

**GENDER INEQUALITIES IN AGRICULTURE IN GATANGA DIVISION,
MURANGA COUNTY**

JACQUELINE GICHERU

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DECLARATION

This research project is my original work and has not been presented to any other examination body.

Name: Jacqueline Gicheru

N69/63846/10

Sign: _____

Date _____

This project has been submitted for presentation with my approval as a university supervisor

Dr. Stevie M. Nangendo: _____ Date _____

DEDICATION

I dedicate this work to my loving parents, Dr. and Mrs. Gicheru, whose encouragement has been my source of inspiration and setting a strong foundation for education at my early age and their unwavering support morally, spiritually and materially to make me who I am.

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TABLE OF CONTENTS

LIST OF TABLES	iii
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Statement of the problem	5
1.3 Research objectives.....	5
1.3.1 Main objective	5
1.3.2 Specific objectives	5
1.4 Justification of the study	6
1.5 Scope and limitations.....	6
1.6 Definition of key terms	21
CHAPTER TWO	7
LITERATURE REVIEW	7
2.1 Introduction.....	7
2.2 Gender Inequality in Developing Countries	7
2.3 Gender inequality in agricultural sector.....	9
2.4 Gender inequalities in agriculture.....	11
2.4.1 Cultural factors.....	11
2.4.2 Limited access to agricultural resources	12
2.4.3 Social and political capital	14
2.4.4 Exploitation of women working in agricultural position.....	17
2.4.5 Discrimination of women	17
2.4.6 Conflicts and natural disasters	18
2.4.7 Poverty	18
2.5 Promotion of Gender Equality in agriculture.....	19
2.6 Theoretical Framework.....	20

CHAPTER THREE:	23
METHODOLOGY	23
3.1 Introduction.....	23
3.2 Study location	23
3.3 Target population	25
3.4 Sampling techniques and Sample size	25
3.5 Research instrument.....	25
3.6 Data collection procedure	25
3.7 Data analysis	26
CHAPTER FOUR	27
GENDER INEQUALITIES IN GATANGA DIVISION	27
4.0 Introduction.....	27
CHAPTER FIVE	34
SUMMARY, CONCLUSION AND RECOMMENDATION	34
5.1 Introduction.....	34
5.2 Summary of the findings.....	34
5.3 Conclusions of the study.....	36
5.5 Recommendation for further study	36
APPENDICES	45
Appendix 1: Letter of Introduction	45
Appendix II: Questionnaire.....	46
Appendix III: Youth and Agriculture	49

LIST OF TABLES

Table 4.1 Education levels.....28

Table 4.2: Agricultural activities of the respondents29

Table 4.3: individual responsible in determining planting time and planting
responsibility30

CHAPTER ONE INTRODUCTION

1.1 Background of the Study

The bedrock of agriculture and agricultural development in developing countries of sub-Saharan Africa is rural development, without which all efforts at agricultural development will be futile. A large majority of the farmers operate at the subsistence level, with intensive agriculture being uncommon. A characteristic feature of the agricultural production system in such countries as Nigeria is that a disproportionately large fraction of the agricultural output is in the hands of smallholder farmers whose average holding is about 1.0-3.0 hectares (Schultz, 2004). Also, there is very limited access to modern improved technologies and their general circumstance does not always merit tangible investments in capital, inputs and labour. Household food and nutrition security relies heavily on rural food production and this contributes substantially to poverty alleviation. Consequently, the first pillar of food security is sustainable production of food (Young, 2009). It has been noted that in the early 1980s, while the population in many African countries grew rapidly, food production and agricultural incomes declined (Rugh, 1984). In many of the countries the diminishing capacity of agriculture to provide for household subsistence increased the workload shouldered by women as men withdrew their labour from agriculture. Hence, the increased attention that is being given to the role of smallholder subsistence agriculture in ensuring food security of the continent, since some 73% of the rural population consists of smallholder farmers (Morris and Maistro, 1999)

FAO (2008) states that inadequate access to agricultural inputs and supporting mechanisms leads to adverse effects such as losing out on vital benefits from agriculture. In the Middle East, Asia, Caribbean countries and sub-Saharan Africa the participation of women in agriculture has significantly grown to fifty percent from 1980 (Becker, 1993). This shows that women continue to be actively involved in agriculture yet they are not adequately represented in the farming production chain. In East Africa, for instance, fifty percent of women are involved in agriculture. However, the household burdens of

children care and household chores as well as cultural norms have restricted them from fully participating in agricultural activities. This has also denied them from getting maximum benefits even though they provide most of the agricultural labour (World Bank 2009).

Agriculture provides a livelihood for 86 per cent of rural poor in Sub-Saharan Africa, as well as for some people living in peri-urban and urban areas (World Bank, 2007). Those who rely on small-scale agriculture as their main livelihood or who provide agricultural labour for others are among the world's poorest and most vulnerable. Women constitute a high percentage of this vulnerable group. According to FAO (2008), more than 70 per cent of the economically active women in developing countries work in agriculture, cultivating subsistence or commercial crops and/or rearing animals.

Apart from providing a means for poor rural people to meet many of their own nutritional needs, non subsistence agriculture can also contribute to economic capacity and poverty reduction in rural areas, both by providing farmers with marketable resources or by offering avenues for paid work (World Bank and Malawi, 2007, Fontana and Paciello, 2005). This can in turn reduce social inequalities including gender inequality and help to boost economic growth. There are consistent gender disparities in access to, and benefits from, agricultural technologies, services, and inputs in developing countries (World Bank 2009). Despite the significant roles women play in subsistence farming they continue to have poorer command over a wide range of productive resources and services than men (World Bank 2009). For example, while 40%-60% of farmers in sub-Saharan Africa are women, they control less land. Specifically, women constitute less than 20% of all landholders in sub-Saharan Africa. In addition, they are less likely to use purchased inputs such as fertilizers, improved seeds, mechanical tools, and equipment (World Bank 2009).

Conversely, female membership in agricultural marketing cooperatives is generally low and yet they play a major role in the marketing of agricultural produce. They also lack important information on the prices of marketing systems because it is sometimes often

provided only to males by extension agents (Mugwe, 2005). Therefore, poor female farmers tend to occupy particular niches in the marketing systems, for example, trading in fresh and highly perishable produce and males in non-perishable ones (World Bank 2009).

Many agricultural projects still fail to consider the basic questions of gender differences in the access to resources, roles and responsibilities as well as the potential impacts of interventions in the agricultural sector. Often there is an assumption that as long as there are improved technologies and interventions, men and women will benefit equally when in fact they may not (World Bank, 2001). For example, Quisumbing and Maluccio (2000) found that targeting development interventions to only one person within a household could potentially decrease the effectiveness of development interventions. This is because the allocation of decisions within a household is not always based on consensus and this can undermine access to critical resources which can result into economic and social consequences. To ensure that both men and women are heard in research and policy processes, meaningful representation in policy bodies, management positions, research and development to enhance their decision making need to be addressed (Mugwe, 2005)

Promoting women's organizations and building their social capital can be effective tools for women's empowerment. In fact, it can be a successful way of improving information exchange and resource distribution. This can also lead to increasing access to resources such as credit as well as improving the bargaining powers of women in marketing and managing their incomes. In summary, ignoring gender concerns can lead to project failure and this can create a backlash. Ignoring gender issues can also result in projects that are technically successful but which negatively affect men, women, and children.

Gender can be defined as a set of characteristics, roles, and behavior patterns that distinguish women from men socially and culturally and relations of power between them (Women Information Centre, 2005). These characteristics, roles, behavior patterns and power relations are dynamic, they vary over time and between different cultural groups because of the constant shifting and variation of cultural and subjective meanings of gender (Hirut, 2004). The differences in power relations between men and women results

into different gender and social roles as well as socially appropriate characteristics and behaviors. All are culture-specific. Kabira and Masinjila (1997) identified action, locus, visualization and power as components in the identification of different roles of men and women.

Action refers to sexual division of labor. Actions are generally categorized into three: productive, reproductive, and community activities. Productive activities are those accomplished for income generation through the production of goods and services. On the other hand child bearing and nursing, as well as activities performed for the maintenance of the family, such as fetching water, cooking, and collecting firewood are termed as reproductive, while community activities are those performed for the welfare of the general community, such as attending meetings (Morris, and Maistro, 1999). In most cultures, reproductive activities are defined to be the roles of women, whereas productive and community activities are heavily dominated by men. Conversely, locus shows the environment in which men and women operate. It is important in identifying gender gaps, particularly working at home or away from home. This is usually connected to the freedom of movement and whether one has access to better income generating employment or not. In most societies women are the ones who mostly working at home in the maintenance of the household or very close to the home doing both household activities and small-scale production and trading. By contrast, it is invariably the men who work mostly away from home and are employed in better paying jobs. As a result, the place of work of men and women, in such contexts, is strongly associated with the level of autonomy and economic empowerment they have (Mukuria et al, 2005).

Visualization is recognizing and being recognized due to certain activities and being rewarded materially and also by privileges. Power is the ability to make decisions and to force others to do what the power holder prescribes. The deeply-rooted patriarchal culture prevalent in most societies attributes power to men both at home and the community level. Such persistent attribution of roles to either sex is referred to as gender stereotyping (Morris, and Maistro, 1999).

1.2 Statement of the problem

Gender inequality in the agriculture sector in Gatanga has been a predominant issue for many decades. This is because access to assets, productive resources, and education remains low especially for women. This has been attributed to various issues such as poverty, high rates of unemployment, increased demand for agricultural land, poor infrastructure, and lack of education as well as diseases especially the HIV/AIDS pandemic. In Gatanga constituency gender inequality in education has been high where enrolment of boys has been 52% compared to that of girls which stands at 48% with the dropout rate for boys being 5.2% compared to that of girls 8.8%. The primary school going population (6-13 years) makes up to 20.3% of the district total population and was estimated to be 131,235 in 2011 with the highest percentage being that of boys (Ministry of Education, 2008). The other factors that contribute to gender inequality in the study region include drug abuse (National Council for Population and Development (NCPD), 2005). Where drug abuse is most prevalent, male participation in agricultural activities is quite minimal since they are incapacitated mentally and physically. Though women in the region are trying to enlist men into active participation in support groups related to agriculture, cultural constraints such as early marriages still remain a hindrance. This study will be guided by the following research questions:

- i. What factors promote gender inequality in agricultural production in Gatanga Division, Murang'a County?
- ii. What are the challenges that men, women and the youth face in agricultural production?

1.3 Research objectives

1.3.1 Main objective

To establish the causes of gender inequality in agriculture in Gatanga Division, Murang'a County.

1.3.2 Specific objectives

- i. To explore the factors that promote gender inequality in agricultural production.
- ii. To determine the challenges that men, women and youth face in agricultural

production.

1.4 Justification of the study

With limited resources and a high population density that requires sufficient annual food production, it is essential to ensure that both genders in the study area are involved in agriculture. FAO (2008) estimates that involving women in agriculture could raise productivity up to 20%. Moreover, with the high levels of unemployment and drug abuse as well as HIV and AIDS in Gatanga Division, it is necessary to involve the men and youth in positive income generating activities. This will influence them to engage in acquiring and developing innovative skills in agriculture and help in reducing the rates of crime and mortality rates in the area. Therefore, this study was undertaken to determine measures of mitigating these negative factors in agriculture and enhance equal participation among men, women, and youth is enhanced to ensure food security.

1.5 Scope and limitations

The research covered Mabanda and Gatunyu towns in Gatanga Division. The area covered for each of the towns was around twenty-four square kilometres. The collection of data was carried out in areas where farmers had applied existing participatory agricultural methodologies with linkages to gender utilization of these skills and their outcomes. Hindrances that were anticipated in the study included: poor roads as this study was to be done in the villages. The study anticipated constrains such as limited finances and time resources. The researcher drew a time schedule and budget that enabled the study to be completed within the required time. The study also anticipated unwillingness by respondent's financial managers and credit officers to reveal information, which was thought to be confidential. However, the researcher assured the respondents that the information shared would be held confidential and would be used for academic purposes only.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature on gender in agriculture, gender inequality in agriculture and gender-related studies in agriculture in other countries and Kenya.

2.1.1 Gender Inequality

World Bank et al. (2009:317) states that “worsening economic times and environmental shocks typically have more harmful impacts on women as compared to men, and on resource-poor rural women, compared to poor women living in urban areas.” This situation has been further heightened by the fact both men and men are migrating to the urban areas in search of white-collar jobs and non-farm wages. Women, especially those in the rural areas, are involved in the production of staple foods which are mainly consumed by the poor and which requires intense labour. To enable equity for both genders access to agricultural inputs and support services should be enhanced to reduce vulnerabilities such as poor production, poor health and proper planning and forecasting for timely agricultural activities. Moreover increasing opportunities to education, capital, land, water, as well as financial resources to initiate agricultural activities will help in advancing food security.

2.2 Gender Inequality in Developing Countries

The issue of gender inequality can be considered as a universal feature of developing countries. Unlike women in developed countries who are, in relative terms, economically empowered and have powerful voices that demand an audience and positive action, women in developing countries are generally silent and their voices have been stifled by economic and cultural factors (UNDP, 2005). Economic and cultural factors, coupled with institutional factors, dictate the gender-based division of labor, rights, responsibilities, opportunities, and access to and control over resources.

Educations, literacy, access to the media, employment, decision-making, among other

things are some of the areas of gender disparity. Increase in education has often been cited as one of the major avenues through which women are empowered. Education increases the upward socio-economic mobility of women, creates an opportunity for them to work outside the home and enhances husband-wife communication (UNDP, 2005).

In Demographic and Health Surveys (DHS), school attendance ratio and literacy rates are used as measures of education (Mathenge, 2009). The former shows the ratio of girls' school attendance to that of boys'. As far as primary school level is concerned, the proportion of females attending primary school in developing countries in general and in sub-Saharan African in particular is found to be lower compared to that of males. For instance, among females of primary school age, only 17% of them in Niger (in 1998) and 21% of them in Burkina Faso (in 1998/99) were attending school, while the figures for males were 24% and 29%, respectively (Mukuria et al., 2005).

The gender gap in access to education is more pronounced at secondary and higher levels in sub-Saharan African and southern and western Asia. According to UNFPA (2005), based on the 2001/02 millennium indicators data base of the United Nations, the ratio of females per 100 boys enrolled in secondary education was 46% in Benin, 57% in Equatorial Guinea, 60% in Cambodia, 62% in Djibouti and 65% in Burkina Faso. Generally, the report shows that, in most developing countries, gender disparities in access to education increase with increasing level of education. Among 65 developing countries for which the required data were available, about half have achieved gender parity in primary education, 20% of them achieved gender parity in secondary education, and only 8% of them in higher education (UNFPA, 2005). Developing countries exhibit considerably lower literacy rate where women are the most disadvantaged. Adult literacy rates is 76% and 99% in developing and developed countries, respectively, indicating that the latter contribute only about 1% to the world's illiterate people (UNFPA, 2005)

2.3 Gender inequality in agricultural sector

African women have begun to make major demands for their participation and inclusion in the policies and economic processes relevant to agriculture. Indeed, they have started to develop and promote local expert materials in the field of agriculture (Longlands, 2008). Through these materials, being those which emerge out of consultation with women farmers on their needs and opportunities, we now know from existing evidence that there are gender differentiations of immense dimension within African agriculture. The position and capability of women meeting the challenges of agricultural development cannot be overemphasized (Kishor, 2005). Women make significant contribution to food production and processing, but men seem to make more of farm decisions and control the productive resources.

It is common knowledge that gender inequality is one of the most pervasive forms of inequality, particularly because it cuts across other forms of inequalities (Joshi, 1999). Different rules, norms and values govern the gender division of labour and the gender distribution of resources, responsibilities, agency and power. These are critical elements for understanding the nature of gender inequality in different societies. Gender segmentation in household arrangements in sub-Saharan Africa is prevalent in the face of highly complex lineage-based homesteads. Much of sub-Saharan African is patrilineal, with women's access to land being through usufruct rights through their husband's lineages. Since women's obligations to the family include provision of food and caring for their children, they are granted this access to enable them carry out these responsibilities (Kabeer, 1999).

Women's low participation in national and regional policy-making, their invisibility in national statistics and their low participation in extension services have meant that those issues of most concern to women have been neglected in the design and implementation of many development policies and programmes. In some countries such as Benin Republic, the programmes developed were far from addressing the main concerns of women as they were neither involved in policy making decisions nor were they directly

consulted to articulate their needs (Jha, 2008). In some countries, despite legislative and tenure changes in favor of smallholders, women continued to be placed in a disadvantaged position in terms of access to land. Women's access to land was rarely discussed and thus their benefits from land reforms were few (Jha, 2008).

In the nine countries examined by Franklin (2003) it was in Africa in general that women are present in greater degrees in agricultural/rural organizations, they tend to comprise a low proportion of the membership and are often not represented in the higher levels of leadership. While women's membership is most often limited by their lack of formal land ownership, many rural organizations do not sufficiently concern themselves with the needs of rural women. Women's participation as office holders in these organizations tends to be even more limited. The most striking example is in Zimbabwe, where despite the fact that women constitute 75% of the members in the Zimbabwe Farmers Unions, only 5% of the officials are women (Ayodo, 2011). The largest numbers of women decision-makers are found in Sudan, where 14% of the office holders in agricultural cooperatives are graduate women (Deininger, 2003).

In Africa, few women hold policy-making positions at the national level and those that do tend to be concentrated in social ministries such as education, health and women affairs (Chege and Sifuna, 2006). Only rarely do women hold such positions in technical ministries such as agriculture, which has far-reaching implications for the policies generated there. Overall, women hold an extremely low number of decision-making positions in the ministries dealing with agriculture and rural development. It is clear that the sharing of decision-making between genders varies substantially from country to country and among different cultural and ethnic groups within the same country. While women's decision-making powers tend to increase in many countries when the husband is not present, men may remain involved in many of the most important decisions (Floro and Wolf, 1991).

Women shoulder the primary responsibility for food security in Africa yet development agencies have devoted minimal resources to researching the impact of their agricultural

policies and new techniques on the wellbeing of Africa's women farmers (Hertz, 1991). Now is the time to push for a paradigm shift: the urgent need for a gendered approach to agricultural policies in Africa.

The supporting argument is that women are an integral part of the African farming structure and that the dominant agricultural policies developed for Africa, with the disproportionate involvement and influence of external experts, have ignored this gender dimension at a very real cost to African agriculture and to gender equity within the continent (Hirut, 2004). The institutional reality remains that of operational inattention to gender issues in agriculture and related areas such as transport and microfinance. A disturbing feature of this inattention is that it coexists with public statements that actively promote participation and consultation as part of the development agenda.

The participatory protocols and measures necessary to ensure that gender is integrated into this process have not been put in place. In the absence of a willingness to begin setting up precise measures around the gender split, the benefits within a gender mainstreaming paradigm may not be realized. The paradigm which disregards women's problems and contributions in relation to the agricultural economy of Africa is likely to stay in place and should not be allowed as its consequences are likely to be unfavorable to all concerned (Schuler and Hashemi, 1994).

2.4 Gender inequalities in agriculture

2.4.1 Cultural factors

Gender inequalities in the distribution of resources, such as land, water and credit, make it very difficult for women to move beyond subsistence agriculture. For example, in sub-Saharan Africa, women are often excluded from irrigation schemes because they are not land owners or household heads. In many countries statutory or customary laws still restrict women from owning land or from inheriting land from their husbands or families (Sen and Batliwala, 2000). Women may also have restricted access to markets because they are unable to transport their goods, they lack basic knowledge of business and accountancy, or because - when their traditional crops become lucrative - men may

appropriate them (Quisumbing and Pandolfelli 2011).

One of the areas of disparity between males and females is related to the difference in their employment status which is manifested by occupational segregation, gender-based wage gaps, and women's disproportionate representation in informal employment, unpaid work and higher unemployment rates (UNFPA, 2005). As women in developing countries have low status in the community, the activities they perform tend to be valued less; and women's low status is also perpetuated through the low value placed on their activities (March et al., 1999).

Women's limited access to education, employment opportunities, and the media, coupled with cultural factors, reduces their decision making power in the society in general and in a household in particular. Regarding their participation in decision-making at the national level, though the number of women in national parliaments has been increasing, no country in the world has yet achieved gender parity. According to the millennium indicators data base of the United Nations, the percentage of parliamentary seats held by women in 2005 was 16% at the world level, 21% in developed countries, and 14% in developing countries. This low representation of women in national parliaments could be due, among others, to the type of electoral systems in different countries, women's social and economic status, socio-cultural traditions and beliefs about women's place in the family and society, and women's double burden of work and family responsibilities (UNFPA, 2005).

2.4.2 Limited access to agricultural resources

Women have limited access to agricultural services and inputs and are more likely to lack assets as well as to grow more subsistence crops (World Bank 2009). Women farmers are more likely to be asset-poor. In sub-Saharan Africa, for example, it has been calculated that agricultural productivity could increase by up to 20 percent if women's access to such resources as land, seeds, and fertilizers were equal to men's (FAO 2011). Yet women still face serious constraints in obtaining essential support for most productive resources, such as land, fertilizer, knowledge, infrastructure, and market organization

(World Bank 2009). The ease of obtaining agricultural services and inputs is even more important in light of the heavy workloads of women and time constraints they face outside the agricultural sector. Although rightly contending that the effectiveness of development strategies hinges on reaching African smallholders, agricultural experts seldom recognize that most of them are women (World Bank 2009). The engagement of women in farming is commonly associated first and foremost with a food security agenda (World Bank 2009). This statement is certainly true; however, such a narrow view limits the engagement of women in commercially-oriented crops and does nothing to help women achieve their broader livelihood goals, improve living standards, access to clean water and better houses. In many situations, women combine both food production and commercial farming, although often on a small scale (Mason, 1986). In sub-Saharan Africa, the gender division of activities in crop cultivation can be quite complicated, with different fields being cultivated for different purposes by men and women (World Bank 2009). Women often manage home gardens and small-scale crop production, which can contribute significantly to the incomes of women as well as to household food security. Moreover, women often grow minor crops such as vegetables with limited or no market value. However, it is important to realize that women have the potential, and the right, to participate in commercially-oriented crops. Local markets offer a good opportunity for women to earn incomes through small-scale sales of staple crops and vegetables; however, these opportunities are often only seasonal.

Crop production is still the primary source of employment for women in most developing countries, particularly in sub-Saharan Africa and Asia. Almost two-thirds of rural women are from low-income households. Similarly, female-headed households are the poorest among these, making up more than 35–40 percent of all heads of households in some parts of Asia (Balakrishnan and Fairbairn-Dunlop 2005). Women and men, depending on their cultural and social backgrounds, perform different roles and have varying responsibilities in agriculture, for example, in crop production and management. A better understanding of these differences will help address the prevailing gender issues. For instance, in making decisions about their livelihoods, men and women have different

perceptions of what is important. Men and women base their decisions on information from different sources (Quisumbing and Yohannes, 2004). The unequal power relationships between the rich and poor, men and women, must be understood in order to achieve equitable development and full participation and decision-making by women. Interventions must be developed based on a comprehensive understanding of the needs that women and men identify that improve their situations. The strategic interests of women and the most disadvantaged groups need to be addressed in order to improve overall crop production and to reduce poverty (World Bank 2009).

2.4.3 Social and political capital

Social capital plays an important role in agricultural production by providing farmers with social networks in which they can exchange information about farming practices and with social safety nets that they can use in times of hardships. Likewise, political capital provides farmers with forums in which they can organize to protect or regulate local resources and with venues in which they can challenge legislation that is unfavorable to small-scale producers. Access to social and political capital is particularly important for female farmers as it provides the formal and informal networks in which they can gain valuable information and influence (Stokard and Johnson, 1992).

It is hard to generalize why gender differences are, or are not, found across inputs, study designs, and regions. However, a common theme throughout the literature reviewed is that crop choices and division of labor differ by gender within disparate regional and cultural contexts. For example, throughout sub-Saharan Africa, lucrative cash crops are often perceived to be “male crops,” and crops for home consumption are perceived to be “female crops” (Kasante et al. 2001).

Related to this issue, Doss and Morris (2001), notes that there may be differences in the choices of inputs by gender, based on whether the crop is produced for home or for the market. For example, yield may be the most important consideration in market-targeted crops, while other factors, such as taste, storability, and ease of processing for example

drying, fermenting and pounding, may be important in determining crops for home consumption. However, Doss and Morris (2001) examination of nationally representative household survey data from Ghana found few crops can be defined as men's crops, and none is obviously a women's crop. Therefore this and other evidence suggests that, in some settings, boundaries between male and female crops may be less rigid than they initially appear (Quisumbing and Pandolfelli, 2011).

Concerning the division of labor within sub-saharan Africa, males are often responsible for the physically intensive task of clearing the land, and women are responsible for weeding and post harvest processing (Guyer 1991; Kasante et al. 2001). In Asian systems, men typically provide the labor in land preparation, and women provide labor in planting, cultivation, and crop care such as weeding (Quisumbing and McClafferty, 2006).

In future research, it is worth further exploring the impact of technology adoption on the traditional gendered division of labor. For example, Fisher et al (2000) find that the adoption of the stabling technique in rural Senegal makes milk more profitable by improving production; as a result, the marketing of milk shifts from the female to the male domain. In reality, studies that examine one input in isolation capture only a partial picture of realities in which synergies exist between farm inputs and relative outputs. Therefore, it would be expected that as inequalities in access to technology and services are reduced, the potential for increased productivity and output will increase across sectors (Sujee, 2005).

Godquin and Quisumbing (2008) study of 304 households in the Philippines found that men and women do not differ significantly in their probability of participating in groups or the number of groups they join. However, there are clear gender differences in the types of groups to which men and women belong, and significantly more men are members of production-oriented groups. Kariuki and Place (2005) explored motivation for group membership in Uganda and found that women, who are usually subsistence farmers, join groups for social insurance or household asset building, whereas men, who

are more market-oriented, join groups to enhance their marketing and commercialization ventures. Jagger and Pender (2006) found that female-headed households in Uganda are more likely to be involved with local Community based Organizations and Non –governmental organizations that do not focus on agriculture and the environment.

Beard (2005) found that married women are significantly more likely than non-married women to know about and participate in civil society organizations in rural Indonesia. Beard (2005) concluded that participatory community development organizations restrict women’s roles to those of caretaking. Only one study explored differential access to resources and assistance from community groups, CBOs, and NGOs. Perdana et al (2006) used probit regression to explore whether the gender of the household head has affected access to assistance from a variety of groups since the 1998 Indonesian economic crisis. This study found that female-headed households’ indicators are a significant determinant of assistance received with respect to CBOs, although not for the government or NGOs assistance.

Agrawal et al (2006) study of forest committees in India found that women’s participation has substantial positive effects on regulating illicit grazing and tree felling, even after controlling for the effects of a range of independent variables. Leino (2007) study examined a targeted intervention in rural Kenya that was designed to increase female participation in water user committees. It found that the intervention dramatically raises female participation levels. However, the increased levels of female participation did not have a significant impact on water source maintenance outcomes. Nonetheless, Leino (2007) notes that the increased participation may have “spillover effects” in the community because of the gains in female leadership capacity. Another interesting avenue of exploration is the impact of group membership on women. Fletschner and Carter (2008) found that, for women in rural Paraguay, a demand for entrepreneurial capital is positively driven by the behavior of members of their groups.

2.4.4 Exploitation of women working in agricultural position

In many regions and particularly in Asia, sub-Saharan Africa, the Middle East and North Africa more women are engaged in paid agricultural work than men, and this number is rising due to the rapid growth in high-yield agro-processing of fruits and vegetables for export, which is often labour intensive (Stokard and Johnson, 1992). A significant proportion of this work is temporary and un-contracted for example, at least 50 percent of those employed in the Chilean fruit export market have contracts and up to 70 percent of those without contracts are women (World Bank, 2009). This means that many female agricultural workers have little protection in the face of poor working terms and conditions, unequal pay, and employment insecurity.

2.4.5 Discrimination of women

Agricultural extension programmes are becoming more gender sensitive and are moving away from old models that revolved around delivering technical advice in a top down manner to a largely male audience. However, poor planning and design means that they still often exacerbate or even create gender inequalities by failing to take women's needs and circumstances into account (Schuler and Hashemi, 1994).

Despite rising numbers of women in community groups and local and national governments in some countries, the ratio of men to women in decision-making positions is still extremely low (Mugwe, 2005). This imbalance is likely to result in less gender responsive policies in agriculture and other related areas. However, even when there is greater political representation of women their voices often carry less weight than men's in official processes. These disparities are often reflected at the level of the household, especially when men are the main financial providers (Onsongo, 2007).

Rural women, particularly farmers, need to be involved in policy planning as well as in local and household-level decision processes. Consequently, national development strategies should call for increased representation of women in decision-making processes around agricultural policy, at the national and local governmental levels. It is

equally crucial to recognize and draw on women's local knowledge of agriculture in the development of agricultural interventions. Concurrently, women's overall political representation should be strengthened, as one means to address gender inequalities in other policy areas such as land rights, trade and finance, which reinforce inequalities in agriculture (Maundeni, 2001).

2.4.6 Conflicts and natural disasters

Women, men, boys and girls have profoundly different experiences and face different risks during and after conflicts and natural disasters. In designing interventions, organizations must understand the social capital gained and lost as a result of crises and must recognize the gender difference in skills, knowledge, access and participation in agricultural activities (Longlands, 2008). Conflicts and crises tend to push women more into the productive sphere as men migrate or become embroiled in conflicts. Women and men face different physical risks and vulnerabilities and natural disasters can be disproportionately deadly for women. Conflicts are more deadly for men while women face escalating sexual violence during times of crises. Dangerous security conditions can limit women's mobility and access to humanitarian aid or markets. Structural barriers affecting women's access to and control of assets such as lands, access to markets and information flows can all be exacerbated during times of conflicts leaving women further disadvantaged. However, it is also important to note that there are opportunities in crises such as advocacy to amenities and productive resources, women are often forced into the public sphere, and although the burdens of care and responsibility may mount, they also gain experience, exposure and confidence (Longlands, 2008).

2.4.7 Poverty

Poverty is a result of inequalities in the distribution of resources, rights and responsibilities. The most pervasive of these inequalities are unequal gender relations, with poor, rural women in particular, often being excluded from access, control and ownership of resources and from decision-making (Hirut, 2004). These inequalities are

replicated across four key institutions: at the level of the state, through its laws and administrative functions; through local, national and international markets, through relations and decision-making processes at the community level and at the household level (Kabeer, 1999). Because of the way in which agriculture links local and household activities with the market and legal issues such as land ownership, it is an arena where many of these gender inequalities overlap and are intensified, and where women are often disempowered (Hirut, 2004).

2.5 Promotion of Gender Equality in agriculture

Putting gender equality at the heart of agriculture should be viewed as a means to empower women, giving them the same rights to land and other assets and the same right to earn a living and participate in decision-making as men. Additionally, there is evidence that increasing women's agricultural productivity and access to markets can result in economic benefits at local and national levels, as well as immediate benefits in the household and the community. These benefits include food security, better nutrition, and increased attendance of both girls and boys at school (World Bank and Malawi, 2007). Promoting gender equality is a key strategy for increasing agricultural productivity.

2.5.1 Sector reform makes way for gender equality

Public-private coordination is vital and sector reforms represent new opportunities in agriculture. Sector reforms aim to carve out the role of the central government (such as ministries of agriculture and fisheries) and provide the political and regulatory frameworks for development and growth leaving the productive activities to private stakeholders (Floro and Wolf, 1991). Such reforms provide an excellent opportunity to incorporate gender equality perspectives.

Reforms to improve the agricultural business environment through removal and reduction of barriers to the movement of produce and registration of companies represent a window of opportunity for gender equality (Hindin, 2005). Improved access to markets and market facilities improves the productivity and the profitability of family farms and this

leads to higher incomes for both women and men farmers to sustain their families (Jejeebhoy and Sathar, 2001).

Increased access to the means of production for women and men is likely to reduce economic inequalities. Access to and control over agricultural resources such as land, technology and inputs can be enhanced through awareness-raising and improved enforcement of legislation (Jejeebhoy and Sathar, 2001). Financial services to poor women and men farmers can be improved through information, extension services and training. Experience from a number of countries indicates that microfinance schemes targeting women in particular show a high rate of repayment and productive use of loans (Joshi, 1999).

2.6 Theoretical Framework

2.6.1 The Longwe framework

This study was guided by a theoretical framework developed by Longwe (1990). In this framework, five different levels of equality, which are the basis of gender equality analysis on the one hand, and determinants of the level of women's empowerment on the other, are identified (March et al., 1999; Women's Information Centre, 2005). These five levels of equality, in their hierarchical order, are welfare, access, conscientisation, participation and control. Welfare refers to the access of women to material resources such as food supply, income and medical care. Access denotes the access women to factors of production on an equal basis with men. These factors include land, labor, credit, training, marketing facilities, public services and benefits. Conscientisation indicates a conscious understanding of the differences between sex and gender and an awareness that gender roles are cultural and can be changed. It also involves a belief that the sexual division of labor should be fair and agreeable to both sexes and does not involve the domination of one sex and subordination of the other. Longwe (1990) defines participation of women under five key elements which are decision-making process, policy-making, planning, and implementation. Finally, control refers to the control by women over the decision- making process through conscientisation and mobilization in

order to achieve equality of control over the factors of production and the distribution of benefits (Moser, 2002).

The fundamental elements welfare, access, conscientisation, participation and control of Longwe framework, despite significant differences, is recognition that men and women have different socially-constructed roles that affect decision-making processes and resource allocations within the household.

Longwe framework attempts to encourage a systematic study of the differences in the roles and responsibilities of women and men, and their access to and control over resources.

2.7 Relevance of Longwe framework to this study

The Longwe framework was significant to the study as it helped in understanding the practical meaning of the empowerment and equality of women and in evaluating whether development initiatives support empowerment in Gatanga Division. The theory was relevant as a basic premise emphasizing on women's development and how it could be viewed in terms of five levels of equality namely welfare, access, conscientisation, participation and control. The Longwe framework helped in understanding gender-related problems.

2.8 Definition of key terms

Gender: This refers to socially constructed roles and responsibilities that govern relations between men and women in their societies.

Gender needs: These are needs that are identified by women and/or men within their existing and socio- culturally defined roles and responsibilities.

Gender inequality: This is whereby both genders have unequal treatment in terms of acquiring opportunities based on social norms that construct women and men as unequal in value in terms of their contributions and entitlements.

Food security: This is defined as including both physical and economic access to food

that meets the dietary needs as well as food preferences of people.

Food insecurity: This exists when people lack adequate physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Gender disparities: The disadvantages facing both genders that limit their equal participation and access to resources such as health, education and the labour market that have negative effects in their lives.

Social capital: This refers to the institutions, relationships, and norms that shape the quality and quantity of social interactions in a society

Physical capital -refers to a factor of production (or input into the process of production), such as machinery, buildings or computers

Political capital-Capital gains by politician by winning elections, pursuing policies that have public support, achieving success with initiatives and performing favours for other politicians.

Women's empowerment: It is the process where women have control over their lives in terms of setting their own agendas, gaining skills, building self-confidence, solving problems and developing self-reliance.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter is organized under the following sections. The research design, target population, sample size and sampling procedures, research instruments, data collection procedures and data analysis.

3.2 Study location

Gatanga Division is found within Murang'a County in the Mount Kenya region, in Kenya as indicated in Figures 3.1 and 3.2. It has a population estimated at 645,713 with the gender representation being 323,479 males and 322,234 females. It covers an area of 251.1 square kilometres with a density of 410 per square kilometre (GOK, 2002). The major economic activities are commercial and subsistence farming with tea and coffee as the major crops. The area experiences a cool-wet climate with an annual rainfall of about 250 mm to 1,020 mm, which ranges from about 1,420 metres to 1,530 metres above the sea level, with a mean temperature of about 18 to 25 degrees Celsius (National Coordinating Agency for Population and Development, 2005).

3.3 Research design

The research adopted a descriptive research design and utilized both qualitative and quantitative approaches. The study adopted a participatory approach involving field visits for the purpose of interaction with the target groups to objectively assess gender inequalities in agriculture in Gatanga Division.

3.3 Target population

The study population was the public service officers who consisted of agricultural directors, deputy directors, crop production officers, animal production officers, human resources personnel and field extension officers in Gatanga Division. These staff provided information on gender parity and retention ratio and on what they are engaged in currently in achieving gender balance. The target population of the study was 1,218 respondents.

3.4 Sampling techniques and Sample size

The unit of analysis involved men and women in Murang'a County. Simple random sampling was used to select the respondents for the study. Purposive sampling was used to select 31 administrators in agriculture sector, while the selection of farmers included 30 males 30 females and 30 youths. Random sampling was used to select the sample of respondents to give statistics on the trends in gender issues in agriculture.

3.5 Research instrument

A self-completion questionnaire was the main research instrument. Questionnaire A was designed for use by the general staff employed in the agricultural sector while Questionnaire B was used by the officials in the Ministry of Agriculture and Labour.

3.6 Data collection procedure

Questionnaires and in-depth interviews were used to collect the primary data. Questionnaires were distributed to the respondents who were given time to answer. They were gathered after the given response time was over. The documents in the Ministry of

Agriculture were used to provide information on the trends of employment in the ministry in the past 10 years. Reports in the press and various publications were also used to provide secondary data.

Confidentiality, anonymity and consent of the informants were put in place as requirements for the whole research process. In respect for the informants and in order to protect them, data were presented in such a way that it cannot be linked to individuals who gave it except by the researcher who may need to seek clarification during data analysis.

3.7 Data analysis

Qualitative and quantitative data were interpreted according to the themes arising. Data were presented in the form of frequency tables, pie-charts and graphs (Macmillan and Schumacher, 2001). Primary data were analyzed with respect to measures of central tendency while frequency distributions were used to establish the number of respondents giving certain information.

3.8 Ethical considerations

In initiating the research procedure, the consent of the interviewees was sought before involving them in the study. However, a prior description of the activities had been given to help in understanding the procedures involved. Anonymity and confidentiality were given to the participants that wished to remain anonymous. The informants were notified of their rights to withdraw from the activity whenever they wished to do so. A research permit from the National Council of Science and Technology, in the Ministry of Education was obtained for the research. Similarly, an introduction letter from the Institute of Anthropology, Gender and African Studies, University of Nairobi, was given to the management of the Ministry of Agriculture in the study region to seek permission to conduct research in the ministry.

CHAPTER FOUR

GENDER INEQUALITIES IN GATANGA DIVISION

4.0 Introduction

This chapter discusses the findings based on the main objectives of the study. The broad objective of this study was to investigate gender inequalities in agriculture in Gatanga Division, Murang'a County, Kenya.

4.1 Findings

A majority (55%) of the respondents were male while 45% were female. The study requested respondents to indicate their ages. From the findings, 40% mentioned that they were aged between 41-50 years, 35% were 31-40 years, 12% were 51-60 years and 10% were 18-30 years while 3% were above 60 years.

The respondents were requested to indicate their marital status. The findings show that a majority (54%) were married, 26% had never married, 8% were widowed while 5% were divorced or separated.

The study sought to investigate the highest academic qualifications attained by the respondents. Thirty percent of the respondents indicated that they had attained diploma education, 29 % had secondary education, 24% had university education and 8% had primary education while 6% had adult education as indicated below in Table 4.1:

Table 4.1: Education levels

	Frequency	Percent
Primary	8	8
Secondary	30	29
Certificate/diploma	31	30
University	25	24
Adult education	6	5
Total	102	100

The study sought to determine the individual who undertook farming activities in the division. From the findings, 47% of the respondents indicated that both men and women took care of these activities. However, 32% stated that women carried out land preparation activities while 15% indicated that men undertook land preparation. On the other hand, 5% mentioned that boys and 1% girls were responsible for these activities. Concerning the individual responsible for sowing, a majority (45%) said that both men and women undertook these activities while 34% indicated women. On the other hand, 17% indicated that men were the ones responsible for sowing while 3% cited boys with only 1% mentioning girls.

On who does weeding, a majority (39%) indicated that women were responsible, 27% indicated men, 18% indicated both men and women, 4% mentioned girls while 2% boys.

The study also sought to know the individual responsible for harvesting. From the findings, 42% of the respondents indicated women were undertaking harvesting, 29% indicated men, 25% both men and women while 1% indicated boys and girls undertook these activities.

The respondents were requested to indicate the individual responsible for drying activities in the farms. The findings show that a majority (50%) mentioned women, 33% men and 17% indicated both men and women. About who carried out value addition, many of the respondents (41%) indicated men, 30% mentioned both men and women while 29% indicated that women were the ones responsible for value addition. The study further sought to know who carried out marketing activities. The results showed that 46% indicated men, 30% women while 24% mentioned both men and women as indicated in Table 4.2 below.

Table 4.2: Agricultural activities of the respondents.

Activity	Men	Women	Both men and Women	Boys	Girls
Land preparation	15	32	47	5	1
Sowing	17	34	45	1	3
Weeding	27	39	18	2	4
Harvesting	29	42	25	1	1
Drying	33	50	17	0	0
Value addition	41	29	30	0	0
Marketing	46	30	24	0	0

The respondents were requested to indicate the challenges they faced on the farms while undertaking their activities. Female respondents indicated that they faced challenges such as lack of funds to employ casual labourers and to buy farm tools.

The respondents were requested to indicate whether women and men had equal access to land. From the findings, a majority (79%) indicated that both men and women did not have equal access to land while 21% indicated that men and women had equal access to land in the division. The respondents explained that men had more land accessibility compared to women due to cultural issues such as land inheritance and high economic power.

The study sought to know whether both men and women had equal accessibility to mechanization. A majority (88%) of the respondents indicated that men and women did not have equal accessibility to mechanization while 12% stated that both men and women did. The respondents indicated that most women had no skills on how to use machines neither did they have the funds to buy them.

The respondents were requested to indicate who determined the planting time and the individual to carry out the planting. Many of the informants (41%) indicated that both men and women were responsible for determining the planting time and the person (s) responsible for planting. However, 36% indicated that men decided when planting should be undertaken and the person responsible for planting while 25% of the respondents indicated that women decided when to plant and who did the planting as indicated in table 4.3 below.

Table 4.3: Individual responsible for determining planting time and planting responsibility

	Frequency	Percentages
Men	36	35
Women	25	24
Both Men and Women	41	41
Total	102	100

The study sought to ascertain whether women and men had equal access to savings and credit facilities in SACCOs and cooperatives. From the findings, a majority (88%) indicated that women and men did not have equal accessibility to savings and credit facilities while 12% indicated otherwise. The respondents explained that financial institutions such as SACCOs and cooperative tend to discriminate women on financial services since a majority do not have assets that they can offer as collateral to banks as compared to men

The respondents were requested to indicate the challenges facing men and women in accessing inputs in Gatanga Division. The respondents indicated that there was a need for sensitization on how they could access funds to buy the inputs. The respondents further indicated that SACCOs and cooperatives should define their financial services to provide soft loans to enable men and women purchase farm inputs.

The respondents were requested to indicate who decides what should be consumed from the farm and what would be sold. A majority (53%) of the respondents indicated men greatly influenced what needed to be consumed and what was to be sold, although 29% indicated men and women while 20% indicated women. This implied that men dominate decisions in the selling of farm output.

The respondents were requested to state whether men or women controlled the selling of food crops from the farms. A majority (69%) indicated that men had control on the sale of food crops while 31% indicated women. The respondents explained that food crops were taken to the markets while others were sold to brokers who then searched for markets in the urban centres. On how cash crop produce was sold, the respondents indicated that the cash crops were taken to the factories where they were sold through the farmers' cooperative societies.

The respondents were requested to indicate whether women had power over the pricing of agricultural products. A majority (63%) indicated that women had no control over the

pricing of the products while 38% indicated that women had control. The respondents explained that men always had an upper hand as they were the ones accorded the responsibilities of looking for the markets, hence, they were more informed on market conditions and on product demands and prices.

The respondents were requested to indicate whether the returns obtained from sales were divided equally. The study results show that 89% of the respondents although 11% stated that the returns were shared equally. The respondents mentioned that men always took the larger share claiming that they had more responsibilities in the family such as buying basic needs, paying school fees and undertaking other investments for the families. The respondents also indicated that men took much of the returns from the sales as culturally they were said to be the heads of the families making women as lesser partners in the process.

The respondents were requested to indicate the individual responsible for the utilisation of the returns from sales. A majority (56%) indicated that men determine the ways through which returns from the sales were to be utilized. However, 24% mentioned that both men and women decided on the utilization of the returns from the sales while 20% stated that both men and women determined how the returns from the sales were utilized. This implied that although there were cases where women would be involved in investment decisions, men dominated in determining how returns on farm gains were to be utilized.

From the findings, 56% of the respondents indicated that youths were active in agricultural activities while 44% stated that the youth were not. The respondents stated that the common agricultural activities that the youth in Gatanga engaged in are cultivating, weeding and harvesting.

This study sought to know whether there are preferences in the selection of crops to be grown. Eighty four percent of the respondents indicated that there are preferences in the

selection of crops to be grown while 16% mentioned that there are no preferences.

The study sought to know whether youths have access to credit and savings facilities. A majority (68%) of the respondents indicated that the youth have access to credit and savings facilities while 38% of the respondents stated that they did not. This is because the youth hardly earned enough money to invest in the SACCOs. Further, a proportion of the youth believe that SACCOs are for the elderly.

On how the youth market and sell their produce, the study found that they take their produce to the local markets, major towns or they sell to the villagers and brokers.

This study sought to investigate how sustainable agricultural activities are among the youth. Some respondents indicated that agricultural activities were not suitable at all as they did not give adequate returns for their basic needs. The study further found that some agricultural activities enabled the youth to create their own employment opportunities. Also that they earned money to support themselves and their families, and enabled them to receive basic training on marketing skills and farm management.

The study sought to investigate whether there were organized groups that promote the youth in agriculture. From the findings, respondents indicated that there were no organized groups that promote the youth in agriculture.

The study sought to investigate the challenges that the youth face in agricultural activities. A majority of the respondents stated that youth farmers in Kenya do not have access to farming inputs, they have limited financial accessibility and they lack timely information on matters about agricultural products. The respondents were requested to indicate their opinions on how the participation of the youth in agriculture could be improved. From the findings, the respondents indicated that the youth needed access to training, funding and adequate land.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter provides a summary of the findings, conclusion and recommendations of the study based on the objectives of the study. The main objective of the study was to investigate gender inequalities in agriculture focusing on Gatanga Division.

5.2 Summary of the findings

The study established that most farmers in Gatanga were literate; hence, they were able to understand the information required by the study on gender inequalities in agriculture in Gatanga Division. The study reveals gender disparities in carrying out agricultural activities. For example, the findings show that both men and women undertake farming activities. However, the study established that women engaged in the sowing of seeds while a few men undertook sowing.

The study similarly revealed that women were greatly involved in weeding although a small number of men also undertook weeding practices. In the case of harvesting, the study found that it was mainly women who were undertaking such activities with few instances where both men and women were involved. The study moreover revealed that women were left to undertake drying activities for the crops harvested while men undertook the role of value addition in the farm as well as marketing.

The study showed that insufficient funds to employ casual labourers, limited land resources, and poor weather conditions were challenges faced by farmers in Gatanga.

Moreover, the study indicated that men and women did not have equal accessibility to land. This is because culturally men can inherit land and had more buying power as opposed to women.

The study further found that a majority of men and women had no equal access to mechanization. On the other hand, the study similarly revealed that most women had no skills on how to operate high level machinery and they had low financial incomes, hence, could not afford to buy farming machines.

The study revealed showed that men were responsible for deciding when planting should be undertaken and the person responsible for planting. It was noted that while in some instances the task of planting was shared, it was generally the women who were left to do the planting.

The study also established that women and men did not have equal access to savings and credit facilities in SACCOs and cooperatives. This is because financial institutions tend to discriminate women on financial assistance as they lack assets to offer as collaterals. Moreover, even for the institutions that did not require collateral, they had a specific time line of repayment of loans that proved difficult for the women to achieve due to minimal returns.

The study noted that men greatly influenced decision- making on what needed to be consumed and what was to be sold. For instance, surplus from farm produce such as green vegetables, pulses and tubers were consumed at the household level and the women could be allowed to sell the surplus. Whereas cash crops were purely the men's domain whereby they determined to whom and where the sales were to be done.

The study found that women had no control over pricing. This is because men were the ones accorded the responsibilities of looking for the market, thus they were more informed on market conditions and on product demands and prices.

The study revealed that the returns from the sales were not shared equally as men always took the larger share with the notion that as the household heads, they had more responsibilities in the family such as buying basic needs, paying school fees and

undertaking other investments on behalf of the families.

The study also found that men determined the utilisation of returns. In particular they were in charge of distributing the returns as per the household needs while some was kept aside for investment on their part. However, in some cases women were allowed to share their opinions on the distribution of the returns.

The study found that youths were not active in agricultural activities due to challenges such as lack of land resources, poor returns, bad weather and generally low return from sales of agricultural products. The study also revealed that the youth had limited access to credit and savings facilities.

The study also found that training is required for the education of the youth so as to expose them to agricultural knowledge and skills that will enable them establish income- generating activities. Moreover, there is a need for awareness creation among the youth as agriculture is not seen as a lucrative business and, therefore, preference of white collar jobs becomes a priority. In addition, land acquisition and access to financial assistance would encourage the youth to take part in agriculture.

5.3 Conclusions of the study

The study concluded that women were greatly involved in weeding, harvesting and drying of crops while men undertook the role of value addition as well as marketing. This implied that gender inequalities in agriculture were evident from the disparities in the individuals who undertook farming activities.

5.5 Recommendation for further study

The study recommends that there is a need to increase infrastructure that will help farmers have more options in attempting income- generating activities that are agricultural based. Therefore, an analysis of development interventions in the area needs to be done to ensure that upcoming initiatives meet the felt needs of the community.

REFERENCE

- Agrawal, A., G., Yadama, Andrade, R. and Bhattacharya, A. (2006). *Decentralization and environmental conservation: Gender effects from participation in joint forest management*. CAPRI Working Paper 53. Washington, D.C.: International Food Policy Research Institute
- Ayodo, H. (2011). *Circumcision Driving Boys out of School in Igembe*. The Standard , January 11, 2011.
- Balakrishnan, S., A. and Fairbairn-Dunlop. V. (2005). *Women and agribusiness: Working miracles in the Chilean fruit export sector*. London: Macmillan
- Beard. V (2005), *Gender, collective action and participatory development in Indonesia*. California, Liverpool university press.
- Becker, G.S. (1993). *Widening participation for women returners to learning meeting the challenge through learning*. Nairobi, UNESCO
- Brouwer, E. C., Harris, B. M. and Tanaka, S. (1998). *Gender analysis in Papua New Guinea*, Dakar. World Bank Publications.
- Chege, F.N. and Sifuna, D.N. (2006). *Girls' and women's education in Kenya: Gender perspectives and trends*. Nairobi: UNESCO
- Deininger, K. (2003). Does cost of schooling affect employment by the poor? Universal primary education in Uganda. *Economics of Education Review*, 22: 291-305.
- Development Management Policy Forum, (2010). *A brief general profile on inequality in Kenya- A profile of education in Kenya*. Retrieved from www.dpmf.org/dpmf/index.php on 5th September 2012.
- Doss, C. R. and Morris, M. L (2001). How does gender affect the adoption of agricultural innovations? The case of improved maize technology in Ghana. *Agricultural Economics*, 25 (1): 27–39.
- Doss, C. R. (1999). *Twenty-five years of research on women farmers in Africa: Lessons and implications for agricultural research institutions; with an annotated bibliography*. Economics Program Paper 99-02. Mexico City: Centro Internacional de Mejoramiento de Maiz y Trigo.
- FAO (2008). *The state of food security in the world: High food prices and food security threats and opportunities*. Retrieved from www.fao.org on 5th September 2012.
- FAO (2011). *The state of food and agriculture: Closing the gender gap for development*. Retrieved from www.fao.org on 5th September 2012.

- Fisher, M. G., Masters, W. A. and Sidibé, M. (2001), *Technical change in Senegal's irrigated rice sector: impact assessment under uncertainty*. *Agricultural Economics*, 24: 179–197.
- Fletschner, D. and Carter. M. (2008). Constructing and reconstructing gender: Reference group effects and women's demand for entrepreneurial capital. *Journal of Socio-Economics* 37 (2): 672–693.
- Floro, M. and Wolf, J. (1991). *The economic and social impacts of girls primary education and development countries*. Washington D.C: USAID.
- Fontana, F. and Paciello ,F. (1997). *Population and Development: A Critical Introduction*. Oxford: Polity Press
- Franklin J. (2007). *Ladies first? Gender and the community management of water infrastructure in Kenya*. University of California, Berkeley, Calif., U.S.A., electronic copy.
- Godquin, M. and Quisumbing, A. R. (2008). Separate but equal? The gendered nature of social capital in rural Philippine communities. *Journal of International Development*, 20 (1): 13–33.
- Government of Kenya (2002): *Kenya 1999 population and housing census: Analytical report on education Volume VIII*. Nairobi: Government Printer.
- Guyer, J. I. (1991). Female farming in anthropology and African history. In *Gender at the crossroads of knowledge: Feminist anthropology in the postmodern era*, ed. M. di Leonardo. Berkeley, Calif., U.S.A. University of California Press, pp 234-265.
- Hertz, B. (1991). *Letting girls learn: Promising approach in primary and secondary education*. World Bank Discussion Papers. Washington D.C: World Bank.
- Hindin, M. J. (2005). Women's Autonomy, status, and nutrition in Zimbabwe, Zambia, and Malawi. In: Kishor, S. (ed). *A focus on gender: Collected papers on gender using DHS Data*. Calverton UN, pp 49-67
- Hirut, T. (2004). *Women's power and anthropometric status in Zimbabwe*. *Social Science. Med*, 51: 1517- 1528.
- Huggins, A. and Randell, A. (2007). *Gender equality in education in Rwanda: What is happening to our girls?* Paper presented at the South African Association of Women Graduates Conference on drop-outs from school and Tertiary Studies. Capetown, pp 23-34
- International Labour Organization (ILO). 2000. *ABC of women workers' rights and gender equality*. Geneva: ILO.

- Jagger, P. and Pender, J. (2006). *The status of gender equity and equality in primary education in Kenya*. Report in common wealth education fund, pp 56-78
- Jejeebhoy, S. J, and Sathar, Z. A. (2001). Women's autonomy in India and Pakistan: The influence of religion and region. *Population and development review*, 27(4): 687-712.
- Jelaludin, A., Alemtsehay, B. and Salvini, S. (2001). *Gender Issues, Population and Development in Ethiopia: in-depth Studies from the 1994 Population and Housing Census in Ethiopia* Central Statistical Authority. Addis Ababa, and Institute for Population Research – National Research Council (Irp – Cnr), Roma.
- Jha, J. (2008). Starting with the self: Education for empowerment in India. *Gender, education and development. Equals*, 21: 4-5
- Joshi, S.T. (1999). *Women and development – The changing scenario*. New Delhi: Mittal Publications.
- Kabeer, N. (1994). *Reversed Realities: Gender Hierarchies in Development Thought*. London, UK: Verso
- Kabeer, M. (1999). *Women and development in Africa: How gender works*. London: Lynne Rienner.
- Kabira, W. M. and Masinjila, M. (1997). *ABC of Gender analysis*. . Nairobi, Forum for African Women Educationalists.
- Kasante, D., Lockwood, M. J. and Whitehead. A. (2001). Gender and the expansion of non-traditional agricultural exports in Uganda. In *Shifting burdens: Gender and agrarian change under neo-liberalism*, ed. S. Razavai. Bloomfield, Conn., U.S.A.: Kumarian.pp153-159
- Kariuki, G. and Place, F. (2005). *Initiatives for rural development through collective action: The case of household participation in group activities in the highlands of central Kenya*. CAPRI Working Paper 43. Washington, D.C.: International Food Policy Research Institute
- King, E. and Hill, A. (1993). *Women's education in developing countries: Barriers, benefits and policies*. Baltimore: John Hopkins University Press.
- Kishor, S. (2000). *Empowerment of women in Egypt and links to the survival and health of their infants*. In: *Women's empowerment and demographic processes*, Harriet B. and Gita Sen Presser. New York: Oxford University Press.
- Kishor, S. (2005). *A Focus on Gender: Collected Papers on Gender Using DHS Data*. Calverton, Maryland, ORC Macro press.

- Kritz, M. M. , Makinwa. A. P. and Gurak, D.T. (2000). The role of gender context in shaping reproductive behaviour in Nigeria. In: *Women's empowerment and demographic processes*, Harriet, B. and Gita Sen Presser (Eds). New York: Oxford University Press.
- Lawrence, J. (2008). Teaching boys to be different in Jamaica. In gender education and development. *Equals*.21: 5-6.
- Leino, J. (2007). *Gender and the community management of water infrastructure in Kenya*. University of California, Berkeley, Calif., U.S.A., electronic copy. London and Basingstoke: The Macmillan Press Ltd.
- Longlands, H. (2008). *Boys in schools: Masculinities, education and gender equality*. gender, *Education and Development*. *Equals*, 21: 1-4
- Longwe, S. (1990). *From welfare to development: a post UN women's decade update and future directions*. Michigan, Michigan state university press.
- Lucas, A. M. and Isaac, M. M. (2010). *Access, sorting, and achievement: the Short- Run effects of free primary education in Kenya*. Wellesley College Mimeo.
- Macmillan, J. and Schumacher, S. (2001). *Research in education. A conceptual introduction*. New York: Longman.
- March, C., Smyth, I. and Mukhopadhyay, M. (1999). *A guide to Gender Analysis Frameworks*. London: Oxfam Print Unit.
- Mason, K. O. (1986). *The status of women: conceptual and methodological issues in demographic studies*. *Sociological Forum*, 1(2):284-300.
- Mathenge, E. (2009). *The equal sharing of responsibilities between women and men, including care-giving in the context of HIV/AIDS*. A statement to the 53rd session of the commission on the status of women (CSW) on March 4th 2009. New York: United Nations, 6-8
- Maudeni, T. (2001). *Portrayal of women in culture. A focus on Setswana Language: Implications for social Work*. Paper presented at the joint University Committee (JUC) Conference, Tlokweng, Botswana, 21-23 September.
- Meme, N., Kogi, W., Muroki, M. and Mwadime, R. (1998). Energy and protein intake and nutritional status of primary schoolchildren 5 to 10 years of age in schools with and without feeding programmes in Nyambene District, Kenya. *Food and Nutrition Bulletin*. 19(4):50
- Mincer, J. (1974). *Schooling, experience and earnings*, New York Columbia University Press.

- Ministry of Education (2008). *The development of education, National report of Kenya.*, Report presented at the international conference on education Geneva, 25-28
- Ministry of Education (2008). *The development of education.* National report of Kenya. Retrieved from <http://www.education.go.ke/.htm> on 26th June 2012.
- Ministry of Education Science and Technology (2009). Building a globally competitive economy. *Kenya Economic Report* . 2009.
- Ministry of Science and Technology (2005). *Kenya education sector support programme*, Nairobi, 2005-2010, Government Press.
- Ministry of Lands (2012). Building a globally Competitive economy. Kenya Economic Report 2012.
- Morris, G. and Maistro, A. (1999). *Psychology: An Introduction*, 10th ed. Englewood Cliffs, New Jersey: Prentice Hall.
- Moser, P. (2005). *Women in agriculture in the Middle East*. Burlington, Vt., Ashgate Publishing.
- Moser, C. (2002). *Gender planning and development: Theory, Practice and Training*. London, Routledge.
- Mugwe, K. (2005). *Universalizing basic education in Kenya: The challenges of providing gender equitable primary education to pastoralists of North eastern Kenya*. Paper presented in partial fulfillment for the award of MA, Institute of Social Studies, Hague, Netherlands
- Mukuria, A., Aboulfia, C. and Themme, A. (2005). *The context of women's health: Results from the demographic and health surveys, 1994 – 2001*. Comparative Reports, No. 11. Calverton, Maryland: ORC Macro.
- National Coordinating Agency for Population and Development (2005). *Population and housing census: Analytical report on education*. Volume VIII. Nairobi: Government Printer.
- National Council for Population and Development (NCPD) (2005) . National Population Policy for Sustainable Development, *Labour Force Analytical Report*. Based on KIBHS – 2005/06
- National Economic and Social Council of Kenya, (2010). The vision 2030 program, Retrieved from <http://www.nesc.go.ke/.htm> on 26th June 2012.
- News Groups (2007). *Culture of Nigeria in profile*. Retrieved October 20th 2012 from, www.newsgroups.derkeiler.com.
- Nganga, T, (2011). *Institutions and gender inequality, a case study of the constituency development fund in Kenya*. Addis Ababa: Ethiopia.

- Nishimura, M., Takashi, Y, and Yuichi, S. (2008). Impacts of the Universal Primary Education Policy on Educational Attainment and Private Costs in Rural Uganda. *International Journal of Educational Development*, 28: 161-175.
- Ochola, W. O., Sanginga, P.C. and Bekalo, I, (2000). *Managing natural resources for development in Africa*. IDRC.
- Onsongo, J. (2007). The growth of private universities in Kenya: Implications for gender equity in higher education. *Council for the Development of Social Science Research in Africa*, 5: 111-134.
- Orodho, A. (2009). *Elements of education and social science research methods*. Nairobi, Maseno University.
- Overholt, C. (1985). *Gender roles in development projects: a case book*. Kumarian Press
- OXFAM (2003): Kenya: *One year on*. Nairobi OXFAM Press release, Kenya.
- Pattman, R. and Chege, F. (2003). Dear diary I saw an angel, she looked like heaven on earth': sex talk and sex education. *African Journal of AIDS Research*. Vol.2 (2): 103-112.
- Perdana, A., Matakos, K. and Radin, E. (2006). *Does it pay to participate?* CSIS Working Paper Series WPI 095. Washington, D.C..Centre for Strategic and International Studies.
- Quisumbing A. R. and Maluccio, A. I. (2000). "Are Women Really More Aggressive than Men in Intimate Relationships?" in *Psychological Bulletin*, 126(5), pp. 685-689.
- Quisumbing, A. R., and Y. Yohannes. 2004. How fair is workfare? Gender, public works, and employment in rural Ethiopia. Policy Research Working Paper 0-3039. Washington, D.C.: World Bank.
- Quisumbing, A. R. and McClafferty, B. (2006). *Using gender research in development*. Food Security in Practice Technical Guide Series 2. Washington, D.C.: International Food Policy Research Institute.
- Quisumbing, A. R. and McClafferty, B. (2009). Developmental and Affective Issues in Assessing and Treating Partner Aggression" in *Clinical Psychology: Science and Practice*, 6(4), pp. 400-414.
- Quisumbing, A. R., and Pandolfelli, L. (2010). Promising approaches to address the needs of poor female farmers: Resources, constraints, and interventions. *World Development* 38 (4): 581–592.
- Quisumbing, A. R. and Pandolfelli, L. (2011). Women's role in the agricultural household bargaining and human capital investments. In *Agricultural and resource economics handbook*, vol. 1, ed. B. Gardner and G. Rauser. Amsterdam: Elsevier.
- Republic of Kenya (1999). *Commission of Inquiry into the Education System of Kenya*. Nairobi: Government Printers.

- Republic of Kenya (2009). *Economic Survey*. Nairobi: Government Printer.
- Republic of Kenya, (2000). *National Gender and Development Policy*. Ministry of Gender, Sports, Nairobi: Government Printer.
- Rugh, A. (1984). *Family in contemporary Egypt*. Syracuse, New York: Syracuse University Press.
- Ruto, S., Nyamauncho, Z. and Mugo, J. (2009). *Educational Marginalization in Northern Kenya*, Paper prepared for Education for All Global Monitoring Report . UNESCO, Nairobi.
- Schuler, S. R. and Hashemi, S. M. (1994). *Credit programs, women's empowerment, and contraceptive use in rural Bangladesh*. *Framework on Women Empowerment*. 25(2):65-76.
- Schultz, T. P. (2004). School Subsidies for the Poor: Evaluating the Mexican Progresa Poverty Program. *Journal of Development Economics*, 74: 199-250.
- Schultz, T.P. (1990), Testing neoclassical model of labour supply and fertility. *Journal of Human Resources*, 25 (4): 599-634.
- Sen, S. and Batliwala, S. (2000). Empowering women for reproductive rights. In: *Women's empowerment and demographic processes*, Harriet B. and Gita Sen Presser (Eds). New York: Oxford University Press.pp.176-189
- Stokard, I. and Johnson, M. (1992). *Sex and gender in Society*, 2nd edition. Englewood Cliffs, New Jersey: Prentice-Hall. pp 57-78.
- Sujee, S. (2005). What are the numbers saying? Unpublished Research Paper. Arizona State University, Arizona
- TGE (1993). *National Population Policy of Ethiopia*. Office of the Prime Minister. Addis Ababa. Ethiopia
- UNDP (2005). *Bridging the gender gap in development*. Hoechsetter printing co, New York.
- UNFPA (2005). *The State of World Population. The promise of equality: Gender equity, Reproductive Health and the Millennium. Development Goals*. Retrieved on 12 June, 2012. On <http://www.unfpa.org/>.
- UNICEF (1998). *A participating poverty assessment study*. Nairobi: UNICEF. Division of Policy and Practice, Statistics and Monitoring Section. www.childinfo.org.
- UNICEF (2008). *Education statistics: Kenya*. UNICEF, Division of Policy and Practice, Statistics and Monitoring Section. www.childinfo.org.

- United Nations Educational, Scientific and Cultural Organization (UNESCO), 2003. *Gender and education for all: The leap to equality*. Paris: UNESCO.
- U.N. (2008). *Food and Agriculture Organization: Becoming Part of the Problem*, Washington, DC: USAID.
- U.N. (2011) *Food Security. Becoming Part of the Problem*, Heritage Foundation Backgrounder Publisher, New York.
- United States Agency for International Development (USAID) (2000). *Policy paper: Program focus within basic education*. Washington, DC: USAID.
- USAID (2008). *Education from a gender quality perspective*, Project report. UNESCO, Holland.
- Women's Information Centre (2005). *Training Manual for Gender Planning*. Ministry of Community Development, *Gender and Children*, Tanzania. Utumishi Publisher, Dodoma
- World Bank (1998). Policy Study. Education in sub-Saharan Africa. Washington D.C: World Bank.
- World Bank (2001). *Engendering Development: Through Gender Equality in Rights, Resources and Voice*, World Bank, Washington, D.C
- World Bank. (2007). *Global monitoring report. Millennium development goals—Confronting the challenges of gender equity and fragile states*. Washington, D.C. World Bank.
- World Bank (2009). *World development report 2006: Equity and development*. Washington, DC: World Bank.
- World Bank and Malawi (2007). *Malawi poverty and vulnerability assessment (PVA): Investing in our future. Synthesis report: Main findings and recommendations*. Poverty Reduction and Economic Management 1, Report 36546-MW. Washington, D.C.: World Bank.
- Young, K. (2009). *Planning development with women: Making a World of Difference*, White House Liaison, New York.

APPENDICES

Appendix 1: Letter of Introduction

Hallo, my names are Jacqueline Gicheru. I am a post-graduate student at the University of Nairobi, researching on “Gender inequalities in Agriculture in Gatanga Division, Muranga County.” You have been selected as an informant in this area. I would like to ask you some questions related to gender issues in agriculture in your area. The information you provide will be useful in making interventions that will contribute to the improvement of food security in the livelihoods of the people in this region. The interview will take a few minutes and I will appreciate your help in responding to these questions. All the information you give will be confidential. The information will be used to prepare general reports, but will not include any specific names.

Appendix II: Questionnaire

SECTION A: GENERAL INFORMATION

SECTION B: BACKGROUND INFORMATION

No	Question and Filter	Coding categories (Tick)	Indicate the code, specify or skip
1	Sex of respondent	1=Male 2=Female	
2	Age of respondent	18-30 31-40 41-50 51-60 Above 60	
3	What is your marital status	1= Never married 2=Married 3=Divorced/Separated 4=Widowed 5= Others Specify	
4	What is the highest level of education you have attained?	1=None 2=Primary 3=Secondary 4=College 5=University 6=Adult Education	

SECTION C: FARMING ACTIVITIES

5Who does the following farming activities?

o	Activity	Men	Women	Both men and Women undertaking the activities	Youth Boys	Girls
	Land preparation					
	Sowing					
	Weeding					
	Harvesting					
	Drying					
	Value addition					
	Marketing					

6. What are the challenges faced while undertaking the above activities?

SECTIOND: ACCESS

7. Do women and men have equal access to land?

Yes No Both either

If the answer to the above is no what are the influencing factors?

8. Do both women and men have equal access to mechanization?

Yes No Both Either

9.If the answer to the above is no what are the influencing factors?

10.Who determines when to plant and what to plant?

Yes No Both Either

11.Do women and men have equal access to savings and credit facilities, Saccos and Cooperatives?

Yes No Both Either

12.If the answer to the above is NO, what are the reasons?

13.What challenges do women and men have in accessing inputs for agricultural production?

14.How can the above challenges be solved?

SECTION E: CONTROL

15. Who decides on what is to be consumed at the household level and that which will be sold?

Yes No Both Either

16. In relation to the above question, what are the influencing factors?

17. Who controls the sale of?

a) Food crops Men women b) Cash crops Men women

18. How are the above (a and b) sold?

19. Does the woman have control on the pricing of the commodities?

Yes No Both Either

If the answer to the above is no what are the influencing factors?

20. Are the returns obtained from the sales divided equally?

Yes No Both Either If the answer to the above is no what are the influencing factors?

21. Who determines the utilization of the returns accrued from the sales?

Yes No Both Either

22. What are the factors influencing the above?

Appendix III: YOUTH and AGRICULTURE

1. Are the youth active in agricultural activities?

Yes No Both Either If yes, what is the common activity that they engage in?

2. Are their preferences in selection of crops to be grown?

3. Do the youth have access to credit and savings facilities?

Yes No Both Either

4. If the answer to the above is no what are the influencing factors?

5. How do the youth market and sell their produce?

6. How sustainable are agricultural activities among the youth?

7. Are there organized groups that promote youth in agriculture?

8. What are the challenges that youth face in agricultural activities?

9. In your opinion what can be done to improve youth participation in agriculture?