing proceeds



Decision making in this case may have been influenced by the type of property ownership as the figure 4.6 above shows consultations between man and wife on how to share the proceeds from the milk sales. The number of men who agreed on consultation is even higher than that of women at 73.3 per cent and 56.7 per cent respectively. The number of men and women who said men make decisions is equal at 13.3 per cent. Decisions made by women were 30 per cent from women respondents and 13.3 per cent from men respondents.

On women being decision makers, a participant from the focus group said,

“Saa ingine wamama hudecide jinsi pesa itakanyotumika kwa sababu saa ingine sisi wazee tunafanya kazi town zingine na kwa vile maisha lazima iendelee na bills kama school fees zilipwe, mama hatangoja nitoke Nairobi ndio nimwambie alipie watoto school fees na ako na ako na pesa ya maziwa. Kitu muhimu hapa ni bora anieleze vile pesa ilitumika”.

(Sometimes women make decisions on how money is spend because sometimes us men work in other towns and because life must continue and bills like school fees have to be paid, a woman cannot wait for me to come from Nairobi to tell her to pay school fees for the children yet she has money from milk sales. The most important thing is for her to account for the money spent). (A man in a male focus group discussion, Kesses village).

This statement was agreed by most participants especially the women. On the other hand those who said decisions are made by men who believe that men own property and therefore have a right to decide on how his property will be shared within the family. A responded who said men make decisions said,

“Mimi kama head of the family huuamua jinsi pesa yangu itakavyotumika. Babu yangu alinifunza kuwa kudumisha ndoa, lazima niwe mstari wa mbele katika kila jambo linalohusu familia yangu na hivyo pia ndinyo bibi yangu ataniheshimu. Pia ukiachia bibi kazi ya kuamua jinsi pesa itatumika, utapata ya kwambi nyingi inaenda kusaidia watu wa kwao na kununua vitu vyenye havifai”.

(As the head of the family, I decide on how my money is spent. My grandfather taught me that for a lasting marriage, I must be at the fore front in every aspect that affects my family and that way my wife will respect me. Again, if you let your wife decide on how family money is spend, you will find that most of it will go towards helping her family and buying unnecessary things). (a man in a male focus group discussion, Kesses village)

This statement raised a lot of heated debate with some participants supporting while others disagreeing.

4.4 Perception of men and women regarding the activities in a dairy value chain

Uasin Gishu being a cosmopolitan county, different views were received regarding the various activities along the dairy value chain. The majority of the residents in this county are from

Kalenjin community with a few others from Luhya and Kikuyu communities have settled in the county and are also practicing dairy farming.

To find out how men and women felt about the activities along the dairy value chain, the respondents were asked to state their personal opinions or views on women or men performing activities listed in a dairy value chain. They also stated the factor/factors influencing their opinions. From most of the respondents, their views were influenced by their culture, beliefs and taboos. For example from the focus groups one man from the Kalenjin community had this to say,

“Mimi najua tangu utotoni kuwa kazi ya kukamua ng’ombe ni ya wamama na hii tulifunzwa na mababu zetu. Kwa nini wakati huu kwa sababu ya kuwa digital nigeuke kimila zetu?” Na nyinyi mnaogeuka hii kimila yetu wacha niwaambie, wazee wale ambao wanaenzi kimila yetu wakiwapata mnakamua, watawapiga faini”. (Since my childhood, milking cows is a women’s job and this, we were taught by our fore fathers. Why in this era of civilization would I go against our culture? And those of you going against our culture, I tell this, the old men who value our culture will fine you if they catch you milking) (A man in a focus group discussion, Ainabkoi village).

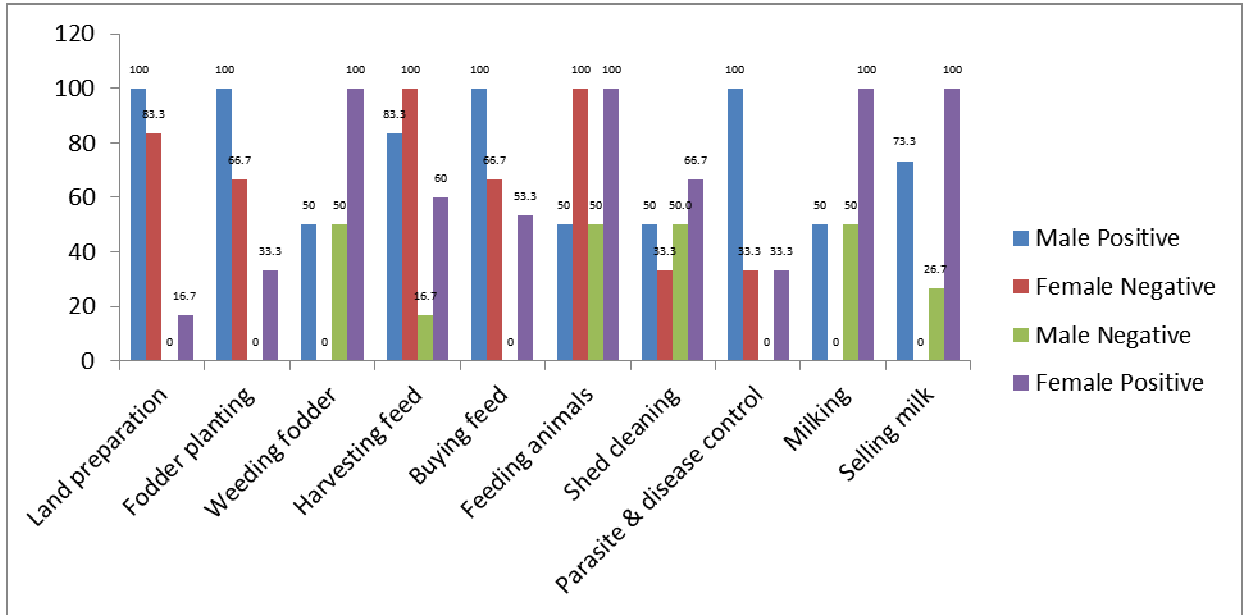
Another participant from Kikuyu community had a different view on the issue of milking. According to him the Kikuyu community has not restrictions when it comes to work as long as it caters for your needs. He said,

“Nyinyi wakalenjini mna kimila duni sana! Kwetu, hakuna kazi ya wamama au ya wazee, kazi ni kazi bora ukulipe. Na nikuulize, bibi yako akifa leo ng’ombe hawatakamuliwa?” (You Kalenjins have an inferior culture! In our land, there is no work designated for women or men, any work is good as long as it pays. And if I may ask, if your wife passed away today, wouldn’t the cows be milked?). (A man in a focus group discussion, Mibei village)

The statement by the Kikuyu participant was supported by those from Luhya community who also felt that milking is not a job that can be done by either men or women.

The Figure 4.6 shows how men and women reacted to the activities in a dairy value chain.

Fig. 4.6 Perceptions of men and women on dairy value chain activities



Land preparation

From the figure, men who responded positively towards land preparation was at 100 per cent and 83.3 per cent of women felt it is a job to be performed by men. Various factors influenced both men and women’s decision and this ranged from ownership, nature of the work and availability of either gender at home. A female respondent who did not agree on preparing land for fodder planting had this to say;

“Shamba ni ya wazee na sisi kama mabibi wa kikalenjin hatukubaliwi kulima ila tu wakati tunapalilia mimea”.

(Land belong to our men and as Kalenjin wives we are not allowed to cultivate land unless we are weeding what has been planted). (A woman in a women focus group discussion, Ainabkoi village)

Observations on the various activities going on the communities also showed that men were the only ones ploughing land with either oxen or tractors and both men and women were seen weeding the fields.

Weeding fodder

On weeding animal feed, a number of men at 50 per cent felt it is a light duty that should be performed by women while a hundred per cent of women felt it was a duty that they can do without any problems. This perception was mostly influenced by the nature of work and had no cultural influence.

Shed cleaning

On cow shed cleaning 50 per cent of men did not feel negative about it and 50 per cent were not comfortable with it. Those who were not comfortable felt it was a dirty demeaning job like one respondent who said;

“Kazi ya kutoa samadi kwa boma la ng’ombe si kazi ya kujivunia kwa sababu ni chafu sana. Ni afadhali ifanywe na wanawake kwa sababu wao wamezoe kupanguza uchafu hata ya watoto. Pia wamama hutumia samadi kutengeneza nyumba”, (This work of cleaning cow sheds is a demeaning job and also a dirty one. It is better performed by women because they are used to cleaning dirt including that of children. Also women use cow dung to clean houses). (A man in men focus group discussion, Mibei village)

Those who had negative perceptions on this activity did not cite any cultural restrictions but their opinions were based on the nature of the activity.

Milking

As an activity it had fifty per cent of men with a positive perception and another fifty per cent of the respondents had a negative perception. A milk collector within the study area said that their

culture does not allow men to milk as it is a taboo although he did not say what happens to a man if he milks. He said;

“Sisi kikwetu wanaume hawakubaliwi kukamua juu ni vibaya, pengine kama anatomia machine bure na mikono.....ni ngumu”.

(In our culture men are not allowed to milk maybe unless they use machine otherwise.....it is hard). (A man aged 29 years, a key informant, Maili tisa market).

The men respondents whose perceptions on milking was positive came from Kikuyu and Luhya communities but those who didn't agree on milking were from the Kalenjin community whose culture prohibits men from milking.

Selling Milk

This activity had different perception especially from men where a number of men at 73.3 per cent felt it was alright for them to sell milk because that is where money is in the whole value chain and a few at 26.7 per cent did not like the work. Of those who did not feel comfortable selling milk were mostly opposed to vending milk to the consumers. They felt it was an embarrassing duty that should be done by children and women and one of them had this to say:-

“Kuuza maziwa ni kazi ya watoto na bibi. Watu wataniangalia vipi wakiniona natembea na mtutungi and kikombe mtaani nikiuza maziwa ili hali mimi ni mtu wa heshima”.

(Selling milk is the work of children and women. How will people feel about me if they saw me walking around with a jar and a cup in the village selling milk and yet I am an honourable person?). (A man in a men focus group discussion, Mibei village).

From observations, more men than women were seen delivering milk at the collection centers on motor bikes and bicycles. They would also be seen signing the milk collection sheets and sometimes asking when they will be paid, evidence that they are selling milk.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter provides the summary of the findings and gives suggestions and recommendations on what needs to be done to ensure equity in gender roles, sharing of proceeds and change the gender perceptions on the activities in a dairy value chain.

5.1 Summary of the findings

From foregoing discussions it is evident that gender roles in a dairy value chain are slowly changing from the previous cases where women were fully confined at the lower levels of the value chain and men more visible at the higher levels of the value chain where benefits accrue. In terms of division of labour, there is more or less equality, for example women are seen doing jobs initially reserved for the men for example some do take part in parasite and disease control at 33.3 per cent as shown in Figure 4.6.

The analysis on who makes decisions on how proceeds are shared in the family indicates that man and wife consult each other on how to distribute proceeds among the family needs. This is so because both man and wife are almost equally involved in all the activities along the value chain. They also jointly own the property giving each person a significant influence on how the proceeds are used in the family.

The perception on the activities in the value chain is also changing despite the cultural beliefs, restrictions and taboos that still confine women in the lower levels of a dairy value i.e. shed

cleaning and milking. For example men also take part in milking of the cows and cleaning cow sheds because they understand the benefits accrued from doing these kinds of jobs. This change in perception is brought about by gender sensitization where the respondents are taught about the importance of gender equality. Education has also played part as women have come to understand their rights within the society and men are becoming more understanding and trying to ease the women's burdens.

5.2 Recommendations

- ❖ To achieve total equity in gender roles in any value chain, the researcher suggests that more education opportunities should be availed to women to learn and understand their rights within the society.
- ❖ The society should be encouraged to shun retrogressive culture that denies women rights to own property and make decisions.
- ❖ The farmers should be encourages to embrace new technology that makes work easy and more interesting for both men and women.
- ❖ Gender sensitization campaigns should be held to enlighten the society on gender equity.
- ❖ More innovations need to be done to come up with simple and easy to use technologies that can be used to ease work for all including those with low levels of education.

5.3 Conclusion

There is a considerable improvement of gender relationship as more people are recognizing the role of women in development. They are also being recognized in decision making process as seen in this research.

Although there is some improvement, we still have gender discrimination in role allocation in our societies brought about by retrogressive culture and taboos and as we head towards the Millennium development goals deadline, the researcher wishes to encourage all stakeholders in the dairy industry to promote gender equity and empower women as part of achieving the Millennium Development Goal number three. This will not only develop women but the entire society and thus contributing towards achieving Millennium Development Goal number one of eradicating extreme poverty.

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Appendix 1: Consent letter

Dear Sir/Madam,

My name is Immaculate Nafula Wafula. I am, carrying out a research on the gender roles in a dairy value in Uasin Gishu County.

This study is in partial fulfillment of a Masters of Arts degree in Gender and Development Studies from the Institute of Anthropology, Gender and African Studies of the University of Nairobi.

I am requesting you to voluntarily participate in this study by taking part in an interview. You are being asked to participate in this because you are a stakeholder in the dairy sector.

If you agree to be a participant, the interview will take one hour of your time. There are no known risks associated with participating in this interview, neither are there direct benefits to you for participating in the interview.

With permission, this interview may be audio recorded. You are free to withdraw your consent and to discontinue participation in the in interview and study altogether at any time without prejudice.

This interview is fully anonymous and confidential. Pseudonyms and codes shall be used to protect your identity. The information obtained from this study may be used in the public domain especially in the dairy sector, but mainly in the University of Nairobi Library

Participants Signature:

Appendix 2: Survey Questionnaire

1. Age of the respondent

20- 30 31 – 40 41 – 50 Above 50

2. Gender

Male Female

3. Who is actively involved in the dairy farming?

Husband Wife

4. From the list below, which activities do you do? (Tick) Add others if not listed.

- ❖ Preparing land
- ❖ Planting animal feed
- ❖ Weeding animal feed
- ❖ Feeding animals
- ❖ Spraying against ticks
- ❖ Milking
- ❖ Cleaning cow shed
- ❖ Selling of milk
- ❖ Treatment against disease

5. Who or what determines the kind of activities to be done by men and women?

Husband Wife

6. How much time do you devote on each activity listed above and how often do you perform
The task/s?

.....
.....

7. What is your access to information on the various activities along the value chain?

.....
.....

8. Are there any specific activities that need to be handled by either men or women? If yes, what
they?

.....
.....

9. What are your thoughts on men/women doing activities thought to belong to the opposite gender?

10. What influences the gender division of labour?

11. Apart from sale of milk where else is income generated?

12. Who receives/collects proceeds from the sale of milk?

Husband Wife

13. How are these proceeds shared and who decides on the proportions?

14. What are men's and women's entitlements in regard to sharing proceed?

Appendix 3: Key Informant Guide (Milk Collectors & Vet Officers)

1. Age of respondent.

20 -30

31-40

41-50

above 50

2. Gender

Male

Female

3. How long have you been working here?

4. In your opinion, who are actively involved in the dairy farming and why?

5. Who delivers milk to the collection centre?

Men

Women

6. What means of transport do men/women when delivering milk?

7. Who signs the contract for the sale of milk?

8. What is your perception towards men/women dairy farmers?

9. In your opinion what is the men/women's access to the market information?

10. Who do you speak to when discussing issues of the dairy cows/farming and at what level?

11. Who calls/consults you whenever a household needs veterinary services/advice? (Answer if applicable)

Wife

Husband

12. Who carries out treatment/dairy management instructions? How do you know?

13. In your opinion, do you think there are uneven power relations between men and their wives in this community or gender related discrimination/exclusions?

NB: Answer question if applicable to your area of work.

Appendix 4: Focus Group Discussion guide

1. What kind of activities do women and men do in a dairy value chain and why?
2. How often or how much time is devoted to these activities?
3. What choices/alternatives they have regarding the activities performed along the chain?
4. What are the norms and values regarding gender roles?
5. Who determines the gender roles?
6. What influences gender division of labour?
7. How would you describe gender relationship within this community?
8. What is the visibility/value granted to women/men's roles in a dairy value chain?
9. Are gender roles changing? If yes, how and in what ways?
10. Are there any restrictions to women owning property? If yes/no how does it affect their role in decision making?

Appendix 5: Work plan

Activity	2014											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Proposal Preparation												
Data collection												
Data entry												
Data analysis and report writing												

Appendix 6: Research Project Budget

AREAS OF EXPENDITURE	AMOUNT (KSHS)
Transport and internet	15,000
Stationery	5,000
Printing/photocopying/binding	7,000
Airtime	4,000
Total	31,000