FACTORS AFFECTING RURAL WOMEN'S PARTICIPATION IN AGRICULTURE FOR DEVELOPMENT IN GATUNDU SUB-COUNTY, KIAMBU COUNTY, KENYA

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ABSTRACT

Agriculture for advancement is a complex and a testing procedure. Rustic women agriculturists assume an imperative part in sustenance generation and nourishment security. Women partake effectively in cultivating exercises and in preparing ranch items, notwithstanding their residential and conceptive obligations. This study tried to investigate components influencing the country women' support in horticulture and the limitations they confront in farming for improvement in Gatundu Sub-County, Kiambu County. This study utilized a cross-sectional illustrative outline, and utilized quantitative and subjective strategies to gather information. Quantitative information was gathered utilizing review polls that were regulated to women occupied with agribusiness in Gatundu Sub-County. Subjective information was gathered through center gathering dialogs and key witness interviews.

The study revealed that women in agriculture are engaged in both provision of labor for crop production and household production. The findings show that contribution of women to agriculture for development in the sub-county is immense. Most of the constraints experienced by women participating in agriculture for development revolve around gender roles and responsibilities and critical factors of production such as access to land, use of modern agricultural methods and agricultural extension services.

The study further revealed that constraints facing women in agriculture are concentrated in gender roles and responsibilities and lack of critical factors of agricultural p64 uction such as access to land, finances, use of modern agricultural methods and access to agricultural extension services. This study concluded that lack of women empowerment in the sub-county has exacerbated constraints of participation of women in agriculture for development. The study 22 commends that the community in the sub-county should recognize and appreciate the important role that women play in subsistence and cash crop farming. It also recommends that agricultural stakeholders in the sub-county should create awareness in the community on the need to avoid biasness against women when it comes to distribution of agricultural income and output.

Regardless of gender, everyone should get agricultural income and output commensurate to their efforts or input. Individuals working in coffee and tea estates should be paid according to work done. Kiambu County Government and the National Government should ensure that gen 24 mainstreaming in agricultural policies is done. The two levels of government should increase the number of women agricultural extension officers and focus on all household members rather than focusing on the household headship. The National Government should intervene to empower women in the sub-county. This will eliminate some of the constraints facing women in agriculture. The government should ensure that women access education and training in agriculture as well as enabling access to alternative sources of capital such as agricultural credit. Financial institutions should come up with credit facilities that are tailored for women who mostly do not have fixed assets as collateral. There is need for further research on the significance of women in agriculture and how to streamline the sector.



1.0 BACKGROUND TO THE STUDY

1.1 Introduction

Agriculture for development is a complex and a testing procedure. Country women agriculturists assume an imperative part in sustenance generation and nourishment security. They represent 70% of farming specialists, 80% of nourishment makers, and 100% of the individuals who process essential sustenance stuffs and they attempt from 60% to 90% of the advertising (Dagmar, 2013). Women partake effectively in cultivating exercises and in handling ranch items, notwithstanding their local and regenerative duties. While there are significant varieties crosswise over sub-locales and between nations identified with ethnicity, age, and tribe, these midpoints have stayed stable for over two decades (Malmberg, 1994).

The need to concentrate on women ranchers' efficiency, which can be a powerful motor for social change, has turned out to be progressively clear in sub-Saharan Africa. Women assume a critical part in cultivating and post-harvest exercises in many nations in the area. By and by, an unpredictable arrangement of rights and commitments reflecting social and religious standards win inside provincial groups; these manage the division of work amongst men and women and go about as limitations to women agriculturists. A comprehension of women agriculturists' part, its significance and their requirements is an essential to formulating arrangements to enhance profitability and financial advancement (Tamele, 2010).

Despite the direct and critical contributions of women to agriculture through labour provision, women continue to experience many barriers that bar them from effective participation in agricultural development. Women are burdened in both statutory and standard

area residency frameworks in Africa (Peterman et al., 2010). African women smallholders have generally less access than men to information advancements, including enhanced seeds and manures, with reliably comparable examples of inconsistencies among various nations. Access to money related administrations remains a key obstruction for women business visionaries. For instance, in Kenya, women speak to 48% of entrepreneurs however get just 7% of formal credit; they give around 75% of aggregate farming work yet they claim just 1% of the area: without area, women regularly don't get credit (Blackden and Woden, 2006). Augmentation administrations in the country regions are the major institutional vehicle for ranchers to get to farming advancements and preparing (World Bank, 2009).

To this impact, the absence of energy about the part of country women in agribusiness is destructive and offers ascend to an absence of particular approaches, arrangements which are misled, elevated amounts of neediness, lack of education and non-contribution in the configuration and arranging of projects and strategies, which includes a procedure of common discovering that mirrors the genuine and particular needs of provincial women. In spite of the critical parts they play in rural economies, provincial women in Africa experience the ill effects of the most noteworthy absence of education rates and are the most noticeable face of neediness (Amina, 2006).

Women ensure occupations, particularly in rustic territories. As an aftereffect of their extraordinary endeavors in farming creation, women' generation ensures their self-sustenance. This is still insufficient, in any case, to cover different requirements, for example, human services, paying for the instruction of their youngsters or the procurement of different items and products which are essential on an everyday premise since they have a constrained monetary limit brought on by a wasteful store network and poor preservation of their surpluses (Doss and Morris, 2001).

Associated with these issues is the issue of environmental change, which incorporates sporadic precipitation, surges, dry seasons and violent winds, whose impacts greaterly affect provincial women and make their life troublesome. Besides, rustic women need to walk, long separations to convey water and get kindling, which is destructive for the strength of people, creating high rates of baby and maternal mortality, turning around advancement in training and imperiling nourishment sway, and also sustenance security and sustenance (Doss and Morris, 2001).

Farming is the principle elective for provincial women, and it ought to accompany better access to land and assets for the counteractive action, adjustment and relief of environmental change, joined with rustic women figuring out how to manage social resistance and adjusting to different signs of this marvel (World Bank, 2012).

Women constitute half of the horticultural work power in low-salary nations. By every exact record, women do most of the horticultural work yet their profitability is lower than that of male agriculturists. The normal work power investment rates on the planet shift locally with the rates extending from around 20% in Latin America to just about half in the southern and eastern Asian sub-areas (World Bank, 2012). About 70% of utilized women in South Asia work in agribusiness (FAO, 2011). World Development Report for 2012 swung thoughtfulness regarding gender issues in agribusiness by underlining on the commitments of women to farming in creating nations while the State of Food and Agriculture (SOFA) for 2010–2011 highlighted the need to close the sex crevice in access to agrarian assets, instruction, augmentation, monetary administrations, and work markets (Ruth and Ouisumbing, 2012).

Women in Sub-Saharan Africa have the most elevated normal work power interest rates on the planet at 65% (World Bank, 2012). Total information reported in the 2010–2011 State of

Food and Agriculture study (FAO, 2011) shows that women make up just about half of the rural work power in Sub-Saharan Africa. Far reaching experimental appraisals of family work and time distribution have likewise demonstrated that women share the essential duty regarding family unit sustenance provisioning, childcare, and residential tasks. As a rule, they give up to 80% of essential foodstuff for family unit utilization and deal, in spite of the fact that appraisals differ. In Ghana, for instance, gauges demonstrate that women produce 70% of the nourishment crops, while in East Africa overall; they make up around 51% of the agrarian work power. In Burkina Faso, Nigeria and Zambia it is more than half and in a few sections of Cameroon, more than 70% (FAO, 2011).

The horticultural segment of Kenya utilizes more than 70% of the populace and assumes a key part in the development of the Kenyan economy. Roughly 80% of the nation's populace lives in provincial regions and is, along these lines, straightforwardly or in a roundabout way associated with cultivating. The way that harvests depend for the most part on water causes Kenyans significant issues (Dagmar, 2013). In Kenya, women provide 75% of total agricultural labour. It is against this backdrop that the study considered it important to understand the factors affecting rural women's participation in agriculture for development in Gatundu South Sub-County, Kiambu County. This study sought to accomplish this goal by exploring the contribution of women in agriculture and the main constraints faced by women in agriculture for development in the Sub-County.

1.2 Problem Statement

Women constitute a large part of farming specialists in a great part of the creating scene, the majority of whom are compelled to manage with less access to assets, for example, water, compost and market outlets than men. Amina (2006) carried out a study on gender and agriculture in Siaya district where she described the significant and critical contribution made

by rural women in Africa to the food security and economies of their countries through their work in the agricultural sector. The main concern of her study was to analyze, document the gender division of labor in agriculture, the male and female differentials in access to, and control of key productive resources, and the specific strategies that can be employed to develop gender-responsive agricultural policies. However, her study never addressed the factors affecting rural women's participation in agriculture for development.

As evidenced by the reviewed literature, women play a great role in agriculture for development in the developing countries, as they constitute the largest workforce performing about 60% to 90% of farm work. None of the studies reviewed focused mainly on participation of women in agriculture for development. Further, none of the studies has focused on Gatundu Sub-County, Kiambu County, which is a commercial agricultural County. It is for this reason that this study sought to assess the factors affecting rural women's participation in agriculture for development in Gatundu Sub-County, Kiambu County. The study was guided by the following research questions:

- i. What contributions do women make in their participation in agriculture for development in Gatundu Sub-County, Kiambu County?
- ii. What are the constraints faced by women participating in agriculture for development in Gatundu Sub-County?

1.3 Objectives of the Study

1.3.1 General Objective

To explore factors affecting the rural women's participation in agriculture and the constraints they face in agriculture for development in Gatundu Sub-County, Kiambu County.

1.3.2 Specific Objectives

- To describe the contribution women make in participating in agriculture for development in Gatundu Sub-County, Kiambu County.
- To find out the constraints faced by women participating in agriculture for development in Gatundu Sub-County, Kiambu County.

1.4 Assumptions of the study

This study assumed that:

- Women's participation in Gatundu Sub-County, Kiambu County has contributed a lot to agriculture for development.
- Women face various constraints in their participation in agriculture for development.

17 1.5 Significance of the Study

The study has provided valuable insights into the experience of women in agriculture for development and the constraints they face thereof. The study has further given recommendations to the major stakeholders like the national and county governments on viable means of realizing women's role in agriculture. The findings have the potential of contributing to the understanding of how the constraints experienced by women in agricultural development can be addressed by the national and county governments.

The study outcome will also come in handy for government or regulators in agriculture and policy makers as they endeavor to facilitate the realization of women and agricultural development. The findings of this study therefore, may change the agricultural policy that at the moment see women as home makers or partners in ranches and not as agriculturists and

financial operators. It will be an insight into the challenges women go through in the process of raising funds to facilitate agricultural activities.

1.6 Scope and Limitations of the Study

The study focused on the experiences of women in agricultural development. It entailed the description of the contribution of women in agriculture for development in Gatundu Sub-County, Kiambu County. Hence, the study only focused on women in order to understand their experiences in agricultural development. This study was cross sectional in nature and this was a limitation since there was no adequate time to explore the phenomenon for a longer duration. A longitudinal study would have overcome this limitation but the circumstances (time and resources) did not allow the researcher to carry out a longitudinal study. The researcher used Gatundu South Sub-County as a case and therefore, generalization to represent counties in other geographical regions in Kenya should be done with caution. The method of data collection was self reporting by women farmers and this may result in bias as individuals naturally rate themselves positively. The researcher requested respondents to objectively respond to the questions in an honest manner and insisted on anonymity to encourage respondents to be objective. In addition, triangulation of methods assisted in eliminating the obvious bias in objectivity.

1.7 Definition of Key Terms

Access to land: This refers to land title deed ownership.

Agricultural Development - This is the process that makes the conditions for the satisfaction of agrarian potential (gathering of information, accessibility of innovation and designation of data sources and yields).

Agricultural extension services: These are government sponsored mechanisms of ensuring that agricultural knowledge is transferred to the farmers.

Constraints: These refer to the challenges experienced by women participating in agriculture for development.

Contributions: These refer to the role played by women engaged in agricultural activities (provision of labor, subsistence farming or even management roles).

Education and Training: These refer to literacy and technical skills in agriculture.

Financing and credit facilities: These refer to sources of capital and funds to start or advance agricultural activities.

Gender gap - Refers to the differences that arise among people based on socially constructed roles and status of women and men.

Mobility: This refers to the ease or flexibility to move around for agricultural related activities.

Technology: These refer to adoption of advanced techniques in agriculture developed through research.

Time: This refers to the duration that is spent on agricultural activities in the farms.

Women empowerment - Refers to the capacity of women to take control over their lives by setting their own plans, picking up aptitudes, expanding their self-assurance, taking care of issues, and creating independence.

Participation: This refers to the engagement of women in agricultural activities.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section covers the review of literature on contribution of women in agriculture for development and challenges faced by women in agriculture for development. The review is done along the lines of the specific objectives. It includes the Contribution of women in agriculture for development and constraints faced by women in agricultural development. The review also presents the theoretical framework adopted in the study.

2.2 Contribution of Women in Agriculture for Development

Women and agriculture in Sub-Saharan Africa involves a rural innovation overwhelmingly described by a little scale cultivating framework. In this framework, more than half of the rural exercises are performed by women, delivering around 60-70% of the nourishment in the area (Gawaya, 2008). Women' entrance and control over profitable assets is incredibly obliged because of disparities built by patriarchal standards in spite of their providing most of the labour in agricultural production (Doss, 2009).

2.2.1 Household Food Production

Women assume a basic part in sustenance security in Africa by satisfying their part as nourishment suppliers. There are two essential variations of family unit nourishment generation frameworks in Sub-Saharan Africa: First, women are in charge of creation of all or most sustenance harvests. In this variation, nourishment plots are viewed as women' plots. The second one is the place men and women together develop staple nourishment crops in fields controlled by male family heads. In this write, male family heads control the yield.

Men are in charge of sustenance generation, while women represent considerable authority in nourishment handling. This variation is chiefly experienced where Islamic practices of female disengagement keep women from taking part in hands on work (Koopman, 2012).

There is an unbending division of work by sex in agribusiness in numerous nations in Africa.

This division might be founded on sorts of exercises performed on the homestead or sorts of products developed by men and women (Doss, 2009). The division of work depends on patriarchal standards that ordinarily oblige women to administer to the requirements of the individuals from the family unit while men are included in conveying money salary to the family unit. Women are additionally anticipated that would help fathers, and spouses in their fields, which builds their workload. Once in a while men will help women in clearing their plots to set up the area (Mehra and Rojas, 2008).

In districts where women and men take a shot at isolated plots developing distinctive harvests, women are typically occupied with subsistence cultivating to give nourishment to satisfy the requirements of individuals from the family while men are occupied with creation of money or fare crops (Doss, 2009). This example is pervasive in a few Sub-Saharan African nations like Tanzania, Uganda, Cameroon, Burkina Faso and Kenya. This refinement can be clarified as an aftereffect of gender standards that dole out women the duty of nourishing the family and men with the obligation of giving money pay (Pitcher, 2006).

In spite of the fact that women predominantly develop nourishment crops for family unit utilization, if there is any attractive surplus they offer it in the business sector. In any case, women' essential duty is to nourish the family and simply after that would they be able to take part in other wage winning exercises. The qualification between products is some of the time not clear particularly on account of maize which is a staple harvest in a few Sub-Saharan African nations and additionally a money crop (Doss, 2009). With the presentation of high yielding assortments of maize, now the qualification is that the high yielding assortments have a tendency to be men's harvests and nearby assortments of maize are a lady's harvest example has been seen in Malawi where nearby assortments of maize are a lady's harvest

while half breed assortments are money crops developed by men (Galdwin, 2012). The rationale is the same: high yielding assortments give a lot of attractive surplus which permits men to give money salary while women proceed with assortments that give enough to subsistence utilization.

2.2.2 Provision of Labor in Cash Crop Production

Women' part is not restricted to nourishment creation; they are additionally required to handle and set up the sustenance they develop, perform care work in the family unit furthermore help men in their money crop generation. With respect to division of work by undertakings, generally, men cleared the woodlands, blazed the shrub and climbed trees for gathering natural products. Women are additionally in charge of transporting and promoting the money crops with male individuals from the family (Gawaya, 2008).

In a study done in Kenya in the 1980s, it was found that women were predominantly in charge of hand burrowing, gathering and transporting the products while men were in charge of building the storehouse (Pala, 2013). In any case, progressively the refinement amongst men's and women' assignments is turning out to be entirely obscured. There are not very many errands that are done only by men like clearing of the field. Women play out every one of the undertakings on their plots from sowing, weeding to collecting. They may get some help from men in clearing and setting up the area for development. On a man's plot, women give assistance by weeding, gathering, and sowing, among others.

There has been a developing acknowledgment of women' part in farming and the obstructions to their advancement. Research demonstrates that if women are given comparative access to assets and contributions as men, they remain to accomplish equivalent or higher yields as that of men (Alderman et al., 2013). For instance, if women in Kenya were to apply the same volume and nature of contributions as utilized by men, women' yields could increment by

10.5% (Moock, 2006). In the event that men's normal info levels were exchanged to women maize ranchers, yields would increment by 9% (Saito, 2014).

2.3 Constraints Faced by Women in Agricultural Development

There are many constraints faced by women in agriculture. The major constraints are embedded in socio-cultural structures. These entail gender roles and responsibilities, household headship, access to land, use of modern agricultural methods and financing. Control of agricultural output and income as well as policy making in agriculture that has not taken keen consideration to understand needs of women in agriculture are also major constraints.

2.3.1 Gender Roles and Responsibilities

The gender parts and obligations in subsistence economies of Sub-Saharan Africa are dynamic and change with new monetary circumstances. One of the imperative changes noted in the primary decade of the 21st century is expanded investment of women in horticulture as men move to work outside of agribusiness. For instance, in Kenya, women in the 1980s performed more assignments that were initially viewed as "male" undertakings (Pala, 2013). Additionally, when men move to non-ranch exercises, women turn out to be more required in real money trimming (Doss, 2009). Accordingly, the gender division of work by product and undertakings has turned out to be less unbending (Saito, 2014).

The adjustment in parts is more one-directional as when a financial circumstance transforms it doesn't give the idea that men are assuming control family exercises or creation of subsistence harvests. Men will expand their investment in women' exercises just on the off chance that some beneficial monetary open door emerges. In Burkina Faso, men are getting to be included in picking of Shea nuts which was customarily women' movement as in the 1980s the offer of these nuts turned out to be very beneficial (Zuidberg, 2014).

2.3.2 Household Headship

The extent of female-headed family units has surged essentially since the 1990s. In any case, the larger parts of those are true headed family units and emerge on the grounds that male heads relocate looking for other pay winning open doors. The extent of female headed family units has differed from 12.9 for every penny in Niger to 39.3 for each penny in Namibia somewhere around 1998 and 2003 (Maffioli et al., 2007). The female-headed family units have a tendency to be more heterogeneous. On a normal, they have a tendency to be little in size, have lower salaries and are more averse to receive innovation and cutting edge cultivating strategies.

Family unit headship assumes an imperative part in farming profitability. Female-headed family units are littler henceforth they might be less profitable than male-headed families because of deficiency of work particularly in pinnacle seasons (Larson and Kanyangwa, 2010). The causality might be turn around as well. On the off chance that the family was poor and had low salaries, the male head relocated to discover different open doors. Furthermore, as these families have lower earnings, their capacity to receive innovation and current cultivating techniques are likewise confined. A study in Zambia found a negative relationship between female headship and manure appropriation (Jha and Hojati, 2013).

2.3.3 Access to Land

Women' entrance to arrive as far as area title deeds possession influences general efficiency. Whoever claims land title deed control the area being referred to. Generally, land was assigned through ancestry or town heads which is a model that still continues in spite of expanding private or state responsibility for. In patrilineal genealogies, women have entry to arrive through male relatives. For instance, among the Beti of Southern Cameroon, women can't acquire land. They are conceded sustenance plots by their spouses however they are not

permitted to plant money crops (Koopman, 2013). At the point when portions are made by town heads, a considerable measure relies on upon their impression of various people's requirements for area. Women are seen to be less fit for cultivating consequently their portions are littler (Doss, 2009).

By and large, women' entrance to arrive in African social orders is very limited, for even in situations where the law secures women' rights to arrive, conventional traditions restrain their entrance and control over area. A case from Mozambique brings up that standard law secures single-women and widowed women in access to arrive. In any case, there are traditions that oblige women' entrance to arrive. Single-women can access land through their fathers, siblings or uncles. However, upon marriage in patriarchal groups, women' entrance to arrive held by these relatives is lost, as they are relied upon to have entry to arrive through their spouses (Gawaya, 2008). By and large, women have a tendency to have littler area property and less ripe plots.

Control over area is an essential variable which clarifies the huge contrasts in ventures ashore made by men and women. A lady who may have acquired area through her better half might be reluctant to put resources into innovation and current cultivating techniques on the off chance that she sees her marriage to be precarious (Doss, 2009). In Zambia, if a marriage is broken down, the area returns to the ancestry and the lady has just a restricted case to the area (Milimo, 2011). Among the Haya of Tanzania, women ranch prairie plots however don't have lasting rights to the area (Koopman, 2013).

Kenyan women have made enormous commitments to the general monetary development of the nation through their verging on select investment in the farming division specifically and in their occupation in different areas of the economy all in all. Be that as it may, an examination of the operation of the nation's laws, government strategies and orders,

especially in segments where women are exceptionally spoken to, for example, in the horticultural segment, uncovers a high level of underestimation, disregard and inside and out separation of women in the circulation of financial assets (Karanja, 1991).

2.3.4 Use of Modern Agricultural Methods

As indicated by the rural strengthening speculation, as the populace weight increments and rural generation moves far from a more customary practice to a more instrument based or motorized (utilization of furrow) cultivating, the part of women in farming decreases. In any case, this decrease in women' part is more in relative terms than in total terms (Boserup, 2010). With expanded capital strengthening like expanded utilization of tractors and bull executes, real esatate increments and the suggestion is that women need to accomplish all the more weeding and collecting and expanded work of tending to residential creatures, in this way more work requests from women (Galdwin and McMillan, 2009).

Other than apparatuses, manures and pesticides might be entirely helpful in expanding profitability. Compost use relies on upon accessibility and agriculturist's assets to buy. As women agriculturists for the most part have less access to money and credit, they are less inclined to buy and utilize composts (Doss, 2009). Research in Burkina Faso on men and women who developed same product on individual plots demonstrated that the vast majority of the data sources, for example, enlisted work, manures, and instruments went to man's plot (Mehra and Rojas, 2008). A study from Cameroon and Malawi demonstrate that the basic alteration programs that evacuated manure sponsorship influenced female ranchers more than male agriculturists as they decreased compost application on maize, which in these two nations is viewed as a female product (Galdwin, 2012).

Odini (2014), in a study on access to and utilization of horticultural data by little scale women agriculturists in Vihiga County, found that cultivating endeavors of subsistence

ranchers, who drudge to develop maize, beans and customary vegetables for their family utilization, are not helping towards accomplishing nourishment security. The analyst credited this to the capricious climate designs and deficient data on present day cultivating hones.

Alila and Atieno (2006) watch that the absence of account for farming breaking points expanding generation and interest in quality expansion exercises in agribusiness. Detachment to credit particularly for little scale agriculturists, and particularly women, has constrained the scope of exercises, the kind of innovation utilized and the size of operations that a rancher can receive on their homestead.

2.3.5 Agricultural Extension Services

Agrarian expansion administrations significantly affect profitability and yield. Be that as it may, there is confirmation that women agriculturists are not came to by augmentation administrations (Saito and Weidemann, 2010). A study in Malawi found that women had no contact with augmentation operators and their interest was exceptionally restricted (Hirschmann and Vaughan, 2014). Other than the lack of the expansion system to target women agriculturists, women' interest is obliged by practices like the desire that women require their better half's endorsement for any legitimate exchanges (Doss, 2009). Absence of instruction and more elevated amounts of lack of education among women is another limitation to women getting expansion administrations.

A farming augmentation program or information arrangement approach harsh to sex parts in agribusiness has escalated and expanded total women' work. For instance, in 1987 an agrarian augmentation program in Malawi began a groundnut seed duplication venture with male leaders of the family units regardless of the women being the ones for the most part required in groundnut creation. Another examination in Kenya has demonstrated that agrarian expansion programs constantly have a tendency to overlook plots which are exclusively

overseen by women. They would give help to plots which are overseen by men and women or just men (Gladwin, 2012).

2.3.6 Financing and Credit Facilities

Another component that decreases a lady's proficiency and profitability on her plot is absence of access to credit. Credit is imperative for securing manure, enhanced assortments of seeds and different innovations on homesteads. Most women ranchers are not ready to get credit without a male underwriter or without spouse's help. The difference between who homesteads and who gets sources of info and credit is because of institutional obstructions and social requirements. The observation that women produce crops for subsistence and not for the business sector, women' less secure area residency and arrangement of credit through associations adapted towards men influence arrangement of credit to women agriculturists. A study on Kenya, Zimbabwe, Malawi, Zambia and Sierra Leone observed that women got just 10% of the credit for smallholder ranchers and 1% of aggregate credit to farming (Mehra and Rojas 2008). Therefore, a horticultural improvement strategy planned to make an inside and out advancement in rustic Africa should be delicate to the necessities of women in these subsistence social orders.

2.3.7 Control of Agricultural Output and Income

In Sub-Saharan Africa, both women and men are in charge of offering money crops alongside some assistance from other family unit individuals. Notwithstanding, women don't deal with the pay. Proof from Uganda demonstrates that the larger part of women who are included in creating money crops don't have control over the wage produced (Godfrey, 2010). This is fundamentally on the grounds that the country family units and advertising foundations work inside a more extensive structure of patriarchal frameworks that have been tilted for men's control of real family assets.

Fischer and Qaim (2012), in their study on change of worldwide agri-nourishment frameworks, watched that with the commercialization of horticulture, women are progressively distraught in light of relentless gender incongruities in access to gainful assets. Rancher aggregate activity that plans to enhance smallholder access to business sectors and innovation could possibly quicken this pattern. The specialists utilized review information of little scale banana makers in Kenya to research the sex ramifications of set up agriculturist bunches. Customarily, the banana has been a women' product in Kenya.

The study discoveries affirmed that the gatherings add to expanding male control over bananas. While male control over banana incomes does not influence family unit sustenance security, it has a negative negligible impact on dietary quality. Fischer and Qaim (2012) exhibited that the negative gender ramifications of agriculturist gatherings can be lessened or maintained a strategic distance from when women are gathering individuals themselves. As per them, in the poorest pay fragments, bunch participation even appears to positively affect female-controlled wage offer.

2.3.8 Policy Making in Agriculture

It is very clear that women' part in farming in Sub-Saharan Africa is basic. In any case, it is frequently disregarded by the families and society as a rule. This has genuine ramifications for agrarian and general improvement of the area. Galdwin and McMillan (2009) watch that a turnaround is unrealistic in Africa without helping women agriculturists. They are especially directing towards women ranchers' entrance toward information sources and women being focused by strategies for horticultural and monetary changes (Galdwin and McMillan, 2009). The absence of perceivability of women' commitment and cooperation in agribusiness comes from the patriarchal standards that make women' commitment in the family unit or subsistence segment non-monetary or non-market movement. Furthermore, the chiefs keep

on regarding women as home makers or associates in ranches and not as agriculturists and financial operators (Mehra and Rojas, 2008).

Alila and Atieno (2006) note that rural approach in Kenya spins around the principle objectives of expanding profitability and wage development, particularly for smallholders; upgraded sustenance security and value, accentuation on water system to present steadiness in rural yield, commercialization and escalation of generation particularly among little scale agriculturists. However, policy making has not addressed constraints that women face in agriculture despite their immense contribution to the sector. Agricultural policy in Kenya is not gender sensitive and has left the socio-cultural structures that limit women's potential in agriculture intact (Alila & Atieno, 2006).

This literature review has established that women have significantly participated in agriculture for development at the household level through subsistence farming and in provision of labor for cash crop production. The literature also shows that women have faced a number of constraints in their participation in agriculture for development. Some of the constraints are associated with gender roles and responsibilities, household headship and access to land. Women have also faced challenges in use of modern agricultural methods, accessing agricultural extension services and financing their agricultural activities. The control of agricultural output and income as well as policy making in agriculture have excluded women adding to constraints in their participation in agriculture for development.

2.4 Theoretical Framework

This study was guided by gender and development theory. This hypothesis concentrates on the socially built premise of contrasts amongst men and women and the need to challenge existing sex parts and relations (Bertrand, 2006; Reeves, 2010). This methodology was to a great extent impacted by scholastic researchers, for example, Oakley (1972) and Rubin

(1975). It underscores the social relationship amongst men and women. These connections they contended have efficiently subordinated women (Moser, 2013).

Gender and improvement hypothesis withdrew from women being developed hypothesis which saw women' issues as far as their organic contrasts instead of sex (Razavi and Miller, 2015). Gender and advancement hypothesis denoted a movement in contemplating the need to see how women and men are socially developed and how those developments are intensely fortified by the social exercises that both characterize and are characterized by them (Razavi and Miller, 2015). Gender and improvement hypothesis concentrate fundamentally on sex division of work and sex as a connection of force inserted in organizations (Moser, 2013). Thusly, two noteworthy systems 'Sex parts' and 'social relations examination's are utilized as a part of this methodology.

Sex part concentrate on social development of personalities inside the family unit, it likewise uncovers the desires from 'maleness and femaleness' in their relative access to assets. Social relations investigation uncovered the social measurements of various leveled power relations imbedded in social establishments furthermore its deciding impact on 'the relative position of men and women in the public arena' (Razavi and Miller, 2015). This relative position has a tendency to oppress women (Moser, 2013).

Gender and advancement hypothesis applies sex investigation to reveal the routes in which men and women cooperate, displaying brings about nonpartisan terms of financial aspects and proficiency. While trying to make sex correspondence, (signifying women having same open doors as men, incorporating capacity to partake in people in general circle; gender and advancement hypothesis strategies intends to rethink customary sex part desires. Women are relied upon to satisfy family unit administration errands, home based generation and bearing and bringing up youngsters and looking after relatives. The part of a spouse is to a great extent translated as 'the obligations of parenthood'. Men nonetheless, are relied upon to be providers whom are connected with paid work, and market generation (Moser, 2013). In the work market, women' general monetary related installments have a tendency to be lower more often than not procuring less.

Various studies that have utilized gender and improvement hypothesis have found that once women have entry to the same sources of info and augmentation administrations as men, there is no profitability differential amongst women and men in agribusiness (Croppenstedt et al., 2013). Expanding women' profitable occupation in agribusiness and handling gender particular obstructions will consequently enhance rural profitability (FAO et al., 2010).

2.5.1 Relevance of the theory to the study

Gender and development theory explains the organizational functioning of the community life being the context where agriculture and development takes place. The contribution of women in household food production and provision of labour in cash crop production are not highly regarded due to power relations within the family set up as well as in the community. Gender and development theory seeks to address this by addressing the underlying issues of power relations that affect agriculture and development by depriving women key resources and opportunities in agriculture.

The gender and development theory also addresses the constraints that women face in development. These include challenges associated with gender roles and responsibilities that restrict women to certain activities in agriculture. Household-headship also limits decision making for women in agriculture as well as access to land. These challenges could prevent women from using modern agricultural methods eventually affecting their productivity in agriculture. Agricultural extension services are largely offered to men in patriarchal communities on the assumption that the knowledge will trickle down to other members of the

household they head. This, according to gender and development theory, is a wrong assumption and it leaves out households headed by women.

Due to property ownership systems in a patriarchal system, women find it hard to access financial and credit facilities. This, according to gender and development theory, could prevent women from engaging in agricultural activities that are capital intensive as women have fewer options and sources of capital as compared to men. When agricultural outputs are harvested and income from agricultural activities is controlled by men, women do not get the adequate control in allocation of resources yet they make critical contribution to agricultural development. This according to the gender and development theory is also entrenched in policy making that touches on agriculture for development matters.

2.4.1 Conceptual Framework

This study conceptualize that the interplay between contributions of women in agriculture and constraints that they face influence agricultural development in Gatundu Sub-County, Kiambu County. The independent variables are therefore contributions of women in agriculture and constraints faced by women in agriculture. The dependent variable is level of agricultural development. Ideally the contribution of women is supposed to increase the level of agricultural development in Gatundu Sub-County. However, this could be hindered by constraints faced by women in agriculture. This relationship of variables is shown by a conceptual framework in Figure 2.1.

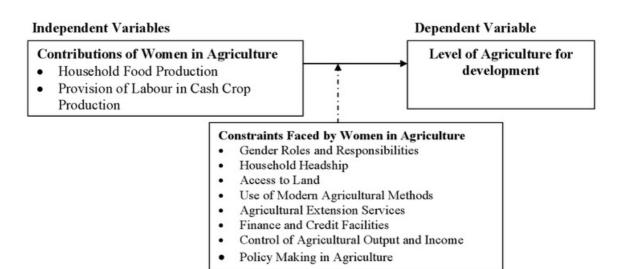


Figure 2.1: Conceptual Framework	Mediating variables

21 CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

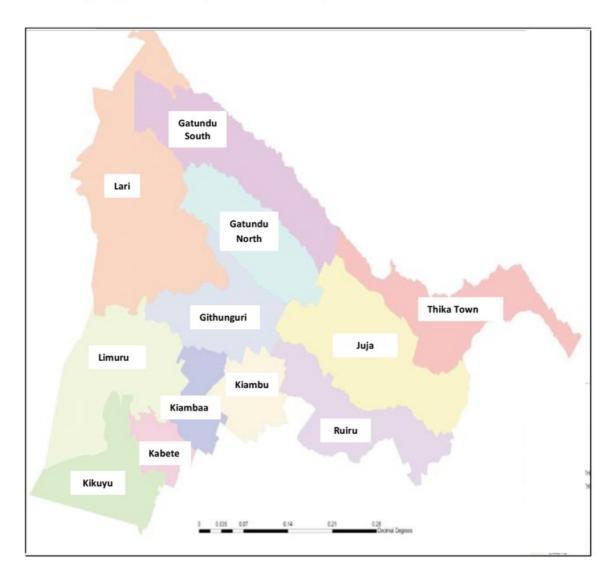
This section describes the research site, research design, study population, sample and sampling procedure, data collection methods, as well as data processing and analysis. The section concludes by discussing the ethical considerations that guided the study.

3.2 Description of Research Site

Gatundu South Sub-County is one of the twelve sub-counties in Kiambu County (Map 3.1). It covers an area of 168.80 square kilometres. It borders Juja Sub-County to the South, Githunguri Sub-County to the West, Ruiru Sub County to the East and Gatundu North Sub-County to the North. It is further divided into four wards, namely, Ng'enda, Ndarugu, Kiamwangi and Kiganjo (Kiambu County Government, 2015).

According to KNBS (2010), Gatundu South Sub-County has a population of 114,180. Given that the dominant community (Kikuyu) in Gatundu sub-county is patriarchal, most of the land in this sub county is owned by men. Over 80 per cent of this population is engaged directly and indirectly in agriculture which implies that agriculture remains the main economic activity in the area. Residents mostly rely on rain-fed agriculture. The sector is also the highest contributor to household incomes in the sub county at 72 per cent compared to other sectors. Declining gains in the coffee and tea sub-sectors have been frustrating sustainable economic growth in the sub-county. This is attributed to cash crop farming gains having not trickled down to the farmers leading to increasing number of people living below the poverty line which stands at 31 per cent with a poverty gap ratio of 8 (Republic of Kenya, 2006).

Women contribute significantly to the agricultural sector by providing labour and management in Kiambu County. This is despite discrimination against women's access to resources critical to agricultural development such as land orchestrated by socio-cultural structures. Women's contribution to agricultural development may not match the benefits they get from the proceeds of agriculture. The agricultural crops and activities that women are engaged in include coffee, tea, bananas and vegetables. They also rear livestock such as cattle and goats (Kiambu County Government, 2015).



Map 3.1: Kiambu Sub-Counties

Source: Kiambu County Government, 2015

3.3 Research Design

This study used a cross-sectional descriptive design, and used quantitative and qualitative methods to collect data. Quantitative data was collected using survey questionnaires that were administered to women engaged in agriculture in Gatundu Sub-County. Qualitative data was collected through focus group discussions and key informant interviews. Quantitative data was analyzed using descriptive and inferential statistics and presented in graphs and frequency tables while qualitative data was analyzed according to the themes guided by study objectives and presentation included verbatim quotes to amplify the voices of the informants.

3.4 Study Population and Unit of Analysis

The target population for this study was women in small holder and large scale agriculture in Gatundu Sub-County, Kiambu County. The unit of analysis was the individual woman farmer.

3.5 Sample and Sampling Procedure

The sample for this study was 96 women farmers randomly selected using the formula $n=Z^2pq/d^2$,

Where:

n = required sample size

p= 1-q (variance expected in the responses assumed to be 50:50 proportion rate).

Z = Z score value at 95% confidence level (standard value of 1.96)

q = Estimated responses.

d = Level of precision or margin of error at +-10% (standard value of 0.1).

$$n = \frac{Z^2 pq}{d^2} = \frac{1.96^2 (0.5*0.5)}{0.05^2} = 96$$

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To ensure representation, stratified random sampling was used to select study respondents.

The sample was drawn from four wards in proportion to the population of women in each ward (Table 3.1). The wards are Kiamwangi, Kiganjo, Ndarugo and Ngenda.

Table 3.1: Sampling Matrix

Ward	Population of women	Sample
	10.621	
Kiamwangi	10,631	17
Kiganjo	13,983	23
Ndarugo	10,625	17
Ngenda	23,826	39
Total	59,065	96



3.6 Data Collection Methods

3.6.1 Survey

The survey questionnaire was administered to the selected 96 women farmers and had four sections. The first section sought for demographic information of the respondents such as age, marital status, source of income, and family or household head. The second section sought information on the contribution of women to agriculture. The third section collected

information on the constraints that the women in agriculture face. The fourth section sought information on agricultural development. A semi-structured questionnaire (Appendix II) was used to collect data.

3.6.2 Key Informant Interviews

These were conducted with three heads of women farmers' groups, agriculture extension officer in Gatundu South Sub-County, the County executive in charge of agriculture in Kiambu County, a chief of one of the sub-locations and a representative from an NGO dealing with small-scale farmers in Kiambu County. The interviews collected information on the participation of women in agriculture for development, constraints faced by women in agriculture for development and sought suggestions for addressing these challenges. A key informant interview guide (Appendix III) was used to collect data.

3.6.3 Focus Group Discussions

Three focus group discussions were conducted with women farmers belonging to registered farmers' groups in the sub-county. Participants in these discussions ranged between 8 and 12. The aim was to obtain consensus on the roles women perform in agriculture for development, the constraints they face and how best to address these issues. A focus group discussions guide (Appendix IV) was used to collect the data.

3.7 Data Processing and Analysis

Quantitative data was analyzed using descriptive statistics such as frequencies, and percentages. Qualitative data was analyzed along the study themes. This entailed categorizing responses from interviews and open-ended questions in the questionnaire into themes as outlined in the study objectives. Any other emerging themes were also documented.

3.8 Ethical Considerations

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The respondents were informed what the study was about and their informed consent was sought. A consent form (Appendix VI) was used to obtain the approval of the respondents. Anonymity was ensured through use of pseudonyms where no direct or indirect identifiers were used unless duly authorized by the respondents. The researcher asked the respondents not to write their names on the questionnaire. The researcher also assured respondents of the confidentiality of the information given as it would be used exclusively for academic purposes. The respondents were informed that there is no compensation for participating in the study and that they were at liberty to withdraw from participation at any stage of the interview process if they felt uncomfortable.

It was hoped that feedback sessions could be organized to share the findings with the women farmers and that the results of the undertaking would be available in the University libraries. To the larger scientific community, attempts will be made to publish the work in refereed journals.

6 CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the findings of the study and their implications. The questionnaire had four sections. Section A sought background information while section B and C sought information on contribution of participation of women in agriculture for development and constraints of participation of women in agriculture for development respectively. The forth section sought information on agricultural development. Ninety six (96) questionnaires were administered and all of them were filled by the respondents. This translated to 100% response rate. This could be attributed to the researcher's presence in the field during data collection and the method used where respondents filled their questionnaires on the spot. The study also collected data from four key informants and two focus group discussions.

4.1.1 Demographic Information

This section presents background information of the respondents in regard to their age, duration as residents of Gatundu South Sub-County, household heads, duration engaged in agriculture and type of agricultural activity practiced.

4.1.2 Respondents Distribution by Age

Respondents were asked to state their ages which were grouped in specific age brackets. Out of 96 respondents, 32.3% were aged 37-47 years while 21.9% were aged 26-36 years. The results also indicate that 20.8% and 19.8% of the respondents were aged 48-58 years and 59 years and above respectively. Only 5.2% of the respondents were in the age bracket of 25 years and below. The results show that most of the women in agriculture in Gatundu South 52 Sub-County are middle aged and elderly. Table 4.1 presents these results.

Table 4.1: Distribution by Age Bracket

Age in years	Frequency	Percent
Below 25 years	5	5.2
26-36 years	21	21.9
37-47 years	31	32.3
48-58 years	20	20.8
59 years and above	28 19	19.8
Total	96	100.0

4.1.3 Duration as Residents of Gatundu South Sub-County

The respondents were asked to state the duration that they have been residents of Gatundu South Sub-County. The data indicate that majority of the respondents (57.3%) have been residents for 15 years and above while 20.8% of the respondents have been residents for 7-10 years. The data also show that 12.5% and 8.3% of the respondents have been residents of Gatundu South Sub-County for 11-14 years and 3-6 years respectively. Only 1% of the respondents stated that they have been residents for less than 3 years. This show that most of the respondents of this study had lived in Gatundu South Sub-County long enough to give useful information on women in agriculture and agriculture for development in the Sub-County. Figure 4.1 illustrates these findings.

1.0%

8.3%

20.8%

3-6 years

'7-10 years'

'11-14 years'

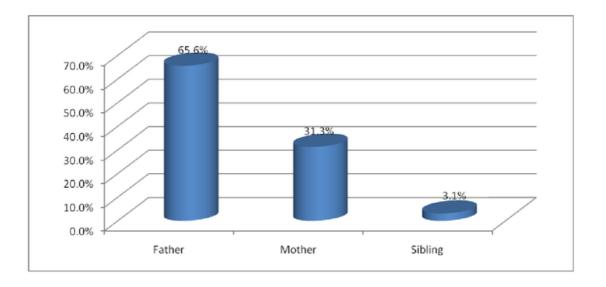
'15 years and above'

Figure 4.1: Duration as Resident of Gatundu South Sub-County

4.1.4 Household Headship

Respondents were asked to state the household head in their family. The data shows that the majority (65.6%) of the families interviewed had the father as the household head. In 31.3% of the families, the mother was noted as the household head while in 3.1% of the families, a sibling was noted as the household head. The results show that the community in Gatundu South Sub-County is a patriarchal one where men dominate in leadership. In cases where the mother or a sibling was the household head, the father was either deceased or away for work or for other reasons. Other possibilities were single women households, divorced or separated. Households headed by siblings were either orphaned or their parents were away for various reasons including work.

Figure 4. 2: Household Head



4.1.5 Duration Respondents have been in Agriculture

The researcher asked respondents to indicate the duration that they have been engaged in agriculture. The data shows that majority (60.9%) of the respondents interviewed have been in agriculture for 15 years and above. Respondents who had been in agriculture for 3-6 years and 11-14 years were 9.8% each while only 8.7% had been in agriculture for less than 3 years. The findings show that most of the respondents have been in agriculture for long enough to give useful information for this study. Table 4.2 shows the results.

Table 4. 2: Duration Respondents have been in Agriculture

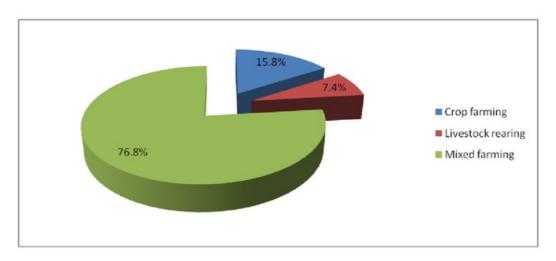
Duration	Frequency	Percent
Below 3 years	8	8.7
'3-6 years'	9	9.8
'7-10 years'	10	10.9
'11-14 years'	9	9.8

'15 years and above'	56	60.9
Total	92	100.0



The respondents were asked to state the type of agriculture they are engaged in. The data shows that majority of the respondents (76.8%) were engaged in mixed farming where they cultivate crops and rear livestock. The data also shows that 15.8% of the respondents indicated that they do crop farming alone while 7.4% indicated that they rear livestock alone. It can be deduced from the findings that majority of the women in Gatundu South Sub-County are engaged in mixed farming.

Figure 4.3: Type of Agriculture



Source: Field Data, 2016

4.2 Contribution of Participation of Women in Agriculture for Development

To establish the contribution of the participation of women in agriculture for development, 65 respondents were asked to indicate in a scale of 1-5 the extent to which they participated in agriculture for development in their sub-county. Value of 1 in the likert scale meant 'not at

all', 2 'to a little extent', 3 'to a moderate extent', 4 'to a great extent' and 5 'to a very great extent'. The data shows that to a very great extent (47.4%), respondents provided labor in cash crop production. They also made agricultural decisions to a very great extent (42.6%) and educated others on best farming methods to a great extent. About half (45.5%) of the respondents indicated that their contribution to a great extent is in other ways.

These findings are congruent with key informants who observed that women are very active in agriculture. One of the informants observed that:

"Women are highly involved because they are the ones doing the majority of the work, planting, weeding and harvesting".

The role of women in subsistence farming is illustrated by Nancy who summarizes the situation in her statements that

"Because of culture, women do most of the work and men provide the leadership".

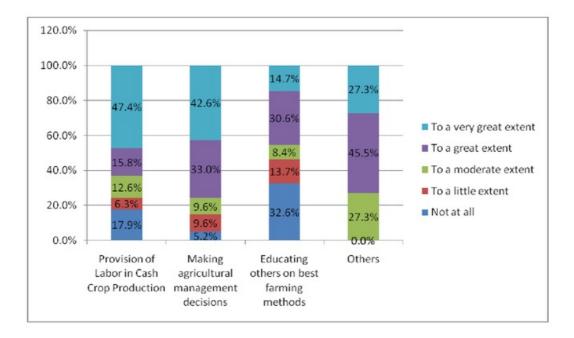


Figure 4. 4: Contribution of Participation of Women in Agriculture for Development

Source: Field Data, 2016

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The respondents were asked to indicate the extent to which women have contributed to agriculture for development using a likert scale of 1-5. The data shows that majority of the respondents (57.9%) indicated that women in the sub-county have contributed to agriculture for development to a very great extent. The results also show that 28.4% of the respondents indicated that women have contributed to agriculture for development to a great extent while 12.6% indicated to a moderate extent. Only 1.1% of the respondents indicated that women have not at all contributed to agriculture for development. The findings imply that contribution of women to agriculture for development in the sub-county is immense.

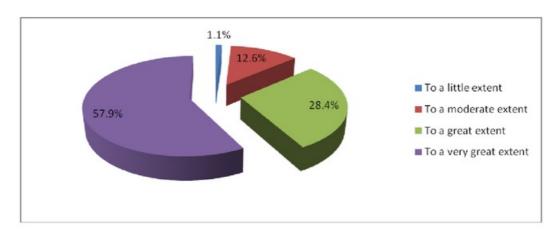


Figure 4.5: Extent to which Women have contributed to Agriculture for Development

Source: Field Data, 2016

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The respondents were asked to indicate the extent that they think women have contributed positively in agricultural development activities. The data shows that respondents to a very great extent (68.4%) contribute positively in agricultural development activities by providing labor in cash crop production. The data also shows that majority of the respondents (60%) contribute positively in agricultural development activities through household food

production. These results imply that women in agriculture are engaged in both provision of labor for crop production and household production. Table 4.3 shows these findings.

These results were corroborated by the key informants who indicated that subsistence outputs such as milk and bananas are shared between men and women by half. Stanley, an extension officer in Kiambu County observed that:

"Arrow roots are exclusively for women while avocado and nuts are for men. It is important to note that men have an interest in subsistence farm products that can fetch cash in the market while those that are largely consumed in the household such as arrow roots and bananas are exclusively for women. Women also plant maize and beans that make their households food secure."

The results show that women play a central role in subsistence food production in the sub-county. Key informants also indicated that tea picking is done by both men and women, while weeding in the tea estates is done by women only. However, coffee and tea belongs to men. Waithera, a women leader in Kiambu County and one of the key informants interviewed estimated that women account for 70% of labor in coffee and tea farms in the sub-county. In some cases, men and women discuss and share income but men get the lion's share. In most access, women are paid less than men for similar work. She noted thus:

"For picking tea, women are paid Kshs. 250 per day while men are paid Kshs. 300 per day regardless of the quantity picked."

These results imply that gendered roles and responsibilities are central in agriculture in the sub-county. Women are not financially empowered as men and this could explain male dominance in controlling agriculture and women providing most of the required labor. There is significant contribution of women in both subsistence and cash crop farming in the sub-

county especially through labor provision. According to FGD participants, women largely contribute labor and the men control and provide finances where need be. These findings agree with Doss (2009) who observed that there is a rigid division of labour by gender in agriculture in many countries in Africa which may be based on types of activities performed on the farm or types of crops grown by men and women. This division of labour by tasks was also observed by Gawaya (2008) who noted that generally, men cleared the woodlands, blazed the shrubbery and climbed trees for gathering organic products. Women were additionally in charge of transporting and promoting the money crops with male individuals from the family unit.

Table 4.3: Contribute Positively in Agricultural Development Activities

Extent	Provision of Labor in Cash Crop	Household food production
	Production	
Not at all	5.3	0
25 To a little extent	3.2	5. <mark>3</mark>
To a moderate extent	9.5	8. <mark>4</mark>
To a great extent	13.7	26.3
To a very great extent	68.4	60.0
Total	100.0	100.0

Source: Field Data, 2016

4.3 Constraints of Participation of Women in Agriculture for Development

Respondents were asked to rate the extent to which constraints facing women has affected agriculture for development using a likert scale of 1-5. The data shows that majority of the respondents (61.1%) indicated that constraints facing women has affected agriculture for

development to a very great extent. This implies that if these constraints are not addressed, they might significantly reduce or even cripple contribution of women in agriculture for development.

Table 4.4: Extent Constraints Facing Women affect Agriculture for Development

14	Frequency	Percent
Not at all	1	1.1
To a little extent	2	2.1
To a moderate extent	16	16.8
To a great extent	18	18.9
To a very great extent	58	61.1
Total	95	100.0

Source: Field Data, 2016

Respondents were asked to indicate in a scale of 1-5 the extent to which a number of constraints are experienced by women participating in agriculture for development in Gatundu South sub-county. A good percentage (37.5%) of the respondents indicated that to a very great extent gender roles and responsibilities were constraints experienced by women participating in agriculture for development in the sub-county. In addition, 31.2% of the respondents indicated that household headship was to a great extent a constraint experienced by women participating in agriculture for development in the sub-county. Other constraints cited included access to land to a very great extent at 35.5%, use of modern agricultural methods at 29.0% to a great and very great extent, agricultural extension services at 27.1% to a very great extent, finance and credit facilities at 30.2% to a great extent, control of agricultural output and income at 30.8% to a great extent and policy making in agriculture at 45.6% to a great extent. The results imply that most of the constraints experienced by women participating in agriculture for development revolve around gender roles and responsibilities,

access to land, use of modern agricultural methods and agricultural extension services. These are critical factors of production. Table 4.5 shows the results.

Table 4.5: Constraints of Participation of Women in Agriculture for Development

Constraint	Not at all	To a little extent	To a moderate extent	To a great extent	To a very great extent
Gender Roles and Responsibilities	5. <mark>2</mark> %	16.7%	12.5%	28.1%	37.5%
Household Headship	11.8%	14.0%	14.0%	31.2%	29.0%
Access to Land	16.1%	7.5%	15.1%	25.8%	35.5%
Use of Modern Agricultural Methods	15.1%	11.8%	15.1%	29.0%	29.0%
Agricultural Extension Services	25.0%	8.3%	15.6%	24.0%	27.1%
Finance and Credit Facilities	29.2%	6.3%	8.3%	30.2%	26.0%
Control of Agricultural Output and Income	19.8%	9.9%	18.7%	30.8%	20.9%
Policy Making in Agriculture	4.4%	4.4%	22.1%	45.6%	23.5%

Source: Field Data, 2016

The key informants were in agreement with these findings. They observed that the major constraints for women in agriculture include lack of alternative source of income, poor or lack of control of agricultural income, lack of education and alcoholism mainly by men jeopardizing family agricultural activities. Waithera, one of the key informants noted thus:

"Women are good managers but cultural norms do not allow them to lead. In addition, they do not have critical factors of production such as land or collateral as they are owned by men."

Informants recommended that women should be empowered through education, financially and through training.

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Most of the participants in the focus group discussion were content with their husbands controlling everything since they are the providers and these women indicated that they have not lacked their basic needs. They also indicated that the husbands regularly negotiate with them on how to spend income from cash crop income and they receive extension services thrice a year. Men make most of the decisions in regard to agricultural activities in a household. Household heads are the reference point when it comes to making choices and they happen to be men as dictated by culture.

Use of modern agricultural methods is improved through access to extension services and training. Men as opposed to women receive most of these services hence they are the ones who are more likely to use them than women. These findings agree with Boserup (2010) who observed that there is declining use of modern agricultural methods among women as compared to men. Contrary, women provide most of the labor in the farms.

A suitable (on a high scale) finance and credit facilities are provided to those with fixed assets collateral. This is in agreement with findings in a study by Mehra and Rojas (2008) in Kenya, Zimbabwe, Malawi, Zambia and Sierra Leone which found that women received only 10% of the credit for smallholder farmers and 1% of total credit to agriculture.

Women do not have collateral (land title) to borrow and most of them do not have even the opportunity to make the decision whether to take credit or not. Agricultural output and income are largely controlled by men. Most of the agricultural land is owned and controlled by men. This is in agreement with Milimo (2011) that a limited claim to the land may prevent women from fully participating in agriculture for development. Women control small portions of land that is mainly used for subsistence production.

Cash crops are a reserve of men while food crops are controlled by women. Food crops are consumed in the household and the surplus is sold. This leaves the women with little income as what they control is sometimes not even enough to feed their families adequately. The discussion shows that policies and major decisions in agriculture are made by men from the household level to extension services being provided by the government. Contrary, women are key implementers of these policies and decisions made in agriculture as they provide most of the labor. The findings of this study agree with observations by Saito (2014) that rigid gender division of labour by crop and tasks may be a hindrance to contribution and participation by women in agriculture for development.

4.4 Recommendations for Conditions for fulfillment of Agricultural Potential

Respondents were asked to rate the extent to which a number of conditions created opportunity for the fulfillment of agricultural potential in Gatundu South Sub-County. The data shows that accumulation of knowledge in agriculture among women (36.8%) and allocation of inputs and outputs to women in agriculture (31.6%) to a great extent has created opportunity for the fulfillment of agricultural potential in the Sub-County. However, availability of agricultural technology to women (30.5%) has not at all created opportunity for the fulfillment of agricultural potential in the Sub-County. The results imply that efforts in providing knowledge in agriculture among women and allocation of inputs as well as outputs have borne fruits. The results also cast doubts on efforts to make agricultural technology available to women.

Table 4.6: Conditions for fulfillment of Agricultural Potential

Condition	Not at all	To a little extent	To a moderate extent	To a great extent	To a very great extent
Accumulation of knowledge in agriculture among women	8.4%	12.6%	24.2%	36.8%	17.9%
Availability of agricultural technology to women	30.5%	11.6%	13.7%	23.2%	21.1%
Allocation of inputs and outputs to women in agriculture	20.0%	9.5%	16.8%	31.6%	22.1%

Source: Field Data, 2016

Some of the key informants recommended empowerment for women. As Stanley, an extension officer in Kiambu County puts it:

"Women need to be empowered through education, financially and through training for them to play their important role in agriculture effectively."

Another key informant recommended that traditional and cultural norms that hinder development should be abandoned or changed. Nancy, a women group leader in Kiambu County observed that sometimes traditional and cultural norms limit women in agriculture for development. She noted that:

"Traditional and cultural norms in Kiambu County dictate that household heads are supposed to receive knowledge in modern agricultural methods. These household heads are mostly men. However, the household heads are not necessarily the one to implement these modern agricultural methods in the farms and they might not transfer that knowledge to those who provide labor in their farms who are usually women. In

this way, traditional and cultural norms limit adoption of modern agricultural methods."

Nancy further stressed on the need for women not to be discriminated in land allocation and inheritance. She noted thus:

"In Kiambu County, majority of those that were initially allocated land were men and only a few women. This trend has been perpetuated by inheritance practices that encourage only men to inherit land from their parents and discourage women to do so."

6
CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND
RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusion and recommendations of the study. It summarizes the results as set out in the specific objectives and the research questions.

5.2 Summary of Findings

The data shows that to a very great extent (47.4%), respondents provided labor in cash crop production. They also made agricultural decisions to a very great extent (42.6%) and educated others on best farming methods to a great extent. These results also show that women in agriculture are engaged in both provision of labor for crop production and household production.

Most of the constraints experienced by women participating in agriculture for development revolve around gender roles and responsibilities and critical factors of production such as access to land, use of modern agricultural methods and agricultural extension services.

The results show that efforts in providing knowledge in agriculture among women and allocation of inputs as well as outputs have borne fruits. The results also cast doubts on efforts to make agricultural technology available to women. There is evidence that the contribution of women to agriculture for development in the sub-county is immense. If the constraints are not addressed they might significantly reduce or even cripple contribution of women in agriculture for development.

5.3 Conclusion

This study has revealed that women's participation in agriculture in Gatundu South Sub-County is high. Women are very active in agricultural activities in the sub-county. The division in the ownership of different crops with men owning cash crops and women owning food crops has implications for the production. Given that women provide almost all the required labor in both subsistence and cash crop production, there is need to have a commensurate enjoyment of benefits that reflects their inputs. The continued insubordination of women resulting from their limited control of the factors of production has had a devastating effect in the agriculture for development in the study site and future programmes need to ensure that input-output balance is achieved and that the enjoyment of benefits reflects the amount of efforts each party brings on board.

The issue of paying women less than men for equal efforts in hired labour and for similar work done is a very un-sustainable method of reward that in the long run compromises quality and slows down efforts. Necessary measures must be put in place to ensure that women do not see themselves as lesser beings since they are also regarded as the best workers in most of the farms. The effects of the patriarchal system in the community must be checked and the discrimination resulting from the gendered roles in the domestic sphere and in agricultural production require urgent attention.

The constraints of participation of women in agriculture for development in Gatundu South Sub-county resulting from land ownership patterns, financial constraints and the lack of critical factors of production have great impacts. Any organized process towards increased output must ensure that reforms in these sectors are undertaken. Increased access to agricultural extension services for women is a crucial and must form part of any programmes geared at enhancing the female participation in agriculture for development.

Once there have been redress to the women's lack of land ownership, increased access to credit to buy farm tools and equipment and structured sharing of the benefits accrued from farming, women will readily adopt the use of modern agricultural technologies that will not only increase production but make efficient use of the available resources. Women have traditionally been the agricultural back-borne of the African society and this can be enhanced and made more profitable in the years to come through clearly thought out policies that are not only gender sensitive but take into account the individual input and efforts.

5.4 Recommendations

This study recommends that;

- The community in the sub-county should recognize and appreciate the important role
 that women play in subsistence and cash crop farming.
- 2. Agricultural stakeholders in the sub-county should create awareness in the community on the need to avoid biasness against women when it comes to distribution of agricultural income and output. Regardless of gender, everyone should get agricultural income and output commensurate to their efforts or input.
- Individuals working in coffee and tea estates should be paid according to work done
 and not on the basis of their sex or gender.
- 4. Kiambu County Government and the National Government should ensure that there is gender mainstreaming in agricultural policies. The two levels of government should increase the number of women agricultural extension officers and focus on all household members rather than focusing on the household headship in the training process.

- 5. The National Government should intervene to empower women in the sub-county. This will eliminate some of the constraints facing women in agriculture. The government should ensure that women access education and training in agriculture as well as enabling access to alternative sources of capital such as agricultural credit.
- Financial institutions should come up with credit facilities that are tailored for women who mostly do not have fixed assets as collateral.
- There is need for further research on the significance of women in agriculture and how to streamline the sector.

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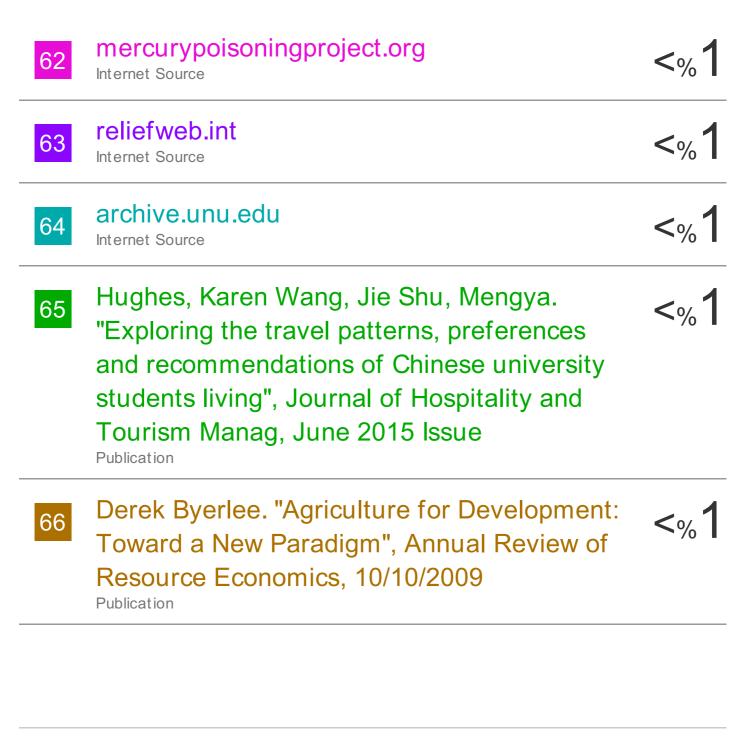
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