GENDER FACTORS INFLUENCING PARTICPATION OF MEN AND WOMEN IN SMALL-SCALE AGRICULTURE IN GATUNDU SOUTH DISTRICT, KIAMBU COUNTY

FRED NDUNG'U KARIUKI

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF HUMANITIES AND SOCIAL SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN GENDER AND DEVELOPMENT STUDIES OF KENYATTA UNIVERSITY

2012

DECLARATION

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

Signature ..... Date 27/11/2012

FRED NDUNG'U KARIUKI

C50/10407/2008

Supervisors

This research project has been submitted for review with our approval as University Supervisors.

1. Dr. Pacificah Okemwa

   Department of Gender and Development Studies

   Kenyatta University

Signature .....Date 27/11/2012

2. Dr. Grace Wamue-Ngare

   Department of Gender and Development

Signature .....Date 27/11/2012

DEDICATION

To my loving parents: Susan Wangari Kariuki and John Kariuki Kamau.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

I am sincerely grateful to a number of people who offered me invaluable support without which this project could not have been produced. Specifically, I wish to thank my supervisors Dr. Pacificah Okemwa and Dr. Grace Wamue-Ngare, for their tireless efforts in supervision and technical support from the inception of this work. My gratitude also goes to Prof. Charity Gichuki for imparting research skills in me that were crucial to my work. Special thanks also go to Dr. Leah Wanjama for providing a turning point in my life.

In a special way, I wish to thank my parents Susan Kariuki and John Kariuki, who taught me to believe in my potentials in life. 'Mom, God has come.' My wife Eunice for the moral support during most of the trying moments and for putting up with my absence, my son Dennis, daughter Elsie, my brothers and sister (George, Nicholas, Harrison, Samuel and Hellen) and to the entire family members, I appreciate your timeless love, patience and support which are the pillars upon which this work stands. I am also thankful to all those, in one way or another, made it possible for me to focus on the study undistracted. I can only say to them; Thank you all, I wish you God's blessings. Above all, to God be the Glory and Honour.

ABSTRACT

This study examined the factors that influence the participation of men and women in small- scale agriculture in Gatundu South District. The study was based on the premise that there are socio-cultural and value related factors, which contribute to minimal participation by men in agriculture. The study therefore, set out to identify and describe these factors, as well as suggests strategies of addressing the unequal participation by men and women in small-scale agriculture in the district. The farming systems approach theory guided the study. The study targeted small-scale farmers in two of the five locations in Ndarugu division. Enumeration areas in the selected locations served as the sampling units for the study. Multistage sampling technique was employed to sample 30% of the households. Two divisional agricultural officers and two assistant chiefs served as key informants. Primary data were collected through semi-structured questionnaires and interview guides. Secondary data were obtained through library search. Analysis of questionnaire data was done using the Statistical Package for Social Sciences (SPSS) Version 17.0 and the findings presented in tables, graphs and figures. Findings from qualitative data are presented in a narrative form. The research found that there are numerous challenges that have hindered active participation of men and women in small-scale agriculture in Gatundu South District. These include cultural attitudes towards agriculture, laziness, alcoholism, small farm size, lack of alternative jobs, lack of farm inputs, and low farm income which discourage men and women from participating. To address these challenges, the study recommends the following measures: enhancing gender mainstreaming trainings to farmers and all service providers in the agricultural sector, sensitizing and financing farmers to adopt technologies that would intensify production of their small farms, eradication of illicit brews, facilitating trainings on value addition of agricultural products as well as promotion of gender transformative attitudes towards participation of men and women in small-scale agriculture and house hold economies.

ABBREVIATIONS AND ACRONYMS

ADB	African Development Bank
ERS	Economic Recovery Strategy for Wealth and Employment Creation
FAO	Food and Agriculture Organization
FSA	Farming Systems Approach
GDDP	Gatundu District Development Plan
GDP	Gross Domestic Product
GoK	Government of Kenya
HH	Household
IFAD	International Fund for Agricultural Development
KARI	Kenya Agricultural Research Institute
MDGs	Millennium Development Goals
NGOs	Non-Governmental Organizations
NPEP	National Poverty Eradication Programme
SSA	Small-Scale Agriculture
UN	United Nations
UNDP	United Nations Development Program
USDA	United States Department of Agriculture
WB	World Bank

OPERATIONAL DEFINITION OF TERMS

Small-scale farmers: Those who do farming in land parcels of 0.8 hectares or less with the most of the production being for subsistence use.

Household: The basic residential unit in which economic production, consumption, inheritance, childrearing and shelter are organized and carried out. It is the centre within which all agricultural production activities are carried out.

Gender: Gender refers to the roles and responsibilities of men and women that are created in families, societies and cultures. The concept of gender also includes the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity).

Socialization: The way in which individuals are incorporated into the values, duties, responsibilities and culture of the society within which they are brought up

Food security: Having enough food to sustain household needs or enough money to buy food requirements for the house consumption

Hegemonic masculinities: A term used to explain the criteria for being the ideal

man in a particular culture. The term serves as a model for all men to show how they "should be".

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Agriculture is the mainstay of most economies in Sub-Saharan Africa contributing at least 70 to 80 per cent of employment, 40 per cent of exports earnings, 30 per cent of Gross Domestic Product (GDP) and up to 30 per cent of foreign exchange earnings (IFAD, 2002). However, agricultural productivity in Africa has declined over the last two decades leading to progressive increase in food imports (AU, 2003). Since 28 per cent of the population in Sub-Saharan Africa suffers chronic food insecurity, efficiency of resources used in agricultural production will continue to be a major concern for policy initiatives targeting improved livelihoods in the region.

Kenya, like other Sub-Saharan Africa countries, is heavily dependent on agriculture with over 80 per cent of its population living in rural areas and deriving their livelihoods from agriculture (Nyoro, 2002). Agriculture is, therefore, the backbone of the Kenyan economy. The sector contributes directly about 24 per cent of GDP and about 19 per cent of the formal wage employment (KIPPRA, 2009). An estimated 70 per cent of all households are engaged in farming activities, and 84 per cent of rural households keep livestock. The sector also indirectly contributes a further 27 per cent to the country's GDP through linkages with agro-based industries (GoK, 2009). Agriculture is also a key to national food security, and is expected to play a critical economic role as Kenya envisages its

transformation into a rapidly industrializing, middle-income nation by the year 2030 (GoK, 2007). Smallholder farmers account for 75 per cent of total agricultural production and 70 per cent of marketed agricultural output (Kinyua, 2004). One of the main characteristics of smallholder farming in Kenya is small land sizes averaging 2-3 hectares, making land one of the major constraints limiting increased agricultural production.

The Government of Kenya recognizes the important role of agriculture as a driver of economic and social development, and it features prominently in national development strategies like the Economic Recovery Strategy (ERS) and the current Vision 2030. The accompanying agricultural development strategies – the Strategy for Revitalizing Agriculture for ERS and the Agricultural Sector Development Strategy for Vision 2030 – call for a determined holistic and sector-wide approach in developing agriculture into a successful and competitive commercial sector. To develop agriculture in a holistic manner that drives to the achievement of the economic and social pillars of Vision 2030, the equal participation of women and men and the youth is crucial.

In the Poverty Reduction Strategy Paper (PRSP) (GoK, 2001), the development of the agricultural sector was considered as a top priority in reducing poverty because agriculture "is the most important economic activity in which even poor rural people are engaged". Thus, through an assumed 6 % annual growth rate in agriculture, the PRSP aimed at the following targets to be achieved:

i) Reducing the proportion of the population below the basic poverty line from 56 per cent in year 2000 to 26 per cent by 2010.

ii) Reducing the number of people who are food-poor from 48.4 per cent to 23.5 per cent in 2008 and below 10 per cent in 2015 (GoK, 2001).

In Sub-Saharan Africa, small-scale farming constitutes the bigger 73% percentage of agricultural activities as noted by Alderman (2003). Small- Scale Agriculture (SSA) provides source of livelihood directly or indirectly to the majority of the population in the rural areas (Alderman, 2003). According to Nayagets (2005), SSA is central to combating hunger, reducing poverty, increasing economic growth and improving living standards. Despite the potential of agriculture in alleviating poverty and food insecurity in Kenya, current trends show that food insecurity has been on the rise.

Musalia (1999:36) asserts that since the 1970s, food sufficiency in Sub-Saharan Africa became a matter of international concern. This was occasioned by the decline in food production. More frequent than ever, a number of Sub-Saharan African countries have had to rely on food aid from the West to alleviate food shortages. Kenya, though predominately an agricultural country, has had her share of food shortage. Food aid and relief are however, not the solution to Sub-Saharan Africa's food problem. Part of the solution lie in tackling the patriarchal character of the post-colonial state, itself as a legacy. Musalia further suggests that, there has been a marked shift towards a realization that there are deep-seated socio-economic factors that explain Africa's food crisis (Musalia, 1999). Berry (1984),

in her view on the literature on food crisis in Africa indicated that much of the literature on local history of agrarian change suggests the need for understanding the conditions of access to productive resources. Berry (1989) argues that it is not enough to give farmers technology and finance to improve agriculture but it is equally important to understand the conditions under which farmers gain access to productive resources and ways in which conditions of access affect resource use and agricultural performance. She says that since these conditions of access and control in Africa are still undergoing change, it is imperative to understand these changes because they lead to uncertainty and tension which affect resource use. Staudt (1987) argues that agricultural crisis can be resolved by understanding the demands on female agricultural labour and women's stake in securing returns for that labour. As food production is a major activity of rural women and their responsibilities and labour inputs often exceed those of men in most areas in Africa (UNDP, 2005).

Rural development studies in Kenya and other African societies show that African women are overworked. They put in long hours to produce most of the food in the continent while at the same time providing substantial labour for cash crop production. In fact, they account for 70 per cent of agricultural workers, 80 per cent of food producers, 100 per cent of those who process basic foodstuffs, 50 per cent of animal husbandry and they undertake from 60 per cent to 90 per cent of the marketing (Government of Kenya, 1994; Mukudi, 2002; UNDP, 2003,2005). The UN Food and Agriculture Organization (FAO) found, in a survey of nine African

countries in 1996, that women's contribution to the production of food crops at the time ranged from 30 per cent in Sudan to 80 per cent in the Republic of Congo, with estimates for other countries tending towards the higher end of the scale (FAO, 1995).

Despite the high levels of women's contribution to agriculture and food production, UNDP (2005:41) however, states that 'Africa has the highest proportion of people living in extreme poverty in the world and is the only continent where food production has been falling over the years.' The UN body further states that 'small-scale farmers practice more subsistence than commercial farming, and they are often trapped in the vicious poverty cycle' and as a result, about 73% of the poor people living in rural areas subsist on less than a dollar a day (UNDP 2005:41) and about 200 million of the world's hungry people are found in the continent (Millennium Development Goals (MDGs) Technical Support Centre, 2004).

For the country to reduce the level of poverty by 2015, lead to a holistic develpoment and achievement of Vison 2030, the particicpation of men in small-scale farming is equally important. In this regard, Chiuri (2010) opines that the gender inequality that hinders development and perpetuates poverty results from the prevalence of hegemonic notions of masculinities at various levels within Kenyan communities. She further proposes that persistent poverty occurs where labour, time and other resources are skewed towards members of the masculine

gender in rural households where, owing to these notions, most men are in control of all other members' labour, time and the resources available. 'They take the lion's share while often making the most minimal contributions towards household production,' (Chiuri, 2010:67). They do this because they 'inhibit positions of power which legitimizes and reproduces social relationships that generate their dominance' (Corringen et al., 1985: 92, cited in Conwell &Lindsfarne, 1994: 19).

In spite of the importance attached to SSA in the improvement of economy, poverty eradication, food security and attainment of the Millennium Development Goals and Vision 2030, there has been a notable change in the participation of men in SSA and household economy. According to Verma (2001) men used to do labour-intensive activities such as digging of trenches in which women provided the the instructions to do so. Managing of livestock was totally dominated and controlled by men, tending, herding and grazing livestock were responsibility of men and boys. Animals were grazed jointly on communal lands during the day and returned in their respective homesteads by night (Muchoki, 1988).

Colonial policies precipitated men's migration and prompted land alienation and inequalities in distribution of land. The consolidation and registration of land had an impact on gender access to and control over land. The individual under whose name the land was registered got control over it. Subsequently, this gave the individual the legal rights not only to decide what was to be grown and by whom but also how to dispose of it (Musalia, 1999). According to Musalia, the most

outstanding of the policies undertaken by the colonial government that altered gender relations of agricultural production were those that led to the alienation of African land, introduction of taxes and labour laws. The colonial administration alienated most of the fertile land from the Africans. Land alienation interfered with the individual access to land and disrupted the land tenure system. The introduction of taxes forced men to look for wage employment away from their homes altering gender relations and consequently food production. The division of labour was altered as more men moved out of their rural areas. Duties like breaking the ground and growing of certain crops such as bananas, previously done by men, were now undertaken by women and children who were left behind (Musalia, 1999). Tignor (1976:304) acknowledges that there were significant changes in work routines in most African communities especially among the Agikuyu. With male out-migration for wage labour, greater responsibilities were shouldered by women.

An analysis of small-scale farming by Verma (2001) in Kenya reveals that within gender divisions of labour, many farms' roles and responsibilities that were traditional domain of men have been offloaded onto the shoulders of women. Because women have had to assume men's on-farm labour responsibilities, men's traditional roles and authority are increasing by being called into question. This challenge, as noted by Daniel (2010), has also been substantiated by men's failure to fulfill their roles as providers of income and escalated gender conflicts and discursive politics within households.

While women have been described as the main source of labour in SSA production, men have been described as the main owners of family property and key decision-makers in SSA production (World Bank, 2007). Their participation in agriculture has not been well-documented outside of their participation in crop and livestock marketing chains. Several studies highlight the difficulties women face when they work hard in the farms with the benefits of their hard work resting in the controls of men. This scenario has a potential of women reducing their efforts in agricultural production as they get little or no benefits from their labour. With the number of people living below the poverty line remaining high combined with higher numbers of people experiencing food sufficiency, the active participation of men is critical to improving the relations within their families, which will translate to improved agricultural production as all women and men participate in the formulation, implementation, and accruing of benefits from their efforts.

The World Bank (2003) states that gender equality is important not only as a goal in itself, but also as a path towards achieving other goals. Gender inequality tends to lower the productivity of labour and the efficiency of labour allocations in households and the economy, intensifying the unequal distribution of resources. It also contributes to the non-monetary aspects of poverty – lack of security, opportunity and empowerment – that lower the quality of life for both men and women. While women and girls bear the largest and most direct costs of these inequalities, the costs cut broadly across society, ultimately harming everyone –

the household, the community and the nation at large in the process hindering development and poverty reduction (King & Andrew, 2001).

This study sought to establish the gender factors influencing men and women's participation in SSA with the aim of assessing the causes and impact of the participation or lack of participation to the achievement of food security, improved life standards and the ultimate achievement of Vision 2030.

1.2 Statement of the Problem

As noted above, women put in long hours in SSA production in Africa, while at the same time providing substantial labour for cash crop production. A lot has been documented on women's participation in agriculture (Mwaka, 1993; Government of Kenya, 1995; Boserup, 1970; Chambers, 1983; Mukudi, 2002; UNDP, 2003) and the need to provide adequate environment for their continued production. Indeed, agricultural policies in Kenya have been changing with the aim of incorporating women's needs and concerns in the mainstream of agricultural production. However, with these efforts and the higher contribution of women to the sector, rural households are still suffering from lack of food.

Blackben and Bhanu(1999) attribute gender inequalities to be among the major factors hindering economic growth in Sub-Saharan Africa. They give attention to men's limited contribution to economic activities at the household level and recommend rising of labour productivity in the household economy by reducing the time burden of domestic work and redirect women's labour to market

production. Chiuri(2010) counters this recommendation by arguing that domestic chores keep rural households functioning. Therefore, the proposal that women divert some of their time and labour to market production from domestic production may have serious negative impacts on the families. She poses the question, "why not make men more active in subsistence and marketable production instead of asking that women shift their time from domestic work to marketable production?" (Chiuri, 2010: 165).

Despite the rise in poverty and food insecurity, the role of men in SSA and household economy is not well-documented. There seems to be an apparent gender shift in household role and responsibility (Verma, 2001; Chiuri, 2010; Daniel, 2010) as more men are increasingly not using their time and labour in SSA and household production.

While the participation of both men and women could increase the agricultural output, improved decision-making and sharing of benefits that would in turn lead to better economic livelihoods of the Kenyan population where food is sufficient, which in turn eliminates hunger and poverty and leads to the achievement of MDGs and ultimately Vision 2030 of an industrialized country with strong socio-economic and political pillars. The lack of active participation of men and women is likely to affect the achievement of these goals. This study therefore aimed to examine the factors that influence men's participation in small-scale agriculture for household food and income security.

1.3 Objectives of the Study

The objectives of this study were:

i. To identify the roles of men and women in small-scale agriculture and household economy.

ii. To investigate the factors which influence men's participation in small-scale agriculture and household economy.

iii. To assess the effect of men's participation in small scale-agriculture and household economy.

iv. To develop strategies that would optimize men's participation in small-scale agriculture and household economy.

1.4 Research Questions

i. What are the roles played by men and women in small-scale agriculture and food production?

ii. What factors influence men's participation in small-scale agriculture and food production?

iii. What is the effect of men's participation in small-scale agriculture and household economy?

iv. What can be done to optimize the participation of men and women in small-scale agriculture and household economy?

1.5 Assumptions of the Study

i. People are knowledgeable of the gender roles played by men and women in small-scale agriculture and food production.

ii. There are factors that influence men's participation in small-scale agriculture and food production in Gatundu south District.

iii. The participation of men has an impact on agriculture and food production at the household level.

iv. There are strategies that can be put in place to address men and women's participation in small-scale agriculture and food production.

v. All respondents will give truthful and precise information upon which the study will be based and arrive at objective conclusions.

1.6 Significance of the Study

The study findings have helped uncover the levels of men and women's participation in SSA. The true revelation of gender participation levels should reveal the unutilized production potentials among men and women, thus contributing to enhanced agricultural productivity and household profitability.

It is expected that the findings of this study will inform policy-makers in government, in formulating policy guidelines geared towards improving food security by focusing on the factors that hinder/promote men's participation in SSA.

1.7 Scope and Limitations of the study

This section defines the boundaries of the research work. The following constitute the major delimitation that narrows the scope of this work. This study focused on the factors that influence participation of men in SSA and household economy. Although these roles could be many and widespread, the discussion was limited to SSA activities. Women formed part of the informants but their views were limited to the factors which they think influence men's active participation in agriculture. The scope of this study was also geographically limited to Gatundu South District. Lastly the study used a survey design and therefore, standardization of research instruments did not capture unique cases of the study within the district.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the literature related to factors affecting gender participation in small-scale agricultural production. The sub-topics covered under this chapter include: Gender participation in agriculture, factors affecting gender participation in agriculture, addressing developmental challenges in the agricultural sector, conceptual / theoretical framework, summary and gaps to be filled by the study.

2.2 Small-Scale Agriculture and Household Economy

The Kenya Rural Development Strategy notes that the country has continued to rely on agriculture as the base for economic growth, export earnings and employment generation; it further notes that, while agriculture has played a significant role in Kenya's economic growth, the adoption rate of labour and time-saving technology (improved agricultural technology to increase productivity) has been extremely slow. Consequently, the use of manual labour is vital to this sector (GoK, 1999:16). An examination of the gender division of labour in the agricultural sector illustrates that women and girls are responsible for much of this labour in.both the subsistence and cash crop economies. In Kenya, women provide eighty per cent of farm labour, yet they find it more difficult than men to acquire inputs, credit, extension, farmers training and information (GoK, 1995).

2.2.1 Overview of Men's Roles in SSA

Small-scale agriculture embraces both family-based and communal production (Nayagets, 2005). According to Alderman (2003), gender in agriculture describes the roles of men and women in agricultural production. Roles may range from provision of labour, responsibilities on who makes decisions on what is to be cultivated, where the agricultural produce will be marketed, and who controls the income generated from the agricultural produce (Nayagets, 2005:8).

The literature on gender participation in SSA and household economy tends to emphasize more on the role of women, than men in SSA production and household economy. For example, a study by Keller, Phiri and Milimo (1990) indicates that customary law in an African setup allows women and men to have land ownership. In many Zambian ethnic groups, both men and women had access to considerable control over productive resources such as land (World Bank, 2003). This was an indication that women as well as men could equally exercise duties in SSA production.

This changed during the colonial era in Africa which was characterized by resettlements and change of governance with men being given more power to own land through compensation resulting from resettlements (Hansen, 2006). Efforts to address land tenure systems were skewed towards men and thus giving them more accessibility to production processes, technology and sale of farm resources

(Muntemba, 1989). Men provided avenues through which women could access land by being relatives such as husbands, brothers or uncles.

According to Munuh (1989), in most parts of pre-colonial Africa, men had more superior right to land usage. This trend continues in the contemporary period where men are preferred as inheritors of family property, head of households as well as controllers of household resources (Birgegard, 2002). Men have primary rights to inheritance and possession of household property. Due to the security they possess in land ownership and control of household resources, men have the ability to control household production through their own and household's (wives, children, hired labour) efforts.

In household production, men played difficult tasks such as digging trenches, putting up hedges and shepherding of livestock in areas far away from home as well as protecting their homesteads (Miguel, 2009). There has, however, been a changing trend in SSA and household production in the post-colonial era. According to Verma (2001), many farm roles and responsibilities that were traditionally the domains of men have been offloaded onto the shoulders of women. Colonial policies led to migration of men and prompted land alienation and inequalities in distribution of land. As a result, women have had to assume men's on-farm labour responsibilities, leading to a situation where men's traditional roles and authority are increasingly being called into question. This challenge has also been substantiated by men's failure to fulfill their roles as

providers of income and escalated gender conflicts and discursive politics within households (Daniel, 2010). While studies provide some of the roles played by men in SSA and household economy, there is hardly any information explaining the factors that influenced their participation or failure to participate in household economies.

2.2.2 Effects of Colonial Rule on SSA and the Participation of Men

The colonial policies of land alienation and conscription of African labour, especially that of men, greatly altered gender relations and consequently food production. The European settlers occupied most rich agricultural areas leaving the marginal areas to the Africans. Division of labour was altered as more men moved out of the rural areas. With the coercion of men to join the army and other institutions, Ndenda (1991) argues that women were overburdened with various agricultural tasks they had to perform in the absence of able-bodied men. From the commission of inquiry formed in 1942 to investigate the causes of the famine that occurred in that year, Ndeda highlights some of the findings as shortage of labour as a result of too many men being drawn from their localities as cited by the Chief Native Commissioner for Nyanza (Ndeda, 1991:190). The prevalence of cash crop production was also cited by Africans as a cause of low food production (Musalia, 1999).

According to Musalia, male out-migration did not stop with independence. She states that more men moved to urban areas or cash crop plantations in even greater numbers as resources continued to shrink in the rural areas. The situation even

became worse with the introduction of the Structural Adjustment Programmes (SAPs) from the late 1980s. The World Bank states that by 1989, 40% of the small agricultural holdings were managed by women. The women not only continue to head the households in the absence of men, but they also contribute the required labour for both food and cash crop production. This situation is made worse as the women can no longer rely on children's labour because of formal education. Their productivity is, therefore, hampered by the fact that labour is distributed over so many other activities (Musalia, 1999:68).

2.3 Organization of Labour in Agriculture among the Traditional Gikuyu Community

Agricultural work among the Agikuyu was concentrated at the beginning of the rainy seasons and during the harvest period. In between was a rest period when the community had time to engage in other activities such as trading and crafts (Muchoki, 1988). Muchoki states that there were men's and women's crop. Among the crops planted by women included maize, millet, sorghum, pigeon peas and beans. Sugarcane, bananas, yams, cassava, gourds, tobacco and sweet potatoes were planted and cared for by men. Although he states that the reason behind the division is not clear, however, Nasimiyu (in Muchoki, 1988) observes that among the Bukusu, agricultural tasks done by men were those requiring superior strength like clearing and ploughing. Farming tasks done by women tended to be less stimulating and were more repetitive, hence they tended to consume more time. From the above observation, it is obvious that the crops cared for by women

needed more attention than men's crops, even with this situation; men had an active role in farming.

According to Muchoki, the ordinary weeding was carried out continuously by women, as far as their own plots were concerned, apart from the weeding at the beginning of each new season, while men were responsible for weeding sugarcane in the valleys, and looked after yams, banana trees and other men's crops (Muchoki, 1988:84). Harvesting was essentially the work of women, although the digging of yams was done by men. The women had the responsibility of storing the harvested crop and it was them who decided what was to be preserved for planting during the next season. In Gikuyu traditional society, women had total control of the harvested crops and men took no interest in it and it was women who decided what was to be consumed, given out as gifts, and if there were any produce to be exchanged with other items, it was never done until it was ensured that there was enough food for the family (Kariuki, in Muchoki 1988). According to Fisher (1950), men were not even allowed to peer into women's granaries. This scenario has changed to instances where men have shifted their earlier responsibilities to women. Furhtermore, women have lost control of the harvested crop as they no longer have a say. Chiuri (2010) notes that some men have resorted to stealing food from the granaries to sustain their habits.

In traditional Gikuyu society, agricultural work was divided between the genders and it was not just women's business. There was no taboo that would have

prevented a man from planting maize or sorghum. However, Muchoki posits that the introduction of colonialism and the incorporation of Kenya into the international capitalist system paved the way for the breakdown of traditional division of labour. Alienation of land and creation of reserves by the colonial government in Kiambu led to the shortage of land among the Kikuyu. This affected their agriculture. The demand for African labour in the settler farms, led to the breakdown of the traditional division of labour (Muchoki, 1988:54). The settler economy established a new division of labour among the Kikuyu which was enforced through the colonial state. Gikuyu males were required to provide labour needed by the settlers which meant that women not only shouldered their traditional role as cultivators, but also combined this with other roles previously associated with men. Muchoki further states that although not all men moved from Kiambu for wage employment, majority of the women had to take care of all the heavy work of clearing the bush, planting and harvesting men's crops, as well as providing food for themselves, the children and even the husbands who were often underfed in their work places (Muchoki, 1988:145). Colonialism thus disrupted the Gikuyu socio-economic systems and transformed the structure and distribution of functions within the family. Women seem to have come out of this change worse off than men.

2.4 Gender Relations in Small-Scale Agricultural Households

Friedmann (1992:5) describes a household as 'a pattern of relationships and processes that connect the household to the extended family, neighbours, the market economy and civic and political associations'. A household socializes its members from one generation to the next about their gender roles, expectations and a position within and outside the household. It also shapes the relations within it and the larger society as it socializes its members. The household economy is central to civil society through which market and non-market relations are articulated. The household does this by continuously solving the problem of allocating time and hence labour of its individual members to different tasks and different rewards (Friedmann, 1992:5).

An examination of gender-based disparities in access to, control over and use of assets and productive resources by the World Bank (2003), found that at the household, community and national levels, the control and ownership of land is male-dominated (World Bank, 2007). Land as the primary asset and resource, patriarchal and matrilineal inheritance traditions ensure that virtually only men own it (IFAD, 2001). Lack of land significantly limits women's access to credit, water and grazing rights, and thereby constrains options for self–employment in agriculture (Fontana & Paciello, 2009). In a study of Senegal and Kenya, for example, women were found to be excluded from contract farming in high value products because they lacked statutory rights over land, had limited access to irrigation and infrastructure and weaker claims over family labour (Maertens &

Swinnen, 2008:31). The lack of secure tenure limits women's land use and cropping choices (Fontana & Paciello, 2009). Wold (1997) however, notes that men's control over family land strengthens their ability to command more of their wives' labour and time in order to maximize their income.

According to Kabeer (2008), gender-related constraints can arise out of gender relations themselves (gender-specific constraints), or may reflect the asymmetric distribution of resources between different groups which limit men's opportunities as well as women's, but usually bear down more heavily on women (gender–intensified inequalities). They can also be the effect of biases in policy: for instance, the state may contribute to female disadvantage by failing to legislate against discrimination or by the manner agricultural extension or land tenure reforms are designed and implemented (Kabeer, 2008:6).

According to Chiuri (2010: 68), the gender inequality that hinders development and perpetuates poverty results from the prevalence of hegemonic notions of masculinities at various levels within Kenyan communities. Kurein defines poverty as 'the socio-economic phenomenon whereby the resources available to a society (or household) are used to satisfy the wants of the few while many do not have even their basic needs met' (Kurein, 1978, cited in Freidmann, 1992:9). Chiuri proposes that persistent poverty occurs where labour, time and other resources are skewed towards members of the masculine gender in rural households where, owing to hegemonic notions of masculinities, most men are in

control of all other members' labour, time and the resources available. 'They take the lion's share while often, making the most minimal contributions towards household production' (Chiuri, 2010:69). They do this because they 'inhibit positions of power which legitimize and reproduce social relationships that generate their dominance' (Corringen et al., 1985:92, cited in Conwell & Lindsfarne, 1994: 19).

Blackben and Bhanu (1999) attribute gender inequalities to be among the major factors hindering economic growth in Sub-Saharan Africa. They give attention to men's limited contribution to economic activities at the household level and recommend increasing labour productivity in the household economy by reducing the time burden of domestic work and redirect women's labour to market production. Chiuri counters this recommendation by arguing that domestic chores keep rural households functioning. Therefore, the proposal that women divert some of their time and labour to market production from domestic production may have serious negative impacts on the families. She poses the question, "Why not make men more active in subsistence and marketable production instead of asking that women shift their time from domestic work to marketable production?" (Chiuri, 2010:69). Although Chiuri notes that men have excess time and labour that could be utilized in the household production, the research did not highlight the factors that influence men's participation in agriculture, which is the focus of this study as the men who have excess time and labour, can be effectively involved to produce food for their households.

2.5 Factors Influencing Men's Participation in SSA and Household Production

According to FAO (1990), culture is among the factors contributing to participation of men in SSA production and household economy. It describes the people's way of life. The culture of small-scale farming in Kenya, just like in many African countries, is one which is dominated by high provision of labour by women and children, and control and ownership of land and household decisions by men (Verma, 2001). The continued dominance of men in decision-making process and control of resources constrains and de-motivates women in agricultural production. A study carried out by the International Fund for Agricultral Development (IFAD) indicates that despite their participation in the production process, the culture of many African societies allow men to predominantly make decisions on behalf of women (IFAD, 2001; Daniel, 2010). This denies women a chance to implement policies and farming strategies that are brought through the efforts of extension workers, and other stakeholders interested in increasing agricultural production. Since labour is an important prerequisite to SSA production, cultural values that give a lot of liberty to men may compromise their contribution in small scale agricultural production (Chiuri, 2010).

Kenyan women experience a wide range of discriminatory practices, limiting their political and economic rights and relegating them to second class citizenship (Alderman, 2003; Chiuri, 2010). Levels of education and literacy for men and women differ widely (Feldstein, 2001). Seventy per cent of illiterate persons in the

country are female (Daniel, 2010). This leads to high concentration of women in small-scale farming as men are always away from home in pursuit of higher education or looking for jobs that are perceived to be more rewarding and more dignified compared to farming. The roles that were traditionally male-dominated are, therefore, offloaded to women who are expected to take responsibility for all household activities.

Government policies enhance or hinder participation of gender in small-scale farming. Among the government policies that are deemed to directly affect gender participation in SSA are the; law of succession, which provides that male and female children should inherit on an equal basis, and that spouses should also inherit equally, except that a widow's inheritance rights are terminated upon remarriage. As a consequence of land ownership law, only 5 per cent of land titleholders are women who in this case have inherited it from their husbands with many widows having a likelihood of being excluded from their husband's inheritance. However, the Kenyan constitution 2010 chapter 5, article 60 clause 1, guarantees equitable access and the elimination of gender discrimination in relation to land (GoK 2010).

Kenya's colonial and subsequent settlement patterns have resulted in male migration from the rural to urban areas with the rural areas increasingly being dominated by female-headed households. With men having titles to land ownership and still considered key decision-makers in the household, the women's

capacity to develop the farm still remains limited. These, therefore leaves them poorer as they do not own or control the land they are responsible for maintaining (Miguel, 2009).

2.6 Effect of Men's Participation in SSA and Household Economy

The lifestyle of men allows them to have a more sociable lifestyle compared to women (Diao, 2007). They have more opportunities to share indigenous knowledge which plays a crucial role in improvement of SSA and house hold economy. In addition, men have more opportunities than women to interact with service providers (Mukudi, 2002). They often participate in agricultural seminars and workshops organized by these providers. By exercising the ability to access information and their level of control of household decisions, men can easily work with formal education providers as well as extension service providers adopting participatory farming approaches (demand-driven approaches) to farmers. These demand-driven approaches give opportunities for male farmers to determine the knowledge they need from service providers thus facilitating better provision of farming knowledge (World Bank, 2007).

According to Fontana and Paciello (2009), the linkages between employment, poverty and gender inequality are complex and require an understanding of how household dynamics and labour market processes interact. The relationship between poverty and women's employment runs in both directions. They go on to state that, poverty can push women into employment – the so-called 'distress sale

of labour' (Elson, 1999), often in informal and poorly paid jobs. On the other hand, women's employment income often makes a critical difference in the poverty status of their households. This does not, however, necessarily mean that the individual situation of the woman concerned improves at the same time, because household income may not be distributed according to the amount of time each member contributes to its generation (Fontana & Paciello, 2009). They further point out that attention should be given to separating individual from average household wellbeing impacts, which may differ because of unequal distribution of rights, resources and time between genders (Fontana & Paciello, 2009:17). The separation of roles among men and women off-farm employment in the rural households may help this study in determining the competing effects of women and men's participation in small SSA production.

2.7 Strategies to Address Equal Participation of Men and Women in SSA

One of the major challenges that may be facing equal participation of men and women in small scale agriculture is rural -urban migration. This has led to reduced labour availability as the productive population in rural areas move from rural areas to urban centres (UNDP, 2005). Fontana and Paciello (2009), however, note that making SSA more interesting by increasing accessibility to agricultural produce, adopting irrigation strategies for dry areas, providing agricultural input and sufficient market information can reduce the rate of migration from rural to urban areas, thus increasing labour availability for production. They however fail

to state that, the reduction in the rate on male-out migration does not transform into automatic availability of the male labour in the household.

Although subsistent farmers predominantly spend most of their efforts in farming, they hardly achieve good yields and therefore, majority of them have been trapped in vicious cycle of poverty (World Bank, 2006; Chiuri, 2010), mainly because a majority of them rely on subsistence farming to earn their livelihood. Furthermore, the rural farmers have little or no access to agricultural information, poor technology, as well as inaccessible markets (Barhanu et al., 2006). Thus, rural small-scale farming, which forms the epicenter of SSA activity, is less likely to attract even the most interested and enthusiastic farmers. It is possible that improving productivity through appropriate labour allocation, technology application, enhanced capital assets, and investing in the development of labour-saving technologies would make SSA an attractive venture for both men and women.

2.8 Conceptual Framework

The conceptual framework adopted for the study is based on the "Farming Systems Approach" (FSA) developed by the Food Agriculture Organization (1995). The FSA states that:

i. The conditions under which farmers operate, dictate the yields they get;

ii. The farmers' social, economic and political wellbeing of their households is linked closely to the way, in which they earn their living and cannot be separated;

iii. The farming systems operated by small-scale farmers are not only complex but are affected by many factors both internal (resources, e.g. labour, capital, and culture) and external factors (input, credit, market), and

iv. The farming system comprises three main components, which vary in quality and quantity from one, farming household/farmer to another. These are input, throughput and output.

Overall, the farming system approach provides a holistic framework for understanding the dynamic gendered resource flows, functional spheres and inter-relationships among inputs, throughputs and outputs. It will be used in this study to examine the factors affecting men's participation in the input, throughput and output process in agriculture and household economy. The FSA recognizes the uniqueness of the individual farming household as far as input, throughput and output are concerned. It also recognizes the influence of factors that are beyond the

farmer's control such as the physical, political, environmental and others that the farmer has control of to some extent.

The FSA comprises three main components, which vary in quality and quantity from one farm household/farmer to another. These account for the difference in farm production. The components include:

a) *Inputs:* Inputs such as land, labour, capital and social values. They are put into the farming system and are transformed by different throughput processes into outputs.

b) *Throughput:* Throughput involves all the processes that are engaged in the allocation of the inputs of a farming system into the different activities in order to produce the outputs targeted. The throughput processes include managerial skills, decision-making, level of knowledge and skills, all which are very different for individual/farming household. The social values that are specific to particular communities are also involved in the throughput stage through the socialization process of women and men farmers which determine their roles and beliefs.

c) *Output:* The outputs are the processed resources produced by a farming system's response to the inputs and throughputs, such as farm yields, income and gendered women and men farmers.

d) *Feedback:* Feedback is the positive or negative response to action that re-enters a system to affect succeeding outputs (Firebaugh, 1988).

Applied to this study, the feedback got from the inputs not only affects the farm outputs of the succeeding efforts but also affects the socio-cultural aspects of the farmers. The socio-cultural beliefs among women and men farmers are also affected. These beliefs that exist within a system will be transmitted to the succeeding generation of farmers (daughters and sons in the household) in a gendered socialization throughput process. In this case, if men's active participation in the agricultural system is low, the factors that influence this low participation are also likely to be transmitted to their sons. This means that where women's participation in agriculture is not enough (due to their gendered triple roles of productive, household and community roles) food insecurity will continue to affect the country.

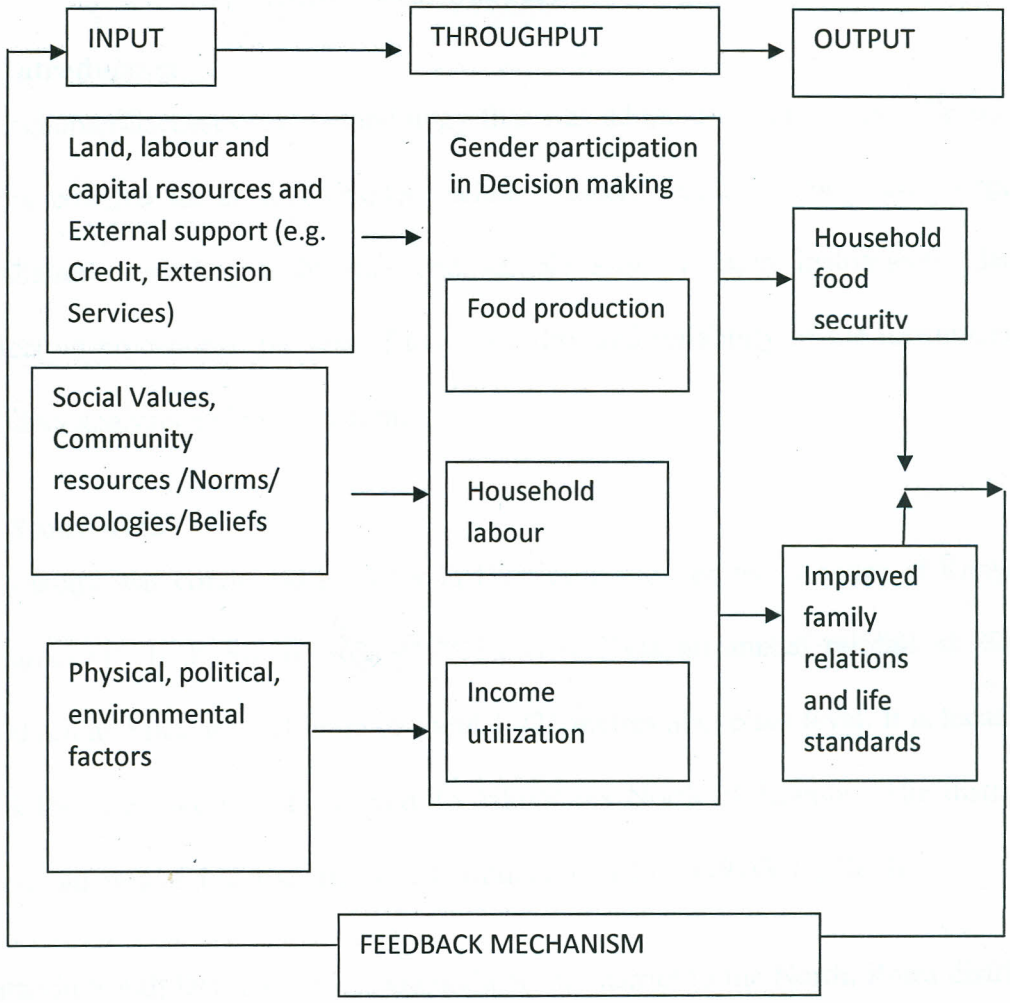
This theory was found adequate because its key tenets tend to capture and explain the variables of the study, which is to understand men's and women's roles in the agricultural system. Applied to this study, the FSA enabled a focus on the household as a system because it is a decision-making unit, which ultimately controls the transformation of inputs into basic agricultural outputs (production). Objectives of the farm household are set by household members which consists of sub-systems that can closely be linked and are interactive.

An examination of the decision-making unit enabled the study to reveal the participation of men, as the unit establishes goals for the system, controls the

system and provides labour, demands for food and cash in fulfillment of objectives. The off-farm sub-system competes with farm activities for labour (as in the case of women's triple gender roles), providing employment and income-generating activities becoming increasingly important to supplement the wellbeing of farming households. The FSA has independent, dependent and intervening variables that are deemed to be integral in household production. As much as labour, capital, participation and culture are integral to SSA production, other external factors such as input availability credit and markets may influence agricultural production and household economy, this are thus considered to interfere with the main independent variables for the study. It was, however used in this study to examine the gender factors affecting men and women's participation in agriculture and to provide mechanisms of ensuring that the feedback from the system is not negative, but one that will lead to food security and improved livelihoods of farmers.

The theory provided parameters through which one is able to understand how aspects of the organization of gender serve to condition and shape additional features of men and women participation pattern in agriculture, impacts of their participation and strategies that could help avoid negative feedback to the system from a gender perspective. Collectively, the theory serves as a lens through which it is possible to see how the changing socio-economic conditions, environmental influences, cultural traditions and physiological factors may bring changes in gender roles and lead to socio-economic development.

Figure 2.1: Conceptual Framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapterdiscusses the methodology that was adopted by this study. The sub-topics covered under this chapter include: research design, study area, target population, sampling techniques and sample size, research instruments, data collection procedures, pre-test of tools, validity and reliability of the instruments and data analysis and presentation.

3.2 Study Area

This study was conducted in Gatundu District in the Central Province of Kenya. Gatundu (1° 1' 0" South, 36° 56' 0" East) receives an annual rainfall of 800-2000mm and lies at an altitude of about 1,721 metres above sea level. It is located 15 kilometres West of Thika and 15 kilometres North of Kiambu. The district covers an area of 192.1 sqkm² with a population of 113,699 (GoK, 2010).

Gatundu South District borders Gatundu North district to the North, Ruiru district to the south and Thika district to the west. It has 3 divisions, namely, Ndarugo, Kiganjo and Ngenda as shown in the map of the district below:

Map of Gatundu South District

A majority of the people in Ndarugu Division depend on SSA production for their main source of livelihood. Most subsistent farmers in this division depend on cash crops, food crops and livestock production for food and income generation. Ndarugo division has 6 locations namely, Munyuini, Karatu, Karinga, Gitwe, Gachagare and Kirangi. The population of the division is presented in Table 3.1 below.

The study focused on Ndarugu Division because it has high concentration of small-scale farmers. The division is divided into 6 locations with each having an average household population of 855 (GoK, 2010). Most famers in the study area depend on cash crops, food crops and livestock production for food security and income production.

Gatundu South district is predominantly agricultural-based with majority in the district depending on the sector for their livelihood, with 80% directly or indirectly employed in the sector. Coffee, tea and dairy farming are the main agricultural activities in the district. The main food crops grown are maize, beans and Irish potatoes (GoK, 2009).

According to GoK (2008) the food crops grown in the district are not adequate to feed the district population and substantial amounts of maize, beans and Irish potatoes are purchased from other districts. The major cash crops grown are coffee and tea, with most of the tea being grown in small-scale farms. The dwindling income from coffee and tea farming has forced the farmers to shift from cash crops to horticultural farming. Horticultural farming is widely practiced in the district depending on the suitability of the climate for crops in the region. The major horticultural crops are pineapples and passion fruits. The main livestock enterprises are dairy cattle, poultry, goats, sheep, rabbits and pigs. Production trends for livestock and livestock products have been increasing over time. This sub-sector has been encouraged by a ready urban market in Thika and Nairobi (GoK, 2008).

The district has soils that correspond entirely with the typical Aberdare, humic andosols and notosols. This notosols have great agricultural potential coupled with the relatively high rainfall regime in the region. The rainfall pattern is bi-modal with two distinct rainy seasons, long rains falling in the month of March and May while short rains between October and November. The amount varies with altitude ranging from 800mm to 2000 mm with the highest rainfall being experienced in the tea zones. Agricultural activities and the type of crops grown in the District are heavily determined by the rainfall patterns.

3.3 Research Design

To achieve the objectives of this study, a descriptive survey design was used. Descriptive survey designs are used to allow the researcher to gather information, summarize, present and interpret data, for the purpose of clarification (Orodho, 2009). It therefore, involves description of the state of affairs as it exists (Kombo & Tromp, 2006). Descriptive survey design entails detailed examination of characteristics of an individual unit, a single subject, a clique or a community with similar events (Cohen & Manion, 1989). The aim of a descriptive study design is to probe and to analyze intensively the multifarious phenomena that constitute the lifecycle of the unit with a view to establishing generalizations about the wider population to which the unit belongs, (Cohen & Manion, 1989; Hamel et al.,1993).

3.4 Target Population

The target population for the study were households within Ndarugo Division. The division was chosen because it has both smallholder cash crop (tea and coffee) and subsistent as well as pure subsistent farming zones, thus incorporating a complete diversity of small-scale farming economies. The total population for the division is 20,236 and the total number of households are 5129 (GoK, 2010). The target community was composed of household members who constitute household heads, men and women as well as other household members above 18 years of age. The women interviewed in the study provided insights into the factors influencing men's participation in agricultural households.

Table 3.1: Distribution of the target community within locations in Ndarugu Division

Locations	Total population	No. of households
Munyuini	3750	897
Karatu	2318	650
Karinga	4813	1224
Gitwe	4098	1021
Gacharage	1704	395
Kirangi	3553	942
Total	20,236	5,129

Source: GoK, 2010

3.5 Sampling Techniques and Sample Size

This section has two stages, the first one dealing with the sampling technique while the second illustrates the sample size.

3.5.1 Sampling Techniques

A multistage sampling technique was used to get the required sample. One division, namely Ndarugu, was purposively identified from the district; this is because most farmers in these regions are small-scale farmers and the Division has two agri-ecological zones.

Systematic random sampling in combination with purposive sampling was the best suitable for the study. Samples were drawn by starting at a randomly selected element in the sampling frame and then every *n*th element starting at random in the list of administrative units within Gatundu South District and picked every kth element until the desired sample size was attained.

3.5.2 Sample size

According to Kothari (2004), 20% of an accessible population is adequate for a study in social research. The study, therefore, sampled 30% of the total number of administrative units in Ndarugu Division and 30% of the total number of enumeration areas within the two locations selected. This was 30 % of 11 enumeration areas giving a sample of 3 areas to participate in the study.

For households to participate in the study, 30% of the total number of each was selected from the areas participated in the study. This gave a sample size of 78 households where each provided one respondent to participate in the study. The sampling technique and sample size calculations are illustrated below:

Stage 1

Sampling of locations:

The researcher sampled the locations to be visited using 30% of the total locations shown above.

$$\frac{30 \times 6}{100} = 2 \text{ locations}$$

The researcher wrote the names of each location in a separate paper and folded them and thereafter, put them in a tin and shuffled them. Two locations Karatu and Gitwe were randomly picked from the tin.

Stage 2: Selection of the Enumeration Areas (EA)

The researcher visited the District Statistics Office in Gatundu South to get the EA mappings for the two locations selected. According to Enumerators' Instruction Manual (2009), the population of an EA varies from 50 – 149 households depending on the population density, terrain and vastness of the area concerned. According to the map, the EAs were villages. Gitwe has 7EAs (1, 2, 3, 4, 5, 6, 7) and Karatu has 4EAs (1, 2, 3, 4). To get the number of EAs that formed the sampling unit, the researcher used 30% representation to calculate the total EAs (11) from which 3 EAs were randomly selected (one from Karatu – Munyuini and two from Gitwe – Karinga and Riitho).

Stage 3: Selection of Households

Step 1:

Gitwe – Karinga has 86HH, with Riitho having 84HH, while Karatu- Munyuini has 89HH. 30% representation of the population was picked as the sample of the study. This resulted in:

Table 3.2: Summary sample size

EA	HH	30%	Sample size
Karinga	86	25.8	26
Riitho	84	25.2	25
Munyuiini	89	26.7	27
Total	259	77.7	78

Step 2:

With the use of the EA mapping provided, the researcher numbered all the dwelling units starting from 001 to N. in a clockwise direction. After going through the completed household listing form, all the noted non- residential structures were eliminated by drawing a dash on HH serial number. The rest were again numbered from 001 to N to acquire the total number of households. The total was then divided by 26 to establish an interval. A random number was selected from which the interval value was added or subtracted to aid in getting the required sample households (25, 26, and 27 =78).

3.6 Research Instruments

A Semi-structured questionnaire was used as the instrument of data collection in the study. According to Orodho (2009), questionnaires provide a high degree of data standardization and adoption of generalized information amongst any population. They are useful in a descriptive study where there is need to quickly and easily get information from people in a non-threatening way. The questionnaire had questions requiring respondents to rate various statements based on the Likert scale as well as questions rating aspects of gender participation. It also had open-ended questions to probe respondents to provide ideas that would help in meeting the study objectives.

3.7 Data Collection

3.7.1 Primary Data

This study used both questionnaires (Appendix i) and interview guides (Appendix ii) to collect primary data. The researcher with the help of trained research assistants administered the questionnaire to the respondents and allowed them to answer the questions. The research team provided guidelines to the respondents in areas where they had difficulties. Semi-structured interview guides were used to obtain in-depth information from key informants. The researchers guided the respondents through a question and answer session and recorded the responses.

3.7.2 Secondary Data

The researcher also conducted library research to obtain secondary data, from various sources such as books, journals, periodicals and research reports among others.

3.8Pre-Test

Before performing the actual data collection, the researcher pre-tested the study instruments in one of the locations in Gatundu. The respondents in the pre-test were not part of the sampling frame. The pre-test was done to assess the suitability of the research instruments in eliciting the required responses and clarity in wording of the items. It also checked the consistency of the responses and the types of responses to be expected from the instruments. The pilot study also tested the validity and reliability of the instruments. It enabled the researcher to familiarize himself with the administration of the instruments as well as giving the

time estimate one instrument required. The findings from the pre-test were used to make adjustments to the research instruments.

3.9 Validity and Reliability of the Instruments

According to Mugenda and Mugenda (2003), validity refers to the extent to which an instrument measures what it is purported to measure. Content validity of the instruments was judged by the researcher through the triangulation method of data collection, as well as by seeking expert judgments from the supervisors while developing and revising the research instruments. This was done by holding discussions, as well as making relevant comments and suggestions which were then synchronized. The reliability of instruments was checked during piloting to establish whether there was ambiguity in any item and whether the instruments elicited the type of data anticipated. Responses were examined to see if they held together in a logical way, if found necessary, questions were modified so as to avoid misinterpretation. The triangulation approach adapted by the study ensured accuracy and maximum reliability of collected information as well as protection against any bias.

3.10 Data Analysis and Presentation

To achieve objectives one and two, descriptive statistics were used. This entailed statistical analysis to determine the means, percentages, frequencies and cross-tabulations in order to identify the actual roles of men and women. Factors which influence men and women's participation in SSA were interrogated.

To accomplish objective three, the Likert scale technique was employed to assess the extent of men's participation in agriculture. Predetermined effects were presented to the respondents and Likert scaling technique was used to rate the extent of men and women's participation in small-scale agricultural production. When responding to a likert questionnaire item, respondents specified their level of agreement to the statements. This was by making a choice from the scale of very low (1), low (2), high (3), and very high (4). Descriptive analysis was utilized to suggest strategies to be put in place to address men and women's participation in agriculture so as to achieve objective four. Data generated was classified into different categories through coding and tabulation. Quantitative data were analyzed using the Statistical Package for Social Sciences (SPSS) version 17.0 application software, while qualitative data were analyzed thematically.

CHAPTER FOUR

GENDER FACTORS INFLUENCING PARTICPATION IN SMALL-SCALE AGRICULTURE IN GATUNDU SOUTH DISTRICT

4.1 Introduction

This chapter presents the study findings. The findings are organized according to themes derived from the objectives of the study as follows: the bio-data of the respondents, the roles of men and women in SSA and household economy, gender factors that influence the participation of women and men in SSA and household economy, effects of women's and men's participation in SSA and strategies for optimizing men and women's participation in SSA and household economy. Seventy-eight questionnaires were dispatched to the respondents and were duly filled and returned, representing 100 per cent response rate. The gender representation in the study was 54 per cent men and 46 per cent women.

4.2 Respondent Profiles

This section presents the respondents background information considered crucial for subsequent discussions such as age, level of education, size of land and income levels.

4.2.1 Age

Age of farmers was thought to be a crucial component of the study, as it reveals the age categories of the people in the farm households. Scholars have noted that, the age may influence participation in farm activities and/or access to resources

(GoK, 2005). The researcher, therefore, asked the respondents to indicate their age brackets and the results are presented in Table 4.1 below.

Table 4.1: Age of the respondents

Age	Frequency	Male (%)	Frequency	Female (%)
18-30	5	12	4	12
31-50	27	65	21	59
51-70	10	24	11	29
Total	42	100	36	100

From Table 4.1, 12% of both men and women were aged 18-30 years. Among ages 31-50 there were more men as compared to women, with 65% of the respondents being male while 59% were females. This indicates that there are more men than women in the active age group who could help the households improve their agricultural production. In the age bracket of 51-70, there were more women than men, with 29% and 24%, respectively.

There are fewer younger people in the households as indicated by only 12% being in the rural areas. Their absence could be attributed to being in schools and colleges, while an equal number of young men and women could also be an indication that a percentage of young men and women have dropped out of school. The study, however, focused on those farmers who were either married or had reached the age of establishing a household.

4.2.2 Level of Education

In identifying this variable, the study took note of the fact that research has shown that education plays a vital role in the socio-economic wellbeing of the society. In agriculture, education is a key determinant of technology use and with its levels correlating highly with the adoption rates. This in turn increases agricultural productivity, incomes and improved livelihoods (Olwande et al., 2009; Uaiene et al., 2009). It affects the level of participation and implementation of extension information and services and technicalities of handling agricultural technologies. The findings for this variable are presented in Table 4.2 below.

Table 4.2: Education level of respondents

Education level	Frequency	Percentage	M	W
Primary	33	43	17	14
Secondary	33	43	11	22
A-levels	2	2	2	0
College	5	6	2	3
No Education	5	6	2	3
Total	78	100		

Study findings revealed that 43% of women and men farmers had attained primary education level and secondary level, respectively. Only 8% had gone beyond secondary education with 6% having no formal education at all. The high numbers of farmers with primary level education suggests a higher percentage of school

dropouts and perhaps who have no other means of earning an income rather than from farming. This has a negative impact not only on agricultural production but also on the socio-economic standards of farmers. A further analysis of the results showed that, of the 33 respondents who indicated that they had primary level of education, 53% were women and 43% were men. In the secondary section, out of the 33 respondents, men had a higher level of education than women with 68% and 32%, respectively. The findings also reveal that of the 5 respondents who went beyond secondary level, 67% were women. However, women also led in the numbers of those with no formal education, while all the respondents at A-levels were men. The results are presented in Figure 4.1 below.

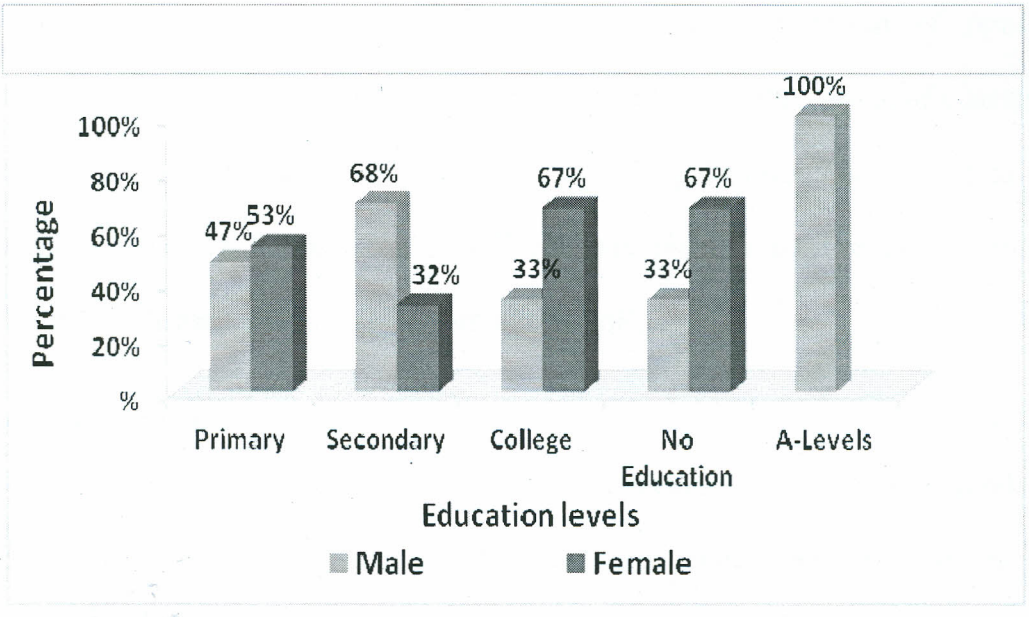


Figure 4.1: Education level disaggregated by gender

The data show that men had relatively higher levels of education than women. Various authors have underscored the significance of this as follows: the lifestyle

of men allows them to be more sociable as compared to women (Diao, 2007). Second, they have more opportunities to share indigenous knowledge which plays a crucial role in improvement of SSA and house hold economy. Third, they have more opportunities than women to interact with service providers (Mukudi, 2002), as they often participate in agricultural seminars and workshops organized by these providers. By exercising the ability to access information and their level of control of household decisions, men can easily work with formal education providers as well as extension service providers adopting participatory farming approaches (demand-driven approaches) to farmers. These demand-driven approaches give opportunities for male farmers to determine the knowledge they need from service providers thus facilitating better provision of farming knowledge (World Bank, 2007). However, despite the higher levels of education among men, it is worth noting that 80% of the agricultural work was done by women, yet they found it more difficult than men to acquire inputs, credit, extension, farmers training and information (GoK, 1995).

4.2.3 Households Sources of Income

The study sought to find out the sources of income that keep households in Gatundu South running. This was important in understanding the dynamics that face a household in the provision of farm inputs and resources that influence agricultural practices and also the contribution of agriculture to the household economy. The findings are presented in Figure 4.2 below.

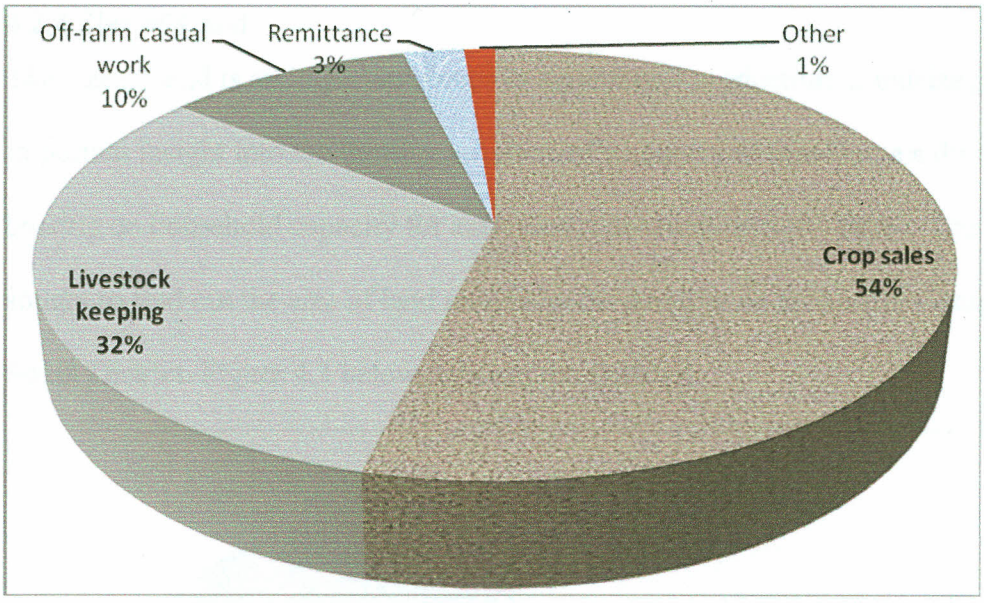


Figure 4.2: Household Sources of Income

Responses indicate that the majority depend on farming for their daily sustenance, that is, 54 % relied on crop sales while 32% depended on livestock keeping. The finding is in line with Alderman (2003) who states that SSA provides source of livelihood directly or indirectly to the majority of the population in the rural areas. This implies that the human resource available at home if well utilised, can lead to improved agricultural produce and hence translate to better incomes. It would also improve the living standards of the farmers. Only 10% of the households depend on off-farm casual work, while 3% depend on remittance from relatives. The findings, therefore, demonstrated the importance of farming to many of the households in Gatundu South District.

4.2.4 Size of Land

The size of land is an important factor in agricultural production. Landsize give an important insight into the farming structure of a country as these have a direct bearing on household capacity for agricultural production(GoK, 2006). The study sought to find out the size of land owned by the small scale farmers in Gatundu South District. Figure 4.3 below presents the findings.

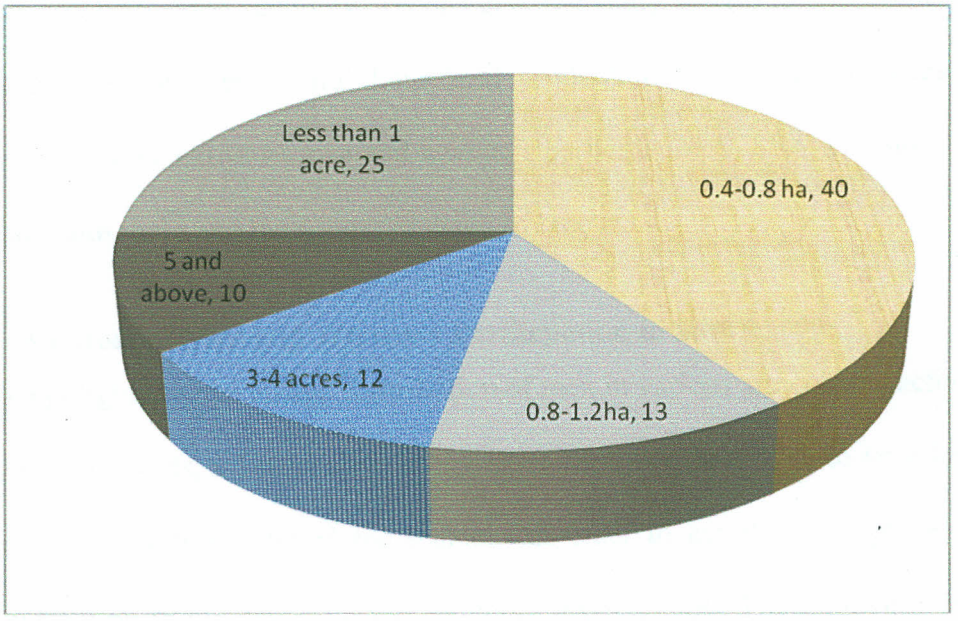


Figure 4.3: Size of land owned

Figure 4.3 show that 40% of the households owned 0.4 – 0.8 hectares of land, with 25% of the farmers having less than 0.4ha under cultivation. Thirteen per cent of the households owned 0.8 - 1.2ha while 12% and 10% owned 1.2 – 1.6ha and more than 2ha, respectively. The study, therefore, established that a majority of the farmers in Gatundu have less than 1.2 hectares of land. This finding agrees with that of Kinyua (2004) who notes that one of the main characteristics of

smallholder farming in Kenya is small land sizes averaging 0.8 – 1.2ha, making land one of the major constraints limiting increased agricultural production.

4.3 Roles of Men and Women in Small-Scale Agriculture and Household Economy

The first objective of the study was to establish the roles of men and women in SSA and household economy. To this end, the study sought to document various variables in the agricultural household production and economy. These were categorized as; extent of men and women's participation in SSA, decision-making in the household and the gender division of labour.

4.3.1 Extent of Men and Women's Partiicpation in SSA

To highlight the percentage contribution of men in various agricultural activities in their households, a Likert scale rating from very low, low, high to very high was used. The study combined the scales in order to get the average percentage contribution in the various activities under investigation. The following variables were considered: crop farming, livestock farming, decision- making and division of labour.

i) Crop Farming

The research noted various crops grown in Gatundu South District. These include coffee and tea as the main cash crops and maize, beans and Irish potatoes as the main food crops (GoK, 2009). The key question however, was the extent of

participation of men and women in crop cultivation. The findings of this are presented in Figure 4.4.

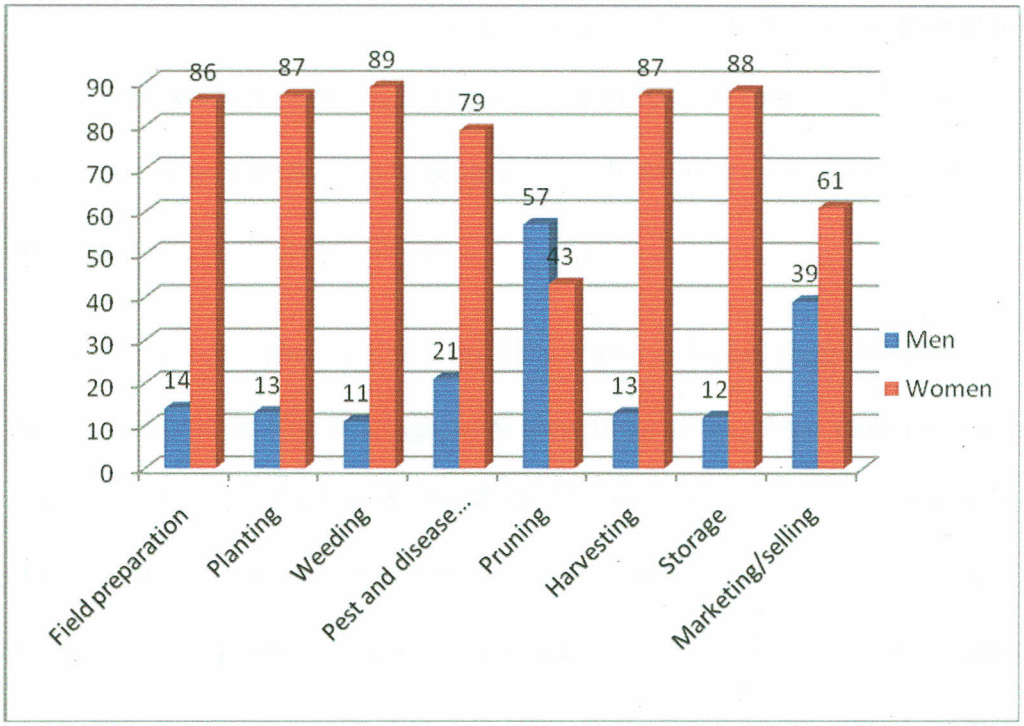


Figure 4.4: Extent of women's and men's contribution to crop production

Figure 4.4 indicates that, men's contribution to crop farming at the household level is on an average of 22% while that of women is at 78%. Activities such as field preparation, weeding, harvesting and storage were among the areas that men contributed minimally to, with less than 15% participation. However, when it came to marketing/selling of farm produce, men had a relatively higher contribution at 39%. This increase may be attributed to the income-generating potential of the activity where men generally assume headship of the household (UNDP, 2005). Pruning which involves the cutting of tea bushes to enable regeneration is normally labor-intensive and culturally a man's job. This could

possibly explain why more men 57% are involved as compared to women. It was noted that pruning is done once in three years and can be done at any time of the day and at a desired pace. This is in contrast to picking of the tea leaves (culturally associated with women) which is done daily and early in the morning. Considering that tea grows in wet areas, the challenges of harsh weather conditions affect more women than men, as they pick the tea.

On average, women's participation was 78% which is higher than that of men in all the crop activities. The findings were similar to those of the Government of Kenya 1994; Mukudi (2002) and UNDP (2003, 2005) which indicated that men's contribution to agriculture is lower than that of women in Africa. Women put in long hours in food production while at the same time providing substantial labour for cash crop production. The statistics show that 70% of agricultural workers, 80% of food producers, 100% of those who process basic foodstuffs and 50% of those who do animal husbandry are all women, even as they undertake from 60% to 90% of marketing. The average percentage participation of women in crop production activities in Gatundu South is also consistent with what Blackben and Bhanu (1999), and Government of Kenya (1994) found in their studies illustrated below in Table 4.5 below.

Table 4.3: Labour contribution by gender within Kenyan households

Activity	Women's labour contribution	Men's labour contribution
Food processing	90%	10% (With children's assistance
Reproduction and domestic chores	95%	5% (with children providing the bulk of support)
Transportation of farm products to market	60%	40%(including motorized transportation)
Food processing and storage	80%	20%
Hoeing and weeding	90%	10% (With children's assistance)
Harvesting and marketing	60%	40%
Average	82%	18%

Source: Adapted from Blackben and Bhanu (1999) and Government of Kenya (1994)

The results in Figure 4.4 and Table 4.3 above reveal that women have a higher contribution than men in SSA. Seventy-eight per cent of women contribute highly to household labour production as supported by the findings in table 4.3 which gives an average of 82% in women's contribution. An average of 22% of the men

were said to be participating highly in SSA further agreeing with Blackben and Bhanu (1999) and Government of Kenya (1994) studies which give a figure of 18% participation with the assistance of children. From these findings, it is clear that men spend considerably less time in household production activities. The finding implies that male time and labour has been minimally engaged in SSA leading to loss of opportunities to create wealth within their households. This in turn negatively affected household economy often resulting in poverty and hunger.

Chiuri (2010) attributes the minimal participation by men in SSA to hegemonic notions of masculinities, which allow most men to be in control of all other members' labour, time and resources available. She further states that the current hegemonic masculinities operating in Kenya tolerate minimal male contribution in household production. This reinforces and promotes masculine power in rural Kenya in particular. The result is a new form of patriarchy where there is 'authority with minimal responsibility'. A key informant interview with the Agricultural Officer in the district agreed with Chiuri's position on masculinities. He observed that,

> Men in this area are rarely answerable to anyone in their households as they are the heads and custodians of all resources. They can work if they so wish or go to the centers and no one will question them (O.I. Mwirigi*, 10/2/2012, Gatundu).

Chiuri (2010) further states that there is lack of societal expectations from men in rural areas, although this is not the case for women in Gatundu South District.

Women are blamed if the family is poor, if there is no food or if the farms are not properly cultivated and the yields are low (O.I. Mwirigi*, 10/2/2012, Gatundu).

ii) Animal Husbandry

As noted earlier (4.1.3), 32% of farmers rely mostly on livestock as a source of income. The study sought to document the level of participation by men and women in the related activities. The results are presented in figure 4.5 below.

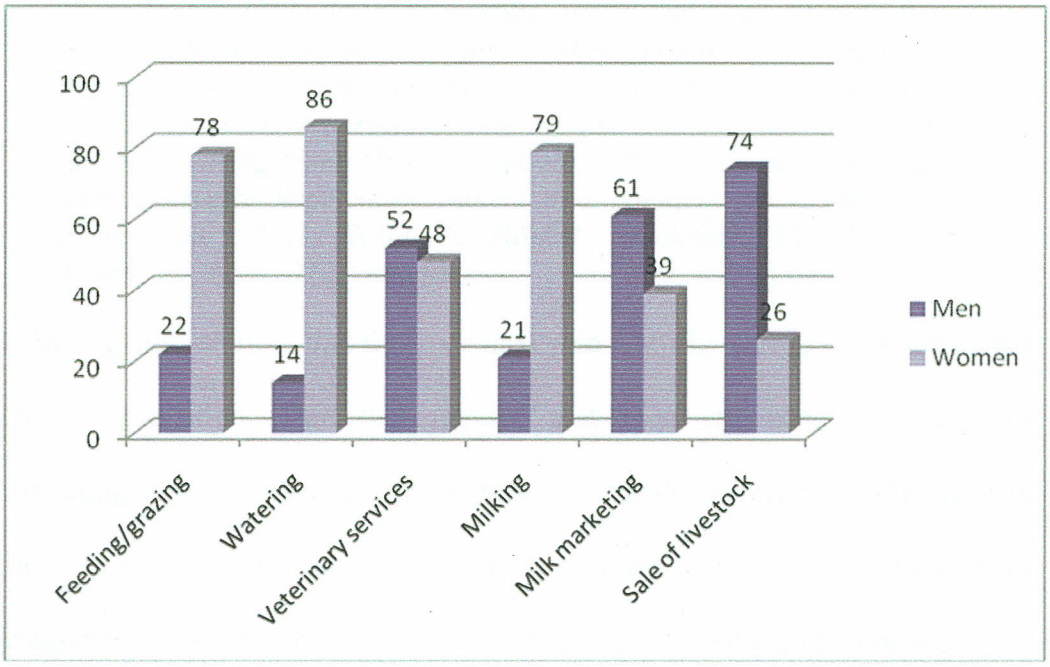


Figure 4.5: Extent of men and women's participation in livestock production

The data show that men's participation in animal feeding was 22%, watering 14% and milking 21%. These levels are particularly low as compared to those of women. The search for veterinary services had an almost equal participation by men (52%) and women (48%). However, the participation of men increases in the area of milk marketing and in the sale of livestock 74% on the high end of the

scale. The average men's participation in livestock production is relatively higher at 41% as compared to their participation in crop production which averages at 22%. The increase in participation could be attributed to the immediate benefits that livestock keeping brings as compared to crop production, which takes a longer time to mature and is laborious. This opinion was captured in a focus group discussion with a group of women who had the following to say:

> *Some livestock like chicken, rabbits, goats and cows (though the cow is labour intensive) are good as they generate small incomes for the household. However, our men are very keen to have a share of the money we generate, despite the fact that they do not assist much in rearing them. However, we allow them to market for us as they generally have many outlets and contacts since they are always out' (O1s,* Wangui*, Nduta*, Nyokabi*, Mary*, and Wambui*, *12/2/2012, Gatundu)*

The findings also showed that there are men who actively engage in both crop and livestock production. This fact implies that men are equally capable of participating in farm activities. However, due to gender perceptions, the majority chose to stay away. The factors which influence these choices formed the basis of investigation in the second objective of the study, as illustrated in section 4.3.

iii) Participation of Men and Women in Decision Making in SSA Activities

The study sought to find out the decision-making patterns within the farm households. Decision-making with regard to land utilization, what should be grown and where, nature and type of inputs, resource acquisition and use, education of children, meals for the family and on the attendance of agricultural seminars and workshops. These decisions determine the success or failure of any

of the farming activities. A list of variables was provided from which the respondents were supposed to indicate, whether the decisions were made by men, women or both. Figure 4.6 illustrates the findings.

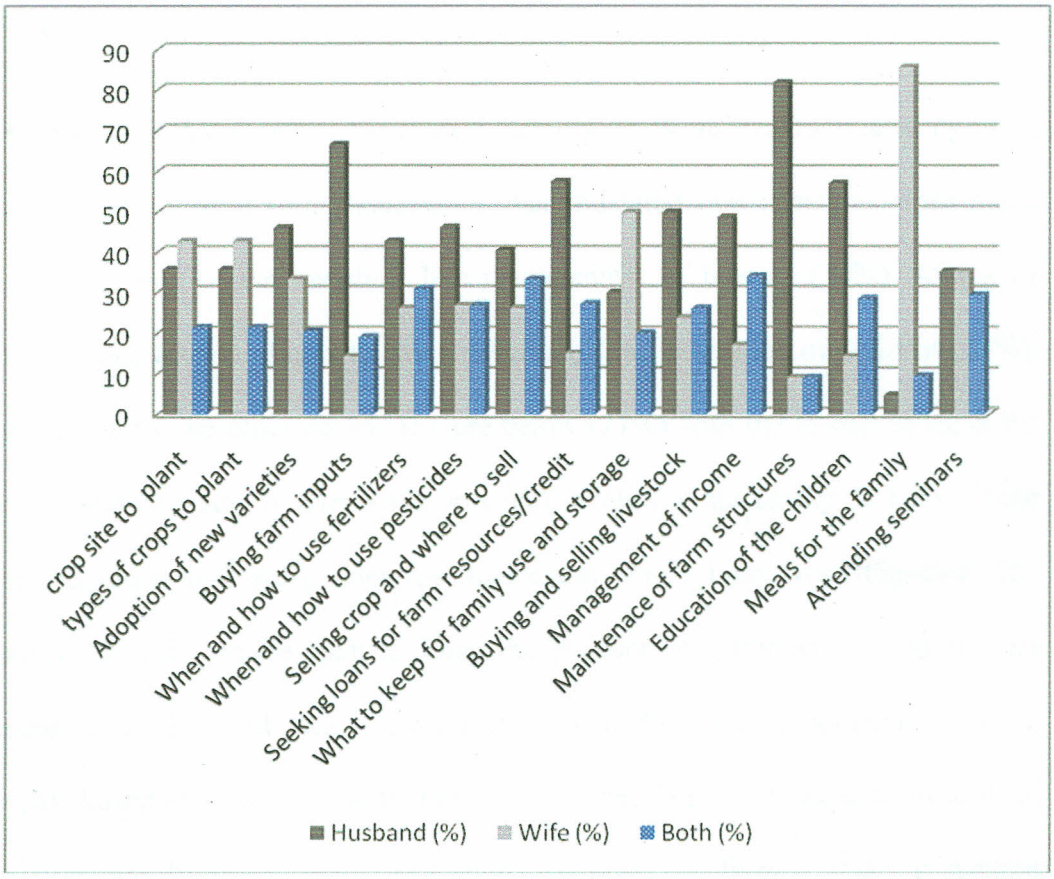


Figure 4.6: Participation in decision-making by HH Members

The research established that important farm decisions were made by men as demonstrated in the figure above. These decisions were mainly on maintenance of farm structures (82%), buying farm inputs (67%), seeking credit (58%), and education of children (57%), buying or selling of livestock (50%), management of

income (49%), when and how to use pesticides (46%), adoption of new seed varieties (46%), when and how to use fertilizers (43%) and in the selling of crops (40%). Women mainly made decisions on meals for the family (86%), what to keep for family use and storage (50%) and selection of crop and site to be planted (43%).

The data show that many of the crucial farming decisions are dominated by men. However, there were some households that indicated that decisions were made jointly on some of the variables like management of income (34%), selling of crops (33%), when and how to use fertilizers (31%), education of children (29%). The figures for the other decisions were below (27%) with the lowest being in the area of maintenance of farm structures and meals for the family at 10%. These joint decisions indicate gender responsiveness where both work together. The study noted that, where such is done, the produce is better and activities were accomplished in good time. In connection with this, one respondent observed, "...my husband is always with me in the farm. We work as a team and all decisions are discussed and agreed upon. Although our farm is small, it sustains our needs" (O1s. Wanjiru, 12/02/2012,).

The study also established that decisions that involve money in Gatundu South District, whether expenditure or income, were dominated by men. These findings support Chiuri's (2010) position of hegemonic masculinities where men are in control of all other member's time, labour and resources. 'They take the lion's

share while often, making the most minimal contribution towards their household production' (Chiuri, 2010:166). This is as a result of '....inhibiting positions of power which legitimize and reproduces social relationships that generate their dominance' (Corrigan et al., 1985:92, cited in Conwell and Lindsfarne 1994:19).

iv) Gender Division of Labour and Time Use in Households in Gatundu South District

The division of labour at the farm household is an important variable in revealing time use as a resource by men and women in contributing to the household economy. Africa's households are characterized by inequality in the distribution of work, income and contribution to productivity, based on gender and age (Mwaka, 1993; Blackben & Bhanu, 1999). This inequality is most pronounced in the division of labour between men and women and boys and girls within the same household. It manifests itself in the social expectations of the members of a household where little expectation from men and boys creates enormous inefficiences in family labour allocations and time use. Rural development studies in Kenya and other African countries show that African women are overworked with their participation in agriculture ranging from 60 -90% (Government of Kenya 1994; Mukudi, (2002) and UNDP (2003, 2005). The question then arises – 'when women are doing all this, what are men who are residents in the farm households doing? The study, therefore, assessed the time use by applying the twenty-four hour activity profile of the Harvard Analylitical Framework (Moser, 2002). Gender daily calendars were produced by separating groups of women and

men from a zone or locality who were asked to give a record of their activities on a regular day. This enabled the study to document the actual roles performed by men, women, boys and girls in SSA production and household economy. The results are presented in Table 4.4 below.

Table 4.4: Daily activity profile of women and men in SSA in Kiambu County

Time	Women's Activities	Men's Activities	Boys' & Girls' Activities
5am-7am	Milk, deliver milk, prepare children for school, take tea with children, escort children to school where necessary, feed the cows.	Sleep	Leave for school
7am - 8.30 am	Clean the house, wash utensils, fetch water if not available, and give husband breakfast.	Wake up take breakfast	In school
8.30 to 12pm	Work on the farm. Pick tea leaves in tea zones, wash clothes.	Walk through the farm then leave for the centres or to community activities	In school
12-2pm	Prepare lunch, feed the animals and give them water, wash utensils, rest.	May come for lunch, rest then leave. Or not come.	Small children in pre-school come home. Older ones in school
2pm-5pm	May go back to the farm, go to the market, fetch firewood, go to women groups.	After lunch, may sleep or go out to social centres	Small children playing, older ones in school
5 to 7 pm	Ensure all animals are locked in, milk, take milk to collection ret, Make fire, prepare supper.	At social centres	Arrive from school
7pm-9pm	Help children with homework, wash utensils, prepare water for milking the following day and take supper.	Come back home as from 8 pm onwards. Some come very drunk. Rest and watch television or listen to radio	Take supper
9pm - 10pm	Rest and wait for husband		Do homework
10pm -	Relaxing Wait for husband if not arrived, and then sleep.	Sleep	Sleep

An analysis of the entries indicates the following: First, most women woke up early in the morning and work all day. The only time that they seem to rest is in the evening. This workload has an impact on the way agricultural tasks are performed and accomplished in the farm and household. Second, it is evident that majority of men not only put in very few hours in SSA production but also in the contribution towards the economy of the household. From this revelation, the research sought to clarify the number of hours that the few men who said they participate in agriculture put in to SSA production. Table 4.5 indicates the hours worked by all the 18 men who said they participate in SSA.

Table 4.5: Hours utilized in agricultural activities by men

	Male respondents 1-18																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Hours worked	2	1	4	2	1	1	5	2	3	2	4	1	3	4	2	2	1	1

From the Table 4.5, it was noted that on average, men put in 2 hours 20mins per day in SSA production. This indicates that even those who claimed to participate in farming only put in minimum time and effort. Consequently, the study noted that men still had excess time and labour which they could utilize to improve agricultural production and household economy. The gender calendars in Gatundu South District confirmed that women worked long hours. Men in the same households put in too little time in a day, in small-scale production. Some of them were not engaged at all in agricultural production and the economy of their

household. In view of this, it was concluded that a majority of men in Gatundu South District hardly engaged in any productive activities within their households yet they benefited fully from the production.

The study sought explanations on how men spent their time. In this regard, it was noted that most of them were idling, with a majority indulging in smoking or taking alcohol. This implies that it is women who largely provide for all these personal needs of men as well as those of their children. The above results portray as Chiuri (2010) states, parasitic hegemonic masculinities within Kenya's rural households, which is not only traceable in Kenya, but also in most of Africa's agricultural communities.

v) Overall Participation in SSA by Men and Women

The study sought to document the general contribution of men and women in SSA. This was achieved by asking a general question, that is, who participates more than the other in SSA – man or woman. The purpose was to test validity of earlier responses. The results are shown below in Figure 4.7.

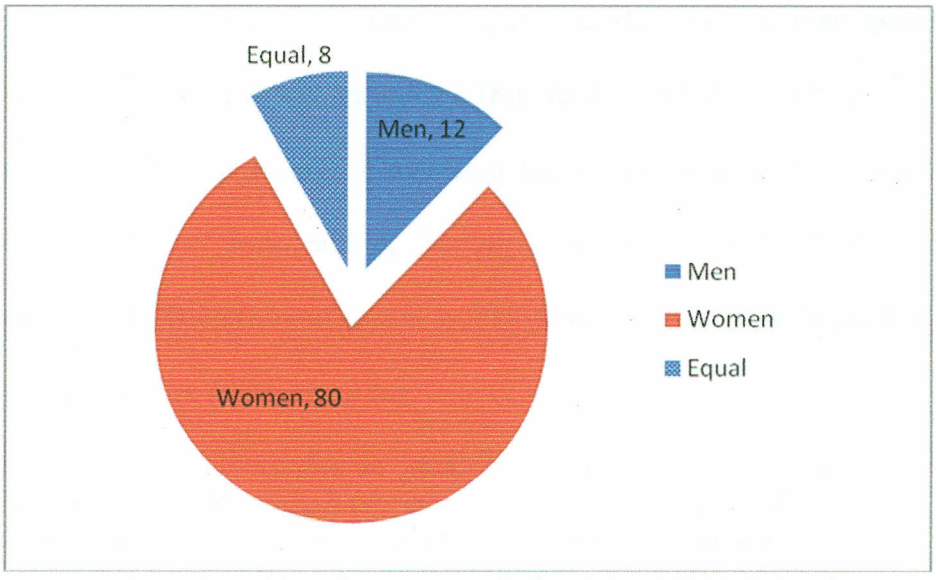


Figure 4.7: Level of participation in SSA by women and men

In terms of total participation in SSA, 80% of the respondents agreed that women participate more than men. Men's contribution is 12% while only 8% were in agreement that men and women have equal participation in SSA. The finding, therefore, indicates that though men participate in SSA, their participation is far below that of women. This is despite their being present in the households as illustrated in table 4.4 below. This minimal participation affects SSA production. Conversely, it was clear that on average, men are more educated than women and that 35% of them attend agricultural workshops and seminars. This means that men have the required technologies to improve farming yet they fail to put this knowledge into use, leading to low incomes accrued from SSA in Gatundu South District.

With 86% of the respondents indicating that they depend on farming for their source of income (Figure 4.2), it is interesting to note that 49% of men make decisions on how such income will be utilized (Figure 4.6), yet their participation in SSA production is low on average. This affects the morale of women who after working so hard on the farm, end up having little say on distribution and utilization of income. The effect of this is to low production. In relation to this, some respondents had the following to say:

> *Tea farming is tedious due to picking it and taking it to the collection centers. We put all our efforts to ensure a good produce, but when the money comes, it goes to the men, whose work is pruning; done once in three years. These men do not remember that we are the ones who have worked. They neither share the money with us nor involve us in decisions concerning it. What is the need of working so hard? We have resorted to picking the tea and dropping it on the ground. We do this because if we fail to go to the farm, we will be divorced or battered. By pouring it to the ground, we ensure that its quantity and quality is low. That way the man will have less money to squander. He will never discover what happened as the tea will be picked, just as it should. (*O.Is Wangui, Nduta, Nyokabi, Mary, and Wambui. *12/2/2012, Munyuini).*

The sentiments above demonstrate the levels that women have reached due to frustrations of being denied the fruits of their labour. Considering that tea is the second largest cash crop in Kenya, and thus a major foreign exchange earner, destroying it not only depletes their household economy but also, the country's economy.

The situation is not different among the coffee farmers. Older men were said to be holding on to the belief that they will continue earning from the coffee trees they established years back, even when they do little towards the tree production. In a

focus group discussion with the youth, they lamented that their fathers had denied them a share of the coffee trees yet they expected them to work on the farm. "Why should I work at home? My father has refused to give me my inheritance. We have over 800 coffee trees, yet he cannot allocate some to me. When I work on them, I get nothing in return yet I am a grown up!" (O.Is Kimani, 10/02/2012, Gatundu). The sons of such men, therefore, opt to work in other farms where they earn wages. When the casual jobs are few, they prefer hanging out at shopping centres. Women on the other hand concentrate on food crops that are inter-cropped with the coffee trees. The overall effect of this is low coffee production, once again affecting the country's economy.

4.4 Gender Factors which Influence Participation in SSA and Household Economy

The study sought to find out the factors influencing the participation of men and women in SSA and household economy. To this end, the study posed open-ended questions that generated the following responses which are discussed under the following sub-sections: laziness, alcoholism, cultural attitudes, farm size, access to income and credit, availability of farm inputs, low farm income, potential to feed the family, potential to generate income, and the availability of alternative jobs. The results are presented in Figure 4.8 below.

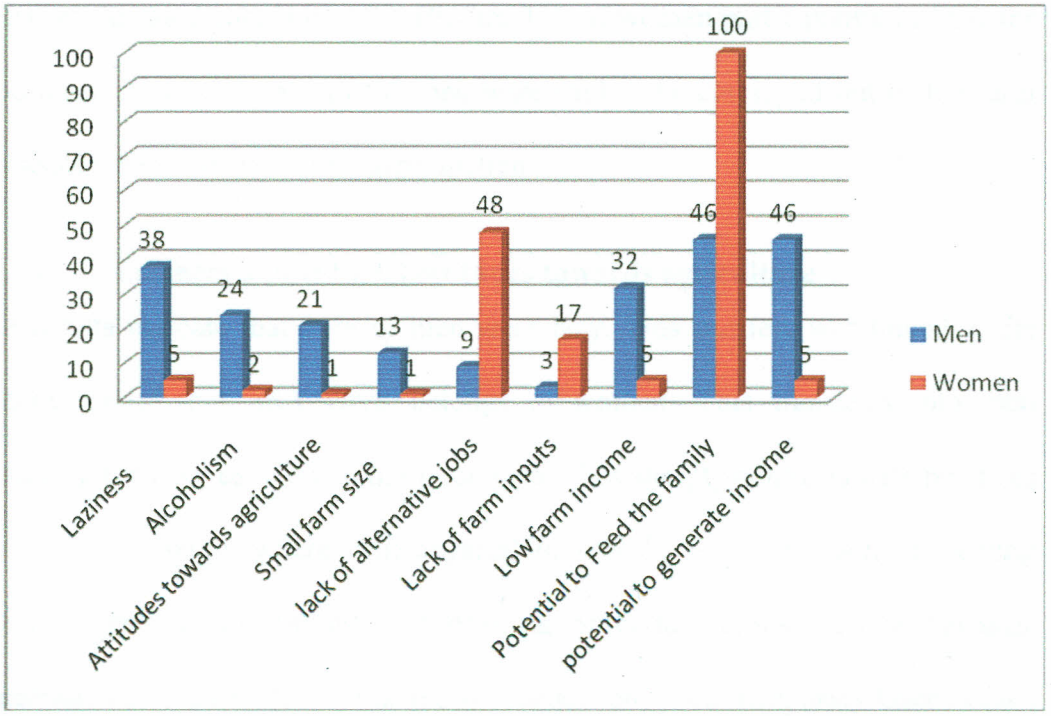


Figure 4.8: Factors influencing men's and women's participation in SSA

The study found that the potential to feed the family and generate income both at (46%), laziness (38%), low farm income (32%), alcoholism (24%), cultural beliefs (21%), and small size of land (17%), were the major influencing factors of participation among men in SSA. Women, on the other hand, were mainly influenced by the need to feed the family (100%), lack of alternatives to farming (48%), and the lack of farm inputs (17%). These results are discussed as below:

i) Potential to generate income and need to feed the family

The findings indicate that men are positively influenced to participate in SSA mainly because of the income that can be earned from the practice (46%) and the desire to provide for their families (46%). It is interesting to note that 46% consider farming to provide food for their family while in the real sense, few

actualize this as depicted by 80% (Figure 4.7) of women participating in SSA for food production. Only 8% of the men were said to be employed out of the farm household, hence their limited participation.

ii) Laziness and cultural attitudes towards agriculture

The results indicate that 38% of men were lazy. This laziness was linked to the cultural belief that SSA work belongs to women. This translates into men expecting their wives to do all the farm work. This sharply contrasts with practices among the Agikuyu where men engaged in specific activities such as clearing bushes, breaking the ground, and growing of certain crops such as bananas, sugarcane and cassava (Kenyatta 1938). Consequently, contemporary Gikuyu men in Gatundu South District have resorted to idleness. The study, therefore, concluded that laziness among men was a drawback in the household economy. When asked why men fail to participate, many said "Nikwiremwo" (to mean, a state of inability or despair). In turn, the laziness/idleness leads to alcoholism and low self-esteem among the men.

The cultural beliefs influencing the men (21%) were said to be the negative attitude that farm work is meant for women, as they are able to bend for long hours. Farming is dirty and associated with failure, as evidenced by some of the respondents who thought it would expose them to ridicule and lower them to the same levels as those who failed in school.

Conversely, women have over time internalized some of the agricultural roles to be theirs, but even with this, they have no choice but farm since men will barely work. Men believe that they should work hard to acquire a farm, plant tea or coffee, or even purchase a cow to give to women to look after. The men argue that, lack of these things will make women to be idle and gossip with others (O.Is Peter Muchai and Dancan Kinuthia, 15/02/2012).

The opinions expressed by men as presented above reflect Gikuyu beliefs on women. Thus, the quality of a good wife is one who is hard working as expressed by Kenyatta (1938). Indeed, some of the respondents stated that men search for hardworking girls to marry. This cultural belief emanates from the socialization of girls and boys in their childhood. 'A girl is told to work hard because if she is known to be lazy, she will never get a husband' (O.I. Wangui, 15/02/2012). These cultural beliefs play a role in influencing men to shy away from farming because they expect the woman they marry to work and feed them. In view of the above, the study concluded that the Gikuyu culture regarding women's roles had been used to exploit women who are expected to work hard in SSA to feed their families.

iii) Alcoholism

The influence of alcoholism (24%) was another factor closely linked to idleness. The idleness that results from this lack of productive participation leads to high levels of alcoholism. Alcoholism further makes the men hopeless as they fail to

perform even the simplest of tasks in the household. This scenario therefore, shifts all the duties that were undertaken by men to women.

Some of the reasons given for the high percentage of alcoholics were linked to the cultural beliefs that men should not stay at home, but should be out of the homestead to learn and share on security and political issues in the community. Other factors included the long absence from the homestead which often leads to loss of control of the household income as well as any other source of income. In this regard, some male respondents had this to say concerning the factors affecting men's participation in SSA:

> *Many men are now depending on their wives. The economy is not good and jobs are few. Women are able to establish small businesses and even sell bananas on the road; they have Self Help Groups and other local merry-go-rounds that generate income for them. Our inability to get income and the subsequent dependence on women causes stress, feelings of inadequacy and low self-esteem among us, which increases our likelihood to perpetuate violence and indulge in alcoholism as an escape route (O1s, Kamau* Kuguru and James*, 10/02/2012).*

The above sentiments portray the frustrations that men experience due to loss of income and control of the household economy. The findings concurs with .

Wamue and Njoroge (2011) observation that there is a gender paradigm shift in the roles of men and women at the household level. Men have progressively removed themselves from their traditional roles of providing for their families. Consequently, the effects of these shifts are felt by the whole family.

iv) Size of land

The size of land under cultivation posed a major concern among men. Thirteen per cent of the respondents attributed the small size in their possession to be discouraging them from farming. In this regard, Peter opined that:

> *Our father left us with 3 acres to us all, five brothers. We have to share that among ourselves, which translates to less than an acre considering that our mother who is still alive has her portion, it is serious. Tell me, what would I do with this piece if my wife and I had to depend on it? (O.I. Peter Gicharu, 15/02/2012).*

Thus, the men attributed their non-participation to the small size of land hence leaving women to cultivate it while they search for off-farm jobs. These jobs are however hard to come by.

Four per cent of the respondents indicated that men fail to participate because they know that at the end of the value chain, they will be the ones benefiting. This number of men could be higher than the 4% as 36% of them who are lazy could be doing so because at the end of the day, they will still find food on the table.

v) Lack of alternative jobs

The results in figure 4.8 indicate that 48% of the women are influenced by lack of other jobs they can engage in to generate income. This situation could arise from the fact that majority of women in the rural areas have low levels of education as exhibited in figure 4.1 and also the triple gender roles that confine them to the domestic arena and consume most of their time. Only 9% of men indicated that they would farm if they lacked another job. This further demonstrates the cultural

attitudes that men have towards farming and the low regard that farming is associated with. That is, dirty and for those who have failed in life.

vii) Lack of inputs

Seventeen per cent of women attributed the lack of farm inputs as a factor discouraging them from farming. This is in sharp contrast to 3% of men who indicated farm inputs as a factor. However, this may be as a result of the minimal participation by men in agricultural activities.

viii) Low farm income

Five per cent of women indicated they were discouraged by the low income generated from the farming activities as opposed to 35% of men. This may be as a result of women's primary goal of providing food for the family, while men's interest is on the financial gain (UNDP, 2005).

With the higher number of men not participating in SSA, and having looked at the factors influencing their participation or lack of, the study sought to establish the effects of men and women's participation on SSA. This was achieved through the third objective presented below.

4.5 Effects of Men's and Women's Participation in SSA

In section 4.4, the study established the factors that influence men and women to participate in SSA. This section focuses on the implications and impacts of the participation of women and men in SSA. The section focused on the effects and

impacts of both participation and non-participation. The results are discussed below.

4.5.1 Effect of men's participation in SSA and household economy

As noted earlier in section 4.3, this section presents the effects of men's participation in SSA in an effort to bring out the impacts of non-participation of men in the household. This is because when men fail to participate in agriculture, some implications that arise are detrimental to the household. King and Andrew (2001) state that although women bear the largest and the most direct costs of gender inequalities in the community, the costs cut more broadly across society ultimately harming everyone – the household, the community and the nation at large. The study therefore posed open-ended questions to the respondents, whose opinions were sought on what happens when men or women fail to participate actively in agriculture. Figure 4.9 presents the findings.

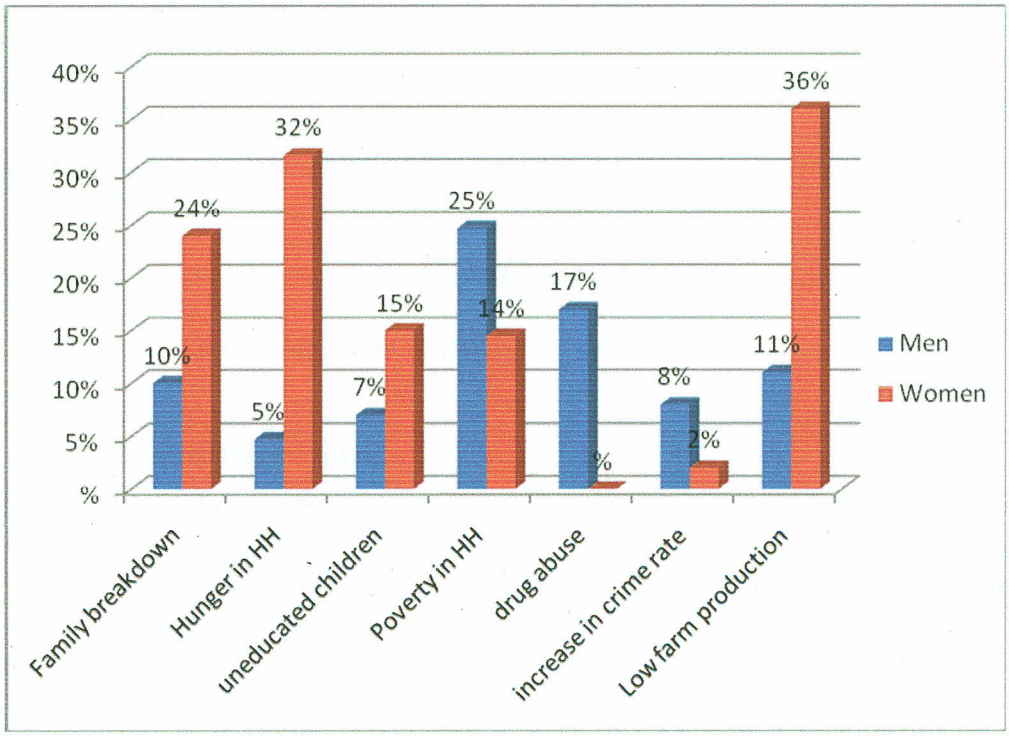


Figure 4.9: Impacts of men's failure to participate in agriculture

The results show that 10% of the households would experience family breakdown if men failed to participate in SSA and 24% if women were to do the same. There would be more severe cases of hunger in the household if women failed to participate (32%), whereas only 5% of the same household would experience hunger if men absent themselves from SSA activities. More children would be uneducated (15%) if women failed to work, as opposed to 7% for men. In terms of poverty, 25% and 14% of the households experience it when men and women exempt themselves from SSA activities, respectively. Cases of alcoholism, drug and substance abuse happen (17%) where men are not active in agricultural activities while no data were obtained to indicate the same for women. Crime rate

increases at 8% for men and 2% for women due to the non-participation in SSA activities. Farm production decreases by 11% and 36% where men and women respectively, fail to participate in SSA activities.

The results of the implications of men's and women's participation in SSA activities are further discussed as follows:

i) Family Breakdown

The study showed that 10% of the households would breakdown where men fail to participate in SSA activities and 24% when women fail. The findings indicate a higher dependence on women in the sustenance of the family. This is in line with Verma (2001) who argues that within gender divisions of labour, many farms' roles and responsibilities that were traditional domain of men were offloaded onto the shoulders of women. Since women have had to assume men's on farm-labour responsibilities, men's traditional roles and authority are increasingly being called into question. As a result, men find themselves unable to meet their economic roles in supporting the household, and their characteristic response has been one of withdrawal. Kimani (O.I 10/02/2012, Ritho) notes that:

> *Women have many opportunities for generating income, they are in groups, Government and Non-Government Organizations fund them, they have the Women Enterprise Fund.....but what do we have? No one thinks of us. It has reached a point where our women are not respecting us, and some of us have stopped fighting and accepted the situation.*

Studies by Wamue and Njoroge (2011) in Kiambu also highlight the positions of helplessness and hopelessness that men have found themselves in as a

consequence of gender role reversal. They go on to state that "...most men in Kiambu have succumbed to feelings of inferiority, uncertainty and frustrations, all with dire consequences to the family. (Wamue & Njoroge, 2011: 11).

On the other hand, women's burdens in the economic, domestic and collective spheres have all intensified. These shifts in gender roles have had a destabilizing effect on households, which, while not empowering women in any real sense, leave men feeling disempowered. The strain placed on relations between men and women leads to increasing tension and violence.

ii) Hunger and poverty in the household

More hunger would be experienced (32%) where women fail to participate in SSA. This is in contrast to 5% in the case of men's failure. The findings show dependence on women in food production and provision, contrary to Gikuyu customs. It was the responsibility of men to provide for their family (Kenyatta, 1938). Women stated that men returned to the house late in the night when the children were already asleep and woke up when they had already left for school in order to avoid responsibility. One respondent stated that, "…. the children will not ask him for food" (O.I. Wanjiru, 15/02/2012). Being good housewives and mothers is a moral obligation that is tied to their identity as women (Kenyatta, 1938). Thus, when resources are scarce, women tend to take a "sacrificing role" in their attempts to satisfy the basic needs of other household members.

Poverty on the other hand is higher in homes where men fail to engage in productive activities. As Chiuri (2010) states the hegemonic masculinities that exempt men from responsibilities at the household, render the home poor, since the men are in control of the resources, '...even those that they did little or nothing to create' (O.I. Waithera, 15/02/2012).

iii) Drug abuse and increased crime rate

The incidence of drug and substance abuse among men (17%) was as a result of the idleness and hopelessness earlier discussed. Local brews and bhang are among the abused drinks and drugs in the district and this leads to cases of crime and gender based violence, as men try to get money to buy the "Chang'aa" (Local brew) or bhang (O.I. Kinuthia, 15/02/2012). This observation is consistent with that of Wamue and Njoroge (2011), who found that the consumption of illicit brew among the male generation aged 20 – 45, have severe drawbacks on men in Kiambu. Gradually, the male ego has been deeply compromised (Wamue & Njoroge 2011). These men find themselves in a hopeless and helpless cage that erodes their self-esteem. As a result, most of them either resort to illicit brews or turn to gender-based violence.

Incidents of crime were said to be high at 8% for men and 2% for women in situations where the farm produce is low and in most cases not sufficient to cater for household needs. In circumstances where women were not getting enough produce, Wambui and Muthoni (O1s. 13/02/2012) note that 'women were forced

to steal to provide food and other necessities for their children. Men steal to get resources to satisfy their own needs like taking of alcohol and smoking cigarettes.' This statement on men's situation concurs with the findings of Chiuri (2010) where men were alleged to steal from the granaries of their wives to get money to sustain their needs, leaving the family without food.

iv) Low farm produce

Success in farm production heavily depends on the amount of effort that a household puts in. The results in Figure 4.9 show minimal effect where men fail to participate. This could be explained by the fact that they are not on the farms in the first place. Absence of women results in higher cases of low farm produce (36%). From the findings, it emerged that if the women were to fail to participate actively in SSA, there would be more cases of family breakdown, hunger and lack of education for children, as compared to men's failure.

> *Where would I get food if I failed to farm? I have no other source of income. I have to do all I can even though the produce is not much (O.I. Wambui, 10/02/2012).*

This position shows the persistence and patience that women have even when faced with difficulties.

4.5.2 Impact of active participation by men in SSA

The study sought to find out the opinions of the respondents towards active participation by men in SSA activities. This was to establish what opportunities the country has been losing or stands to gain when less than 20% of the male

population living in the rural areas fails to participate in activities that contribute to the wellbeing of the family. The results are presented in Figure 4.10 below.

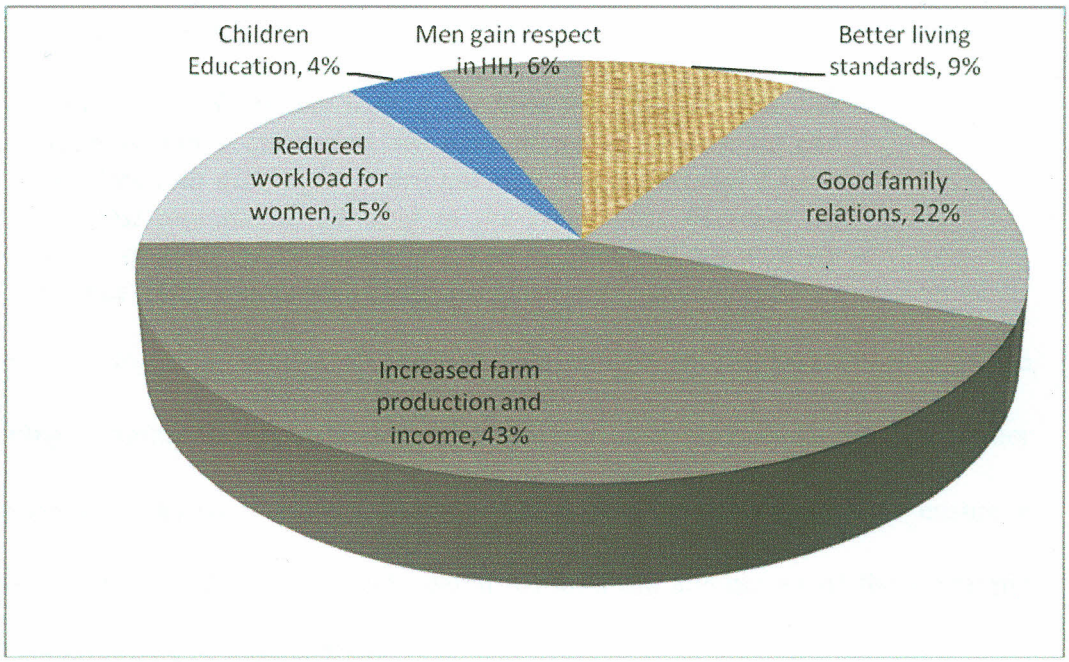


Figure 4.10 Impact of men's participation in SSA

The study established that 43% of the respondents believed that farm production would increase if men were to engage fully in farming activities. They also believe that family relations would improve (22%), women would have a reduced workload (15%), and better living standards would be achieved (9%). More importantly, the respondents noted that men would gain respect (6%) and children would never be out of school due to lack of school related needs (4%).

Overall, the results show that societies would improve as men and women contribute to and enjoy the benefits of their labour. This situation would see men, women and the youth feel they belong and have a stake in the household. An interview with one of the men who has been sharing gender roles with his wife revealed the following:

> *I have worked with my wife at our farm for 23 years now and we have never quarreled, we have managed to educate our children and although we are not rich, we are happy. I have not lost any social standing in the community because we wake up early, work in the farm and by 3pm, am out with my friends (O.I. Wamumbi, 15/02/2012).*

Indeed, young men need such positive role models to emulate, because as the farming Systems theory indicates, what goes on in a household, provides either positive or negative feedback to the system. Such a scenario would ensure a holistic agricultural development geared towards the attainment of the economic and social pillars of Vision 2030.

4.6 Strategies of Optimizing Women and Men's Participation in SSA and Household Economy

In objective one, the study sought to establish the roles of men and women in Gatundu South District undertake in SSA. The factors influencing these roles and their implications were discussed in objective two and three, respectively. This section looks at strategies of optimizing women and men's participation in SSA and household economy, which was the fourth objective. The study therefore sought to identify what measures could be instituted, in order to improve the

current status of farmers in Gatundu South District. The findings are presented in two sections, one discussing the strategies for men and the other, women's need.

The respondents were asked what in their opinion could be done to increase men's participation in farming activities. There were various responses that men and women in the district thought would change the situation. The findings are presented in Figure 4.11.

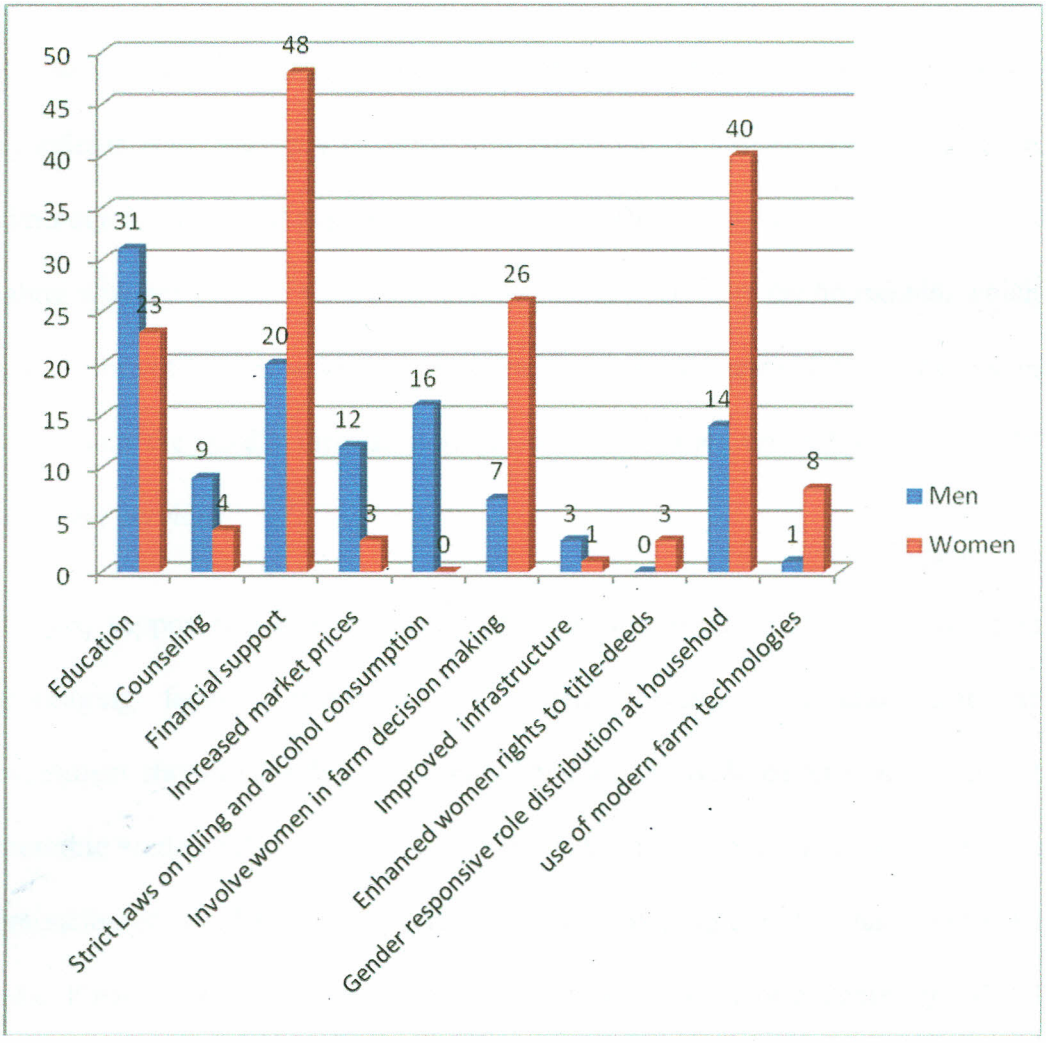


Figure 4.11: Strategies for optimizing men's and women's participation in SSA

The results in Figure 4.11 above indicate that various strategies for both men and women can be used. Thirty-one per cent of the respondents said that men need to be educated on the importance of farming in the household while another 11% were of the opinion that men need to be counseled and encouraged to be responsible heads of households. This suggests that 42% of the respondents indicated that men need to be re-socialized and educated on gender responsiveness in the farm. This education would remove gender biases which men have towards farm work and household chores. On the other hand, 23% of the women respondents noted that they would require education on the use of improved farm technologies. Such education was normally offered by various organizations dealing with agriculture, but due to gender role allocation at the household, which leaves them with heavy workload, the current practice of demand-driven extension service, and the gender inequality at the household, they are not able to benefit from these services.

Financial support in terms of farm inputs was cited by 20% of men as being an encouraging factor towards farming. Men, therefore, intimated that the government should subsidize farm inputs and also provide better mechanisms of promoting trade (12%). This is by offering better prices to their products, and elimination of middlemen, who were said to be exploiting the little that the farmers make. Financial support in farming was identified as a major concern by 48% of the women. They believed they could work better if funds were available to buy farm inputs and pay casual labourers. Only 3% of the women believed that an

increase on the prices of farm product would encourage them to do more farming. This indicates the tendency of men to only work where they can get money as opposed to food production for household consumption. This situation was captured by many of the women who indicated that:

> *when men look at a bunch of bananas ripening at the farm, what comes to their mind is the amount they would get and what they would do with such benefits. Of course, the use will not feature food provision, if it does, it is a very small percentage of the total amount got. Most of the expenses men incur are outside the household. But for us women, we think first of food for the family. If we sell, the aim is to get some money to buy food related items like salt or sugar (O.Is. Muthoni, Wangare, Felista and Jane, 15/02/2012).*

Strict laws on idling and elimination of local brews were suggested by 16% of the respondents as a good way of ensuring that men return to farms and work. The local brews have severe drawbacks on men in Gatundu as they lead to cases of impotence resulting to marital problems, stealing farm produce from women stores in order to get money to buy it, health deterioration and risks of contamination with poisonous substances, gender based violence and child abuse (Wamue and Njoroge 2011; Chiuri, 2010).

Twenty-six per cent of the women noted that they could increase prodcution if the decision- making processes at the household were gender-responsive, hence incorporating their needs and concerns. This is in contrast to 7% men who thought the same. These results demonstrate the persistence of hegemonic musculinities among men in rural areas, who claim control of the household even when their participation is minimal (Chiuri, 2010). While 48% of the women indicated that

they would be more ative in SSA activities if they got help from their men, only 14% men were of a similar opinion. This futher shows that men have alienated themselves from farming activities. Unfortunately, for the women and the country at large, all these factors are being observed by the children (especially sons) in the community, which distorts their understanding of family relations and work.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings of this study as well as the conclusions drawn from the findings. It also presents suggestions on the way-forward in light of the findings and conclusions, and areas for further research.

5.2 Summary

The first objective of this study was to find out the gender roles of men and women in small-scale agriculture. The assumption was that the community is knowledgeable of the gender roles played by men and women in small-scale agriculture and food production in the study area. The findings present various roles that men and women play in small-scale agricultural households. In addition, the study noted that majority of men do not actively participate in agriculture. Hence much of the work was done by women who spend many hours in a day on SSA activities. It was also evident that 80% of farm work was carried out by women who have limited control over the benefits of farming other than what is consumed at the household. The findings from this study confirm what the FSA has stated that farming systems operated in SSA are complex and are influenced by many factors. Thus, women in Kenyan rural households work on the farm, in the house, the school, the community projects and the church yet many lack control over the resources they generate.

The second objective sought to evaluate the factors that influence men and women's participation in SSA. The supposition was that there are factors that influence men and women's participation in SSA and food production in Gatundu South District. The study found that, laziness, alcoholism, culture, and small farm size as the main factors influencing men's low or lack of participation in SSA activities. The potential to generate income and food for the family were positive factors for men. It was observed that, women faced many challenges that force them to participate in SSA. Among them were lack of alternative options to farming, the cultural expectations of a 'good' woman and necessity to cater for household needs. This was in contrast to men's position. Due to the gender classification of roles, men were found to have traditionally been socialized to fit in the public domain, even when they reside in their households. The study therefore, is in agreement with Chiuri (2010) who notes that men in rural Kenya are rarely answerable to anyone within their respective households because they are the heads and decision-makers. They can work if they so wish. However, there appears to be an apparent lack of societal expectation from them within the social structures at the rural households. In due course, most men are losing their traditional position as family breadwinners, and this challenges their perceived patriarchal image in the Gikuyu family.

In objective three, the study established the impacts of participation or lack of participation by men and women farmers and its consequences on agricultural production and household economy. Farming systems theory posits that the input

in a system is influenced by the throughput process, which in this case, the study found to be the different positions adopted by men and women towards SSA and household production. The output of the gendered system in Gatundu South District was, therefore, low farm production, poverty, and drug abuse, family breakdown, increased crime rates, uneducated children and hunger. Meanwhile, women are blamed if the family did not have enough food, if the household was unkempt, if the farms were not properly cultivated and the yields poor and if the family is poor and could not afford to educate their children. When these things happen, it is the woman who is perceived to have failed. Such a scenario perpetuates the hegemonic notions of masculinities among men. The positive output, for men's and women's participation, all lead to improved farm production and food sufficiency, good family relations, reduced gender roles for women among other positives. This study has, therefore, demonstrated that improved farm production is conceivable where both women and men take up gender roles and responsibilities in SSA.

In objective four, the farming systems theory helped the study explain the whole process of farming from the gender factors in the household, their gendered roles and influencers, and finally, the output of the farming system. All these contributed to the feedback system that helped the study to formulate strategies that will ensure men and women are actively involved in SSA activities. Men, therefore, need to be trained on the 'opportunity costs' of gender inequalities in

their households and more specifically on agriculture. Subsidies in agriculture and provision of credit were others strategies that the study identified.

5.2 Conclusion

The study found that there are various gender factors that influence the participation of men and women in SSA in Gatundu South District. Outdated cultural attitudes and traditions play a big role in discouraging men from active participation. The socialization of men getting white-colour jobs and the attainment of the prestigious kind of masculinities are major obstacles to men's participation. However, responsible masculinities demand that every man provides for his family, something that majority fail to do. This reflected a scenario of subordinate masculinities which result in despair of men and alcoholism. Men, therefore, need to be trained on responsive kinds of masculinities to be able to cope with their family and communal responsibilities.

Education has been defined as the process through which knowledge; skills, attitudes and values are imparted for the purpose of integrating the individual in a given society, or changing the values and norms of a society (UNESCO, 1975). For individuals, this process is life-long: it begins at birth and ends with death. The farming systems theory adopted by this study has revealed that household members adopt the behaviours/attitudes adults' exhibit in the household or community. In other words, the output of a system will depend on the input that has been fed to it. Hence, it is possible to change the agricultural situation in the

country through educating men and women on the 'opportunity costs of gender inequalities.' This would lead to a society where the needs and concerns of all are observed, and where all participate in and benefit from the development process. With this insight, the study therefore made recommendations that are covered in the next section.

5.3 Recommendations

On the basis of the conclusions of this study, the following recommendations are made for effective participation of men and women in SSA in Gatundu South district.

1. The Government through the Ministry of Agriculture should engage with the Private Sector to enhance gender mainstreaming trainings to farmers and to all service providers in the sector. Such trainings would change the perceptions that men and the youth hold towards agriculture, while revealing to them the gains and repercussions of their participation or lack of it. The ministry should, therefore, work with the communities to create the understanding among Kenyan men, that their participation in SSA is an important cog in unlocking women's productive potentials and improving the life standards of households and the country at large. This would ensure that all organizations promoting the equality of women in agriculture do not overlook the role that men play in encouraging/undermining the efforts of women. This focus could lead to a holistic development approach where all men and women feel part of the development process.
2. The Ministry of Agriculture should ensure that all actors in agriculture continue to sensitize farmers on the need for intensifying production of their small farms. Agricultural technologies that result in maximum utilization of land should continue to be introduced. In this regard, the ministry should spearhead policy frameworks that support financing of small-scale farmers,

offer financial trainings and entrepreneur skills that would enable women and men modernize their farming technologies.

3. The people should be sensitized to reduce irresponsible consumption of illicit brews. These could be done by faith based organizations, government institutions and enforcement of legislation that would ensure synergy at the grassroots level in encouraging men to take up their responsibilities as heads of households.
4. Women and men farmers should engage the Ministry of Agriculture to facilitate trainings on value addition of agricultural products. This would employ many of the youths who are jobless and with no land. Value addition techniques would ensure that farmers fetch better prices for their produce resulting to a positive view of agriculture as a profitable enterprise.

5.4 Suggestions for Further Research

This study focused on gender factors that influence men and women's participation in small scale agriculture and household economy in Gatundu South District, Kiambu County. Further research needs to be carried out to establish the economic value that the households and the country lose when part of its population become dependent on others in rural households. A study should also be carried out to establish effective mechanisms of enhancing a positive image of the agricultural sector among the youth in Kenya.

REFERENCES

Abrahams H. N. (2000). Joint production and averting expenditure measures of willingness to pay. *American Journal of Agricultural economics*, 427-437.

Alderman, H. J. (2003). *Gender Differences in Farm Productivity: Implications for Household Decisions, Gender and Development.* Washington, DC: International Food Policy Research Institute.

Afican Union (2003). *Maputo Declaration on Agriculture and Food Security.* Maputo: NEPAD.

Berhanu, G. Hoekstra, D. and Azage T. (2006). *Commercialization of Ethiopian Agriculture: Extension Service from Input Supplier to Knowledge Broker and Facilitator.* Nairobi: International Livestock Research Institute (ILRI).

Berry, S. (1984). The Food Crisis and Agrarian Change in Africa: A Review Essay. *African Studies Rev,* 27 (2): 59-112.

Berry, S. (1989). Access, Control and Use of Resources in Agriculture. *African Studies Rev,* 59, 1: Special Issue

Blackben, M. and Bhanu, C. (1999). *Gender Growth, and Poverty Reduction: Special Program of Assistance for Africa.* Washington, DC: The World Bank.

Birgegard, L. (2002). *Agricultural Research in Rural Development: A Review of Issues and Arguments*.Cambridge: Lars-Erik Publishers.

Boserup, E. (1970), *Women's Role in Economic Development*. London: Allen & Unwin.

Moser, C. (2002). *Gender Planning and Development: Theory, Practice and Training*. London: Routledge.

Chiuri, W. (2010). Men's Role in Persistent Rural Poverty: Lessons from Kenya. In Egodi, U. (Ed). *Masculinities in Contemporary Africa.* CODESRIA Gender Series Volume 7. Dakar: CODESRIA.

Cohen, L. & Manion, L. (1989). *Research Methods in Education* (3rd ed.). London: Routledge.

Cornwall, A. and Lindisfarne, N. (1994). *Dislocating Masculinity: Comparative Ethnographies*. London: Routledge.

Daniel, T. (2010). *Opportunities and Challenges of East Africa Farmers*. International Association of Agricultural Economist (IAAE). Goldcoast: Ghana.

Diao, D. H. (2007). *The Role of Agriculture in Development: Implications for Subsaharan Africa.* Washington, DC: IFPRI.

Division for the Advancement of Women (DAW), (2004). *The Role of Men and Boys in Achieving Gender Equality,* New York: DAW.

Elson, D. 1999. Labour Markets as Gendered Institutions: Equality, Efficiency and Empowerment. World Development, 27(3): 611-627.

FAO (1990). *Rural Household And Resource Allocation For Development: An Ecosystem Perspective.* Rome: FAO.

FAO (1995). *The Farming Systems Approach to Development and Appropriate Technology.* Rome: FAO.

Feldstein, H.S. (2001). *Conceptual Framework for Gender Analysis In Farming Systems , Research And Extension.* London: West Publishers.

Fisher, J. (1950). *The Anatomy of Kikuyu Domesticity.* London: Department of Technical Cooperation.

Friedmann, J. (1992). *Empowerment: The Politics of Alternative Development* . Wiley: Blackwell publishers.

Fontana, M. and Paciello, C. (2009). *Gender Dimensions of Rural and Agricultural Employment: Differentiated Pathways Out of Poverty: A Global Perspective.* London: Institute of Development Studies.

Government of Kenya (1994).*Development Plan 1994-96.* Nairobi: Government printer.

Government of Kenya (1995). *Agriculture Sector Review.* Nairobi: Government Printer.

Government of Kenya (1999). *Analytical Report on Labour Force.* Nairobi: Central Bereau of Statistics.

Government of Kenya (2001). *Poverty Reduction Strategy Paper.* Nairobi: Government Printer.

Government of Kenya, (2005). Thika District Strategic Plan, 2005-2010. Nairobi: Government printer

Government of Kenya (2005). *Strategy for Revitalising Agriculture.* Nairobi: Government Printer.

Government of Kenya (2006). *Kenya Integrated Household Budget Survey.* (Revised Edition). Nairobi: Government Printer.

Government of Kenya (2007). *The Vision 2030: A competitive and Prosperous Kenya.* Nairobi: Government Printer.

Government of Kenya (2009). *Economic Survey.* Nairobi: Government Printer.

Government of Kenya, (2009). *Thika District Strategic Plan.* Nairobi: Government printer.

Government of Kenya (2010). *Housing and Development Department, Gatundu South District.* Nairobi: Government Printer.

Hamel, L., Dufour, R., and Fortin M. (1993). *Doing Qualitative Research.* London: Sage Publishers.

Hansen, T. (2006). *An Agricultural Research Perspective on Poverty , Innovation and Policies and Agricultural Development in Sub saharan Africa.* New Delhi: Sage Publications .

International Fund for Agricultral Development (IFAD) (2001).*Rural Poverty Report 2001: The Challenge of Ending Rural Poverty.* Oxford: Oxford University Press.

International Fund for Agricultural Development (IFAD)(2002).*Annual Report*.Oxford: Oxford University Press.

Kabeer, N. (2008). *Mainstreaming Gender in Social Protection for the Informal Economy.* London: Commonwealth Secretariat.

Keller, B. Phiri, E. and M. Milimo (1990).Women and agricultural development. In A. P. Wood (Ed.). *The Dynamics of Agricultural Policy and Reform in Zambia* (pp.241-262). Ames, Iowa: Iowa State University Press.

Kenya Institute for Public Policy Research and Analysis (KIPPRA). (2009). *Kenya Economic Report: Building a Globally Competitive Economy.* Nairobi: KIPPRA.

King, M. and Andrew, M. (2001). *Engendering Development Through Gender Equality in Rights, Resources, and Voice.* Washington DC: World Bank.

Kinyua, J. (2004). *Towards Achieving Food Security in Kenya.* Paper presented at the International Food Policy Research Institute, Kampala, Uganda, April, 14th -17th.

Kombo, D. K. and Tromp, D. L. (2006).*Proposal and Thesis Writing.* Nairobi:Paulines Publications Africa.

Kothari, C. (2004). *Research Methodology: Methods and Techniques.* New delphi: International Limited.

Maertens, M. and Swinnen, Johan F.M. (2009).*Are Modern Supply Chains Bearers of Gender Inequality?* Paper for the FAO–IFAD–ILO Workshop on Gaps, Trends and Current Research in Gender Dimensions of Agricultural and Rural Employment: Differentiated Pathways out of Poverty. Rome, March, 25th – 27th.

Miguel, J. (2009). Agroecology, Small Farms and Food Sovereignty. *Independent Socialist Magazine*, 61(3): 32 – 75.

Millenium Development Goals Technical Support Centre (2004). Innovative Approaches to Meet Hunger, Millennium Development Goal in Africa. *Proceedings of July 5th 2004 High level Seminar.* Addis Ababa: Technical Support Centre.

Muchoki, F.M (1988). *Organization and Development of Kikuyu Agriculture 1880-1920.*Unpublished M.A Thesis, Kenyatta University, Nairobi.

Mugenda, O. M and Mugenda, A. G. (2003).Research Methods. Nairobi: Laba-Graphics Services Publishers.

Mukudi, R. O. (2002). *Nutrition and Gender.* Geneva: ACC /SCN.

Muntemba, N. (2002). *Thwarted Development: A case Study of Economic Change in Kabwe Rural District Zambia: The Roots of Rural Poverty in Central and Southen Africa.* London: Heinemann.

Munuh, T. (1989). *Women , the Law and Land Tanenure in Africa, Women Role in Natural Resource Management.* Ottawa, Canada: International Research Institute.

Musalia, W. M. (1999). *The Political Economy of Transition: A Study of Issues and Social Movements in Kenya Since 1945.* Nairobi: Eight Publishers.

Mwaka, M. (1993). Agricultural Production and Women's Time Budget in Uganda. In Kinnaird, V. and Momsen, J. (Eds). *Different Places, Different Voices: Gender and Development in Africa, Asia and Latin America*, London: Routledge.

Nagayets, O. (2005). *Small Farms: Current Status and Key Trends : Paper prepared for future of small firms.*Retrieved www.smallfarms.org June 29, 2005.

Ndeda, J. (1991). *Colonial Impact on Agriculture in Western Province of Kenya.* London: Maxim Publishers.

Nyoro, J. (2002). *Agriculture and Rural Growth in Kenya.* Nairobi: Tegemeo Institute of Agricultural.

Olwande, J. G. and Mathenge, M. (2009). Agricultural Technology Adoption: A Panel Analysis of Smallholder Farmers' Fertilizer use in Kenya. Paper presentation at the African Economic Research Consortium Conference on Agriculture for Development, May 28th - 29th, Mombasa, Kenya.

Orodho, J. A. (2009). *Elements of Education and Social Science Research Methods.* Maseno: Kanezja.

Staudt, K. (1987). *Programming Women's Empowerment: A Case from Northern Mexico.* Boston: Allen & Unwin.

Tignor, R. L. (1976). *The Colonial Transformation of Kenya: The Kamba, Kikuyu and Maasai from 1900 – 1939.* Princeton, N.J.: Princeton University Press.

Uaiene, R.N., C. Arndt and W.A. Masters (2009). Determinants of Agricultural Technology Adoption in Mozambique. Discussion Paper No. 67E. National Directorate of Studies and Policy Analysis. Ministry of Planning and Development, Republic of Mozambique.

United Nations Development Programme (UNDP) (2003). *Millenium Development Goal National Reports: A Look Through gender Lens.* New york: United Nations Development Programme (UNDP).

United Nations Development Programme (UNDP) (2005). *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals.* London: Earthscan.

Verma, R. (2001). *Gender , Land and Livelihoods through Farmers Eyes* . Ottawa: International Research Institute.

Wamue, G.and Njoroge, W. N. (2011). Gender Paradigm Shift Within the Family Structure in Kiambu, Kenya. *African Journal of Social Sciences*, 1(3): 10-20.

Wold, B. K. (1997). *Supply Response in a Gender–Perspective: The Case of Structural Adjustment in Zambia*. Reports 97/23, Statistics Norway, Oslo: The World Bank.

World Bank (2003). *The strategic Country Gender Assessent.* Washington, DC: World Bank Development.

World Bank (2007). *Cultivating Knowledge and Skills to Grow African Agriculture.* Washington, DC: The World Bank.

World Bank (2009). *Gender in Agriculture Source Book.* Washington, D.C: The World Bank.

APPENDIX I

QuestionnaireTopic: Factors influencing men and women's participation in Gatundu South District, Kiambu County.

Precautionary Statement

The data collected from this study is purely for learning purpose, responses will be kept confidential and names of respondents are not required. Kindly answer the questions freely.

Section A: General Information

Date of interview	
Name of enumerator	
Location	
Sub location	
Village	

Section B. Farmer Characteristics

1. Name of the farmer (optional)	
2. Gender of the farmer	Male [ ] 2. Female [ ]
3. Age of the farmer	**[18-30] [31 – 50] [51- 60] [above 60]**
4. Marital status (***please tick***)	1. Married [ ] 2. Single [ ] 3. Widowed [ ] 4. Divorced[ ]
1. Please indicate your highest level of schooling	1. Primary [ ] 2. Secondary [ ] 3. College [ ] 4. University

2. Number of Household members (including HH head) living permanently on the compound

Household members	**Number**
Men	
Women	
Children(below 18 years)	

7. What are your household's main sources of income? **(Please tick appropriately)**

a) Crop sales [ ] b) Livestock keeping [ ] c) Off-farm casual work [ ] d) Off-farm permanent employment [ ] e) Remittance [ ] f) Food aid [ ] g) Other (specify) ----------

Section C. Farming practices

	Less than I acre	1-2 acres	2-3 acres	3-4 acres	5 and above
8. What is the size of your land?					
9. What is the size of the land under cultivation?					

10. What kind of farming do you practice? **(Tick appropriately)**

a) Mixed farming [ ] b) Livestock farming [ ] c) Food crop farming [ ] d) Cash crop farming [ ] e) Other specify----------

11. If you keep livestock, what kind of livestock systems do you practice in your farm?

a) Zero grazing [ ] b) Open grazing [ ] c) Both Zero grazing and Open grazing [ ]

12. What kind of livestock do you keep in your farm? **(Tick appropriately)**

a) Cattle [ ] b) Sheep [ ] c) Goats [ ] d) Poultry [ ] e) Others (specify) --------

13. What kind of crops do you grow in your farm? **(Please list them)**

Crop	Please tick appropriately
Maize	
Beans	
Fruits and Fruit trees (Bananas, passion fruit, mangoes, paw paw, etc.)	
vegetables	
Cassava	
Arrow roots	
Tea	
Coffee	
Other specify)	

14. Using a four point Likert scale of (1), very low (2), low (3), high and (4) very high, what is the extent of men's participation in small-scale agricultural production?

a) Very low- meaning no participation at all [ ]

b) Low – meaning participation is about ¼ [ ]

c) High – meaning participation about ½ to ¾ [ ]

d) Very high – meaning participation over ¾ [ ]

Male and female labour contribution to small-scale crop production in Gatundu district

Name of the Crop	Field preparation	Planting	Weeding	Pest and disease control	Pruning	Harvesting	Storage	Marketing /Selling
1								
2								
3								
4								
5								

(b) Male and female labour contribution to small-scale livestock production in Gatundu district

Name of livestock	Feeding /grazing	Watering	Veterinary services (dipping, deworming etc.)	milking	Milk marketing	Acquisition of cash	Sale of livestock
1							
2							
3							
4							
5							

15. Using these abbreviations; **H=husband, W=wife, B= both husband and wife** and **NR=no response**, please fill in the table below

Participation of farmers in decision-making on small-scale farming activities in Gatundu district

Decision-making areas	**Farmer (H,W,B,NR)**
Selection of crop site to be planted	
Selection of type of crops to plant	
Adoption of new variety of seeds	
Buying farm inputs	
When and how to use fertilizers	
When and how to use pesticides	
Selling crops and where to sell	
Seeking loans for farm resources/credit	
What to keep for family use and storage	
Buying and selling of livestock, poultry, (To differentiate between large livestock vs small ones. E.g. cows are taken traditionally to belong to the men while chicken belong to the women, who also have control on what to do with them.)	
Management of income	
Maintenance of farm structures	
Education of the children	
Meals for the family	
Attending seminars and workshops	

16. What are the factors influencing men's participation in small-scale agriculture? **(Please list them)**

a) .....
b) .....
c) .....
d) .....

17. What are the factors influencing women farmers participation in small-scale agriculture? **(Please list them)**

a) .....
.....
b) .....
.....
c) .....
.....
d) .....
.....

18. Which strategies can be put in place to address men's participation in agriculture **(Please list them)**

a) .....
.....
b) .....
.....
c) .....
.....
d) .....
.....

19. Which strategies can be put in place to address women farmers participation in agriculture **(Please list them)**

a. .....
b. .....
c. .....
d. .....

20. What do you think is the impact of men's participation in small scale agriculture?

a) .....
b) .....
c) .....
d) .....
e) .....

21. What roles are performed by women and men farmers in a typical day? (fill in the following spaces)

Gender Activity Profile (24hour Clock)

Men		Women		Children
Hours	Activity	Hour	Activity	
1.00		1.00		
2.00		2.00		
3.00		3.00		
4.00		4.00		
5.00		5.00		
6.00		6.00		
7.00		7.00		
8.00		8.00		
9.00		9.00		
10.00		10.00		
11.00		11.00		
12.00		12.00		
13.00		13.00		
14.00		14.00		
15.00		15.00		
16.00		16.00		
17.00		17.00		
18.00		18.00		
19.00		19.00		
20.00		20.00		
21.00		21.00		
22.00		22.00		
23.00		23.00		
24.00		24.00		

22. How many hours do you spend working in the farm household in a day? (FOR MALE RESPONDENTS ONLY)

.....

Thank you

APPENDIX II

Interview Guide for Key Informants

Questionnaire Topic: Factors influencing men and women's participation in Gatundu South District, Kiambu County.

Precautionary Statement

The data collected from this study is purely for learning purpose, responses will be kept confidential and names of respondents are not required. Kindly answer the questions freely.

1. In your opinion, who do you think participates more in small scale agriculture? (Women or Men). Why?
2. What roles do men and women play in Small scale agriculture in Gatundu South District?
3. What influences men and women's participation in small-scale agriculture?
4. In your opinion, what strategies can be put in place to address men and women's participation in agriculture?
5. What do you think is the impact of men and women's participation in small scale agriculture?
6. In your opinion, what should be done to change the views of men and women towards agriculture and gender?
7. Are there any gender specific challenges faced by women and men in agricultural production?