EXAMINING GENDER EQUALITY IN ACCESSING AGRICULTURAL EXTENSION SERVICES TO FARM WOMEN IN RURAL AREAS: THE CASE OF MVOMERO DISTRICT

EXAMINING GENDER EQUALITY IN ACCESSING AGRICULTURAL EXTENSION SERVICES TO FARM WOMEN IN RURAL AREAS: THE CASE OF MVOMERO DISTRICT, TANZANIA

By

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A Dissertation submitted to the School of Public Administration and

Management in partial fulfillment of the Requirement for the Awards of Master

of Research and Public Policy of Mzumbe University

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CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for
acceptance by the Mzumbe University, a dissertation entitled; Examining Gender
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Mvomero District, in partial fulfillment of the requirements for the award of the
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Signature

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I, Benard B. Wataye, hereby declare that this dissertation is my own original work
and that it has not been presented and will not be presented to any other University
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DEDICATION

I still remember the painful day 25^t, October, 1990 when you passed away, I wish you were alive and witness the academic achievement of your son, mother you are still remembered and live in me forever, I dedicate this dissertation to Fatuma Juma Mhelela my beloved mother.

LIST OF ABBREVIATIONS

ASDP Agricultural Sector Development Programme

CAADP Comprehensive Africa Agriculture Development Programme

CEDAW Convention on Elimination of all forms of Discrimination against

Women

DADP District Agriculture Development Plan

DALDO District Agriculture and Livestock Development Officer

FAO Food and Agriculture Organization

FFS Farmers Field School

FSR-E Farming systems approach to research and extension.

IFPRI International Food Policy Research Institute

MDGs Millennium Development Goals

MKUKUTA Mkakati wa Kukuzana Kupunguza Umasikini Tanzania

MVIWATA Mtandao wa Vikundi vya Wakulima Tanzania

NGO Non-Governmental Organization

NSGRP National Strategy for Growth and Reduction of Poverty

REPOA Research on Poverty Alleviation

SADC Southern Africa Development Community

TAFSIP Tanzania Agriculture and Food Security Investment Plan

UN United Nations

US United States

ABSTRACT

Agriculture is not only one of the most important sources of rural livelihoods in Tanzania, but also makes vital contributions to the country's economy. Rural women are major agricultural producers, especially at the household level. But unfortunately they have less access to agricultural extension services. The study examined gender equality in accessing agricultural extension services among farm women. The study was undertaken at Mlali ward in Mvomero District, where 2 villages were randomly selected. Probability and non-probability sampling techniques were used to select the study respondents, and data were collected from 62 respondents.

The study were guided by four specific objectives which were, to assess the attitude of the community towards women's access to agricultural extension services, to determine socio-cultural and economic factors which promote/hinder women to access agricultural extension services, to analyze institutional framework for supporting women in accessing agricultural extension services in the rural areas and to assess the challenges of agricultural extension agents that affecting accessibility of extension services to farm women.

Qualitative methods of data collection through interviews and focus group discussion were used to collect the data, and documentary method was deployed to supplement the previous methods. Content and descriptive analysis was incorporated to analyze the data from the field with the help of SPSS version 20. The results showed that the attitude of the community towards women's access to agricultural extension service was positive in the sense that community members were of the opinion that women have the right to access extension services as men do. Three quarters of the farm women who were involved in this study had never had contact with agricultural extension officers in their fields because they were not members in the farm community groups, so getting agricultural extension service, women must join infarm community groups/organization. Therefore, the resultsshowed that there is no any formal system such as policy or programs that are specifically dealing with the accessibility of agricultural extension services to farm women. In providing agricultural extension service extension agents faced with the challenges that in one

way or another affecting farm woman to access agricultural extension services which were, means of transportation, many women are not members in the community farm groups and low level of participation of women in the farm field schools.

The study thus recommended that, Government should formulate agricultural extension services policy which will guide and look after farm women in various aspects in the sector of agriculture, also there is a need for local authority like WEO and VEO to establish communication with other stakeholders who are dealing with the agricultural credits and trainings.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter is an introduction of the dissertation. It consists seven sections, section one is about the background to the problem; section two is a statement of the problem; section three is objectives of the study; section four is about the research questions; section five is the significance of the study; section seven is operational definitions of key terms, limitation of the study, delimitation of the study and lastly the organization of the chapter.

1.1 Background of the problem

Equality between women and men has been recognized by international law since the introduction of the Universal Declaration of Human Rights in 1948 which introduced some principles which are supported and implemented by many countries in the world (United Nations, 1958). Gender equal rights have raised international discussion of the position of women since 1975 up to 1985, whereby the United Nation Decade for Women introduced and discussed some women issues, and this forum has been a key element in the global feminism (Bulbeck, 1988). The issue of gender equality was placed on the policy agenda by women who are disadvantaged by the main patterns of gender inequality and who therefore have the claim for redress (UN, 1958)

The access of these farming women to basic and natural resources and institutional services, such as credit, market information, training and extension services; has been limited to a large extent (FAO, IFAD AND ILO, 2009). Men still dominate access to the resources and are still the main target of institutional services, for instance, most women in the mountainous areas in the South-West China obtain access to new technologies and market information through men's second "handover" (Wang *et al.*, 2002). The current technology extension system provides

more opportunities to men than women, consciously or unconsciously (Wang et al., 2002).

World Bank (2009), FAO (2011) and Peterman et al., (2009), in their studies reported that there were gender inequalities in accessing agricultural information, credit and extension services, including agricultural inputs such as water, land and marketing opportunities, and this is because of male bias to women farmers. In northern south Asia, the Middle East and North Africa, reported that women face social prohibition to participate in different public meetings including to attend farm field schools and other trainings prepared by extension agents and thus affecting their ability to engage full in farming activities. Therefore, this makes them not to participate fully as the farmers (Agarwal, 1994; FAO, 2011; World Bank, 2009). All these situations make women not to take advantage to participate in production, which has high value (World Bank, 2009). FAO (2011) reported that in Nigeria and Senegal men are the ones who hold the contracts in farming whereby land rights and other resources are reported to be among the obstacles for women to engage in contract farming arrangements. Women also put much of their labour on family farming but they earn less compared to men. Lack of access to extension services makes women not adopt modern farming technology, including high yielding (Doss, 2011). Ogunlela and Mukhar (2009) in their study reported that in Nigeria, traditional agricultural extension services had only focused to male farmers because it is believed that only men are the farmers, therefore this tendency seems to neglect women farmers by denying them chances to get agricultural education and besides in Nigeria women contributing half of the production force (ibid).

About 75% of Tanzania population live in the rural areas, and their main activities that enable them to earn a living is from small scale, rain-fed farming and informal business (NAP, 2013). It is reported that rural adults who have aged from 15 years and above, 70% of men and 75% of women. The report indicated that their main activity is agriculture and livestock/forest (NBS, 2009). Promoting equal opportunities and equal access and control over productive/economic assets, social resources and essential services for all Tanzanians is critical for poverty reduction. Generally, Tanzanian women have less access to and control over assets and

resources (including land, capital, credit and formal employment), information and decision making than men (Manfre, 2013).

Tanzania also one of the many African nations that promotes gender inequality through all systems of law as Mbote (2005) stated that under all systems of law in many African countries, land ownership is anchored in patriarchy, law can be used to reinforce or make permanent social injustice in the realm of women's rights, legal rules may give rise to or exacerbate gender inequality. Legal systems can also become obstacles when change is required often the de jure position which may provide for gender neutrality (Mbote, 2005).

Lwoga *et al.*, (2011), in a survey which they conducted in four districts in Tanzania, stipulated that there is a variation in the information needs according to gender. Other studies carried out in Nigeria Adomi*et al.*, (2003), reported that there was a definite gender split at the information needs, especially through agricultural extension services. It was found that the socio-economic characteristics of women farmers significantly affect participation of women in agricultural extension service (Adomi *et al.*, 2003). However, other factors militating against women in their participation in agricultural production are many, some of which are socio-cultural and economic in nature.

In Tanzania the government formulated different policies which are intended to protect gender equity and equality, there were several ratifications of conventions and declarations that the government has signed in order to protect and to advocate human rights, and all these implementation of programmes and policies undertaken under the international law, there are some conventions and declarations which Tanzanian government has signed in order to promote gender equity and equality which are; the conference of international women's year which held in Mexico, the Beijing declaration and platform of action, United Nation Convention on Elimination of all forms of discrimination against women CEDAW (1985), The southern African Development Community (SADC), Declaration on Gender and Development in 1997 and the resolutions and communiqués of several African Conference on women held in 1975, 1980, 1984, 1994, and 1999. Also the

Tanzanian constitution prohibits any kind of the discrimination against its people on whatever grounds (TOWO, 2004). Therefore the government of Tanzania also puts in place various platforms that ensure that there is no any discrimination on all levels including national and sectoral policies which are; Development vision for 2025 (URT, 1995), The National land policies (1999), The women and gender development policy (2000), The National poverty eradication strategy (2003), all these transformation commitments and help to promote gender equality in all sectors (TOWO, 2004).

Several of the recent policies and strategies launched by government of Tanzania emphasize improving access to agricultural information, extension and training for small scale men and women farmers. In this respect, there are several initiatives and programmes such as Kilimo Kwanza, National Strategy for Growth and Reduction of Poverty 2 (NSGRP 2) or (MKUKUTA 2 (Kiswahili acronym), Agricultural Sector Development Programme (ASDP), Tanzania Agriculture and Food Security Investment Plan (TAFSIP) under the comprehensive Africa Agriculture Development Programme (CAADP), Feed the Future Programme, Southern Agriculture Growth innovations emanate from these government.

1.2 Statement of the problem

Much effort has been made by the government of Tanzania in bringing about gender equality, the government has in place the National Development Vision 2025 that states, among other things aims to attain gender equality and empowerment of women in all socio-economic and political relations, and culture from the 2025 (URT, 2005a). The government formulated the women and gender development policy which was adopted in 2000. The policy puts emphasis on mainstreaming and integration of gender equality in policies, plans, development strategies and actions in all sectors and at all levels in the development process, and the signing and/or ratification of major international instrument that promote gender equality and human rights, including the Human Rights Declaration (1948), United Nation Convention on the Elimination of all Forms of Discrimination against women (1979), Beijing Platform for Action (1995) on women's economic and political

empowerment, education and training, Millennium Declaration and Development Goals (MDGs).

In many parts of the world women are the main farmers or producers, but their roles remain largely unrecognized, women make an essential contribution to the rural economy of all developing country regions as farmers, labourers and entrepreneurs, their roles are diverse and changing rapidly, women have less access than men to agricultural assets, inputs and services and to rural employment opportunity (FAO, 2010). Four decades of research demonstrate the varied and crucial responsibility that women hold in agriculture and the value of their contributions both economic and social, rural women produce half of the world's food and in developing countries between 60 percent and 80 percent of food crops, yet agricultural investment do not reflect these facts (FAO, 2010).

Even though gender equality is currently considered as a fundamental right as stipulated in the Human Rights Declaration of 1948, Millennium development goals which stressed on how to incorporate gender analysis when formulating policies and programmes for the country development (REPOA, 2010). Agricultural extension and information do not improve female farmers' productivity to the same degree as that of male farmers, knowledge and training in farming methods and techniques are critical for both women and men, but women farmers tend to have less access to this information and particularly information attuned to their needs (World Bank, 2014). Women farmers tend to receive second-hand information from husbands and friends if they are not the head of their household (World Bank, 2014).

Despite the government initiatives in promoting gender equality through national policies and institutional framework, and despite their immense contribution to the household economy and given their critical role in determining and guaranteeing food security as food producers, food providers and contributors to household nutrition, but women still often face difficulties than men in gaining access to agricultural information to increase their production and productivity (Winrock, 2001). Therefore, it is the interest of this study to examine the gender equality in accessing the agricultural extension services to farm women in rural areas.

1.3 Objectives of the study

1.3.1 General objective

The general objective of the study was to examine gender equality in accessing the agricultural extension services to the farm women in rural areas.

1.3.2 Specific objectives

The specific objectives of the study were:

- i. To assess the attitude of the community towards women's access to agricultural extension services.
- ii. To determine socio-cultural and economic factors which promote/hinder women to access agricultural extension services
- iii. To analyze institutional framework for supporting women in accessing agricultural extension services in the rural areas
- iv. To assess the challenges of agricultural extension agents that affecting accessibility of extension services to women.

1.4 Research questions

- i. What are the attitudes of the community towards women's access to agricultural extension services?
- ii. What are the socio-cultural and economic factors which promote or hinder women to access agricultural extension services?
- iii. How does the institutional framework supports women in accessing agricultural extension services in the rural areas?
- iv. How do the challenges of agricultural extension agents/officers affecting the accessibility of extension services to farm women?

1.5 Significance of the study

There were a number of practical reasons for doing this research. At this time when food production in the country is continuing to be a problem and cannot adequately feed the growing population, there is an urgent need to look into the constraints of those who produce food (in our case women) face in accessing support/services mainly from agricultural extension services. Identification of the challenges women farmers faces and without forgetting the challenges/constraints which these extension agents/officers face when discharging their duty, these will be a first step towards addressing them and thereby increasing agricultural production.

However the study also was justified in the sense that will be re-orientation of the extension agents that will take into cognizance the relevance of women farmers and their challenges.

The findings of this study can also be used in guiding policy makers and development planners who are concerned about gender issues while designing agricultural extension projects within the region and elsewhere in the country.

The result of this study can be used to understand the socio-economic factors that affecting women in accessing the agricultural extension services in rural areas.

The findings of this study will also be used to inform the village, ward and district authorities the importance of integrating rural women in agricultural extension services.

1.6 Scope of the study

The study focused only on two villages located in Mlali Division in Mvomero District (Morogoro Region), and the study was only engage data on examining gender equality to women in accessing agricultural extension services in the rural areas.

1.7 Operational definitions of terms

1.7.1 Gender

These are socially constructed roles and status given to men and women, girls and boys, cultural characteristics identifying the social behavior of women and men and their relationship between them in the society. Gender roles vary according to place such as countries, villages, regions, groups and generation; therefore gender is not about women but the relationship between women and men.

1.7.2 Gender equality

This refers to the different needs, behavior, aspirations of women and men the way are treated, viewed, considered and favored equally, but their rights and treatment will not depend on their sex (male of female).

1.7.3 Agricultural Extension Services

The application of scientific research and new knowledge of agricultural practices through farmer education. The field of 'extension' now encompasses a wider range of communication and learning activities organized for rural people by educators from different disciplines, including agriculture, agricultural marketing, health, and business studies.

1.8 Limitation of the study

Inviting respondents to the focus group discussion was the major limitation of the study. Many people refused to participate in the discussion until they were promised some money. Also little has been written concerning gender and agricultural extension services, and therefore weakens the part of the literature review of this study.

The researcher tried to explain the purpose and aim of the dissertation to the respondents with the help of VEOs and eventually most of them accepted to participate in the discussion.

1.9 Organization of the dissertation

The dissertation is organized in five chapters whereby Chapter one is about introduction. It also describes the key concepts. In Chapter two, the main theoretical perspectives are prescribed. Chapter Three dealt with Research Methodology. Chapter Four is on Results and findings that will include the interpretation of the results and discussion. Lastly, Chapter Five is Conclusion, policy implications and Recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter includes three sections which are, theoretical framework, empirical literature review and conceptual framework.

2.1 Theoretical framework

2.1.1 Social conflict theory

The theory which underpinned this study was the conflict theory which explains the unbalanced distribution of duties within the household is still spreading in all societies which impedes women to participate in several activities in the societies eventually lead them to the subordinate position compared to men.

Karl Marx is the founder of the social conflict theory which has four major paradigms of sociology, there are other sociologists who in one way or another associated with the social conflict theory include; Harriet Martineau, Jane Addams and W.E.B Dubois, the theory look at how "social patterns" can cause some people in the society to be oppressor and other to be oppressed and the theory does not look at how social structures help society to operate.

Conflict theory based on the assumption that society is in the full of struggles whereby people looking for power and dominance, each and every one want to dominate each other, the struggle between social classes happens because of the scarcity of resources such as land, factories, natural resources and other resources like money, food and material goods, capitalism system power is based on few hands of the ruling class (Bourgeoisie) who own lands, factories and other means of production that workers (proletariat) work for their survival, Karl Marx argued that the ruling can do whatever it takes to maintain their status and continue to dominate workers and exploiting as much as profit until the oppressed who are workers recognize that are exploited and form class consciousness and unite to challenge the inequitable system.

According to Friedrich Engels (1820-1895), who applied this assumption at the level of the family and, he suggested the master, slave or exploiter-exploited relationships occurring in broader society between the bourgeoisie and the proletariat are translated into the household. Primitive societies were highly egalitarian because there were no surplus goods, hence no private property, people consumed what they produced, with the emergence of private property and the dawn of capitalistic institutions, Engels argued that a women's domestic labor is "no longer counted beside the acquisition of the necessities of life by the man, the latter was everything the former an unimportant extra". The household is an autocracy, and the supremacy of the husband is unquestioned. Mbote (2005), in his study stated that in many African countries the issue of land ownership is based on the patriarchy which is supported by all systems of law in many African countries, this unbalanced distribution of resource within the family is still spreading in many societies and it is indeed damaged both men and women as well in the society.

For example, in Tanzania, there are provisions which are usually formulated to protect women land use rights, but they have eroded in allocating village councils, these councils have been guided by customs which continued to discriminate women from getting their rights to own land asset, land asset is given to head of household who are actually men in most of African countries and women leaving out (Clknet, 2013). For women, it leads to less opportunity to participate in paid work, and agricultural extension services, programs, in other words, to be less economically independent, have less bargaining power within the household and fall in a subordinate position compared to men (Borjas, 2009). Conflict theory suggests that men, as the dominant gender, subordinate women in order to maintain power and privilege in the society.

Many studies have shown different forms of identifying women's empowerment, but at least all of them goes in one direction which point out that power is the ability of women to solve and face challenges. Longwe and Clerk (1994) identified women's empowerment as to overcome constraints and challenges that arises especially in the patriarchal society.. Also the study of Safilios-Rothschild (1985)

described invisibility of women with the patriarchal values usually hinder women empowerment.

According to Mayoux (2000) women assuming the ability to identify their aspirations and strategies for change besides gaining skills and resources to achieve these aspirations constitutes their empowerment. An aspiration or needs that women strive to achieve have been classified into two categories by Moser, who developed a framework for analyzing these needs, the categories are practical and strategic gender needs which arise from the inequalities that exists between men and women

2.2 Historical evolution of agricultural extension services

It is believed that agricultural extension service has its roots as far back as 1800 BC, 1800s AD formal agricultural extension services in many countries, and in 1845 during the potato famine Ireland started agricultural extension service, later in other countries like the United States and Canada Although the agricultural extension service has roots as far back as 1800 BC, formal extension in most countries did not start until the late 1800s AD. The first modern extension service was started in Ireland during the potato famine in 1845 (Swanson et al 1997). In the United States and Canada, formal extension started during the late 1800s. France began a national service in 1879 using itinerant agriculturalists, Japan and many of the British colonies also started extension services during this time (Anandajayasekeram et al, 2008).

The term extension service comes from the educational development in England during the second half of the nineteenth century, in 1850s two ancient universities of Oxford and Cambridge started the discussion on how they could serve the rapidly growing population during the industrial revolution, especially urban areas and near their homes by using agricultural education needs. In 1867 the first practical attempt was undertaken in what was designed as 'University extension', the activity developed quickly to become a well-established movement before the end of the century. The provision of relevant agricultural information and advice to farmers,

however, as a long history prior to the emergence of modern forms of agricultural extension in the nineteenth century (Anandajayasekeram et al, 2008)

In the very early years of this century, extension services were very small and it was operated in the small scale and were only contacted with the few farmers, and their organization were not well organized, even though was based on legislation. They were organized predominantly either by central or local government, or by agricultural colleges, usually in close association with experiment stations or by farmers' organization, or combinations of these parent bodies. After few years has passed the organizations grew and matured in that changes have often occurred to their parent affiliations hence government started to fund in broader terms, especially in the North and extension workers were provided with the training and became well trained and more professional (Anandajayasekeram et al, 2008).

Fifty years ago, agricultural extension organizations in less developed countries were seen as the administrative traditions of the former colonial powers (Axinn and Throat,1972). Services During this time colonial powers were only interested in other agricultural support services like production and marketing of export commodities. Accordingly, crop-oriented extension programs were common, however, as noted by Antholt (1994), the scope of extension programs expanded in the fifties as the newly independent states of Asia and Africa sought to increase food production and to spread the benefits of improved farming techniques more widely. Extension organizations, therefore began to aim at broad national and farming system coverage. The economic strategies of these pioneering years relied on heavy state interventions, import substitution and rapid industrialization. Extension programs often relied on the proposition that farming productivity was held back not so much by technological and economic constraints, but by farmer apathy, inadequate social arrangements and lack of local leadership. Often, extension agents came to be viewed as the foot soldiers of nation building campaigns aiming at multiple economic and social objectives.

Initial agricultural extension service was top-down in the sense that, the information was coming from universities through researches and the ministry of agriculture, directly farmers received this information through agricultural extension agents, farmers were the only recipient of the information, they were not involved in giving out their input nor advice (Anandajayasekeram *et al.*, 2008).

One of the good example of extension model was United States extension model, the US system was formed or structured as a cooperative system which were under federal, state and county in terms of funding and control, and this US system was the one of the oldest model of extension that has been successful in many areas, the model also known as transfer of technology because the technology comes from research stations and universities and eventually disseminated through extension agents to the farmers. Another model was developed by the British and other colonial power in order to increase the production of cash crops during the colonialism, the model was quite top down in terms of the structure, whereby the government conducted research which later shared by extension agents who passed the information to the farmers (Anandajayasekeram *et al.*, 2008).

Most developing countries are usually using top down model, all issues regarding agricultural development plans are located within the ministry of agriculture and it is not usually associated with universities, and therefore has poor linkages with research (Boone 1989).

There are a number of conditions for agricultural extension to evolve identified by (Swanson et al., 1997), and these include;

- Information has been assembled, systematized and made available for good, progressive, or new agricultural practices suited to either or both the accumulation of experience or findings from research.
- This information is used, among other things, to educate professional agriculturalists who may further enlarge or refine this body of knowledge or become active promoters and disseminators.
- An appropriate administrative or organizational structure exists within which the dissemination activities may be established and conducted

- There is a legislative or some other official mandate or influential proponents, which prescribes or enables that agricultural extension work is desirable and must occur.
- There are invariably a variety of antecedents, which have attempted protoforms (basic frames, used until a more suitable form can be found) of agricultural information and advice dissemination.
- The incidence of critical situations, such as famine, crop failure, soil exhaustion, or altered economic conditions or a relationship may create an immediate cause for initiating the organization of extension work in the form of mass campaigns.

2.2.1 Extension in the 1970s

In 1970s the extension system in developing countries changed, as the realization came about that there is a need to reach more farmers and train extension agents who could help to educate and disseminate agricultural information in a professional manner. At this time the main development included integrated rural development approaches and emergence of training and visit extension systems. The diffusion model of extension gave way to the 'get the technology right' model, where farmlevel constraints explained non-adoption of technology, with a prescription to ease the constraints through an integrated package of services (Axinn, 1988).

This ushered in the World Bank-sponsored training and visit system. This system used contact farmers in order to multiply the extension's effect. Being highly structured, this system was top-down and characterized by rigidity and high costs. Funding often came through loans from the World Bank, working mainly with contact farmers' stifled diversity, because many were large scale male farmers who had little in common with small scale resource poor farmers.

2.2.2 Extension in the 1980s

At this time the world witnessed the emergence of new farming systems approach to research and extension (FSR-E)

Extension during this time was characterized by;

- Emphasized on participatory approach
- Preoccupation with increasing productivity of women and preserving ecosystems along with attempted cost recovery and privatization schemes (World Bank, 1990)
- Emphasized in training and visit extension system and growth of FSR-E
- Institutionalization of FSR-E

The public sector extension was criticized for not being relevant, adequately effective, and efficient and, at times for not pursuing programs that foster equity (Anandajayasekeram *et al*, 2008)

Much literature (Schwartz and Kampen' 1992; World Bank 1995; Contado 1997) suggested the need for the pluralistic extended system because public extension services need to be accountable to both the clients of the services and the wider population. Contado (1997) identified a number of advantages that a national pluralistic policy of extension will bring about;

- It encourages wider participation, providing resources, support and control of
 the extension program of the country. As a consequence, more resources are
 allocated for the extension or at least a clearer accounting of resources
 devoted to the extension is achieved.
- It creates complementarity and synergy in the use of resources for extension by different donors, which are recognized as part of the pluralistic extension policy.
- Research and extension linkage is made functional in the field.
- It creates a cohesive critical mass of extension people who could address
 large numbers of farmers as well as the increasing variety and complexity of
 subject matters needed by farmers.
- It lessens the resource burden upon the central government, or on a single agency, or on the private sector or on farmers themselves.

National reforms and other initiatives that in essence aim at an optimum mix of institutional pluralism have followed different paths for achieving their objectives. Grassroots associations, the NGO sector, farmers' associations are major stakeholders in this process.

Potential providers of agricultural extension services fall into three main groups: the public sector, the private non-profit sector and the private for profit sector. The distinctions between various providers are important because of the range of services each typically offers, and the incentives they have for delivering these services. The private (profit) sector includes all agents whose objective is to generate profits directly or indirectly, for their owners, members or shareholders. The private nonprofit sector differs from the profit sector in one important respect, rather than distributing the residual earnings (if any) to individuals who exercise control, it reinvests profits to finance future activities (Umali-Deininger, 1997).

The private-for-profit sector comprises three main sets of actors, commercial suppliers of agricultural inputs provide 'free' information and advice linked directly to the use of their technology. They are increasingly concerned to ensure that accurate information is passed on by input dealers at point of sale and so may be involved in training and providing technical support to their dealer networks. At the other end of the production process companies which purchase, process and market agricultural produce provide information and services in order to assure quality and reliability of supply. Much less common in developing countries is the autonomous emergence of for-profit organizations (firms, partnerships) or individuals specializing in providing consultancy and advisory services (Umali-Deininger, 1997).

However, some reforms, especially in Latin America have helped to facilitate this in the context of a shift of both delivery and funding from the public sector.

Table 2.1: Providers of agricultural extension services

Public sector	Private sector(non-profit) Private sector (profit)	
Ministries and departments of agriculture Agricultural research centers	 Local and international NGOs Bilateral and multilateral aid projects Universities Community boards, associations and foundations (including farmers' groups) Other non-commercial associations 	 Commercial farmer or farmer group operated enterprises (including cooperatives) where farmers are both users and providers of agricultural information Commercial production and marketing firms (such as input manufactures and distributes) Agro-marketing and processing firms Trade associations Private consulting and media companies (publishing and telecommunication firms)

Source: Adapted from Umali-Deininger (1996)

The key issue of creating a pluralistic service, and one suggested by various authors (Schwartz and Kampeden 1992; Ameur 1994; Dinar 1996; Holden et al 1996; Umali-Deininger 1997; Zijp 1998) is a need to find an appropriate 'mix' of public and private funding and delivery mechanisms for extension, which will achieve differing agricultural goals and serve diverse target populations.

There are three major lessons for extension which are;

- It is important to make new things visible the state of the environment and the extent to which present farming practices are untenable, in addition, extension can demonstrate the feasibility of sustainable practices. Even more important is to give farmers the tools for observation and to train them to monitor the situation on their own farms
- The use of farmers' knowledge; the location specific nature of sustainable agriculture implies that the extension must make use of farmers' knowledge and work together with farmers. Often indigenous practices, which have been ignored under the impact of chemical farming, can be fruitfully revived. Indigenous technology development practices and farmer experimentation can be an important 'entry point' for introducing sustainable farming practices (Brouwers and Roling 1999).
- An emphasis on facilitating learning: instead of transferring technology, extension workers must help farming 'walk the learning paths'. Extension workers should seek to understand the learning process, provide expert advice where required, convene and create learning groups and help farmers overcome major hurdles in adapting their farms.

2.2.4 Scenario of Agricultural extension service in Tanzania

The provision of agricultural extension services has been very important in Tanzania for a many years now, previously extension services were provided directly by central government through the Ministry of Agriculture, but after the local government reforms the local government was given the task of provision of agricultural extension services which help to encourage and motivate other stakeholders to participate in service delivery (Kimaro, 2010). In recent years many approaches have introduced to disseminate agricultural information to the farmers, the methods facilitate easy participation of farmers and eventually given chances to plan and implement, there are different approaches used, by extension agents includes FFS, Training and Visit, contract farming, participatory extension and farmer to farmer extension (ibid).

2.2.5 Organization of agricultural extension service in Tanzania

The reform of local government of 1996 and its official launched in 1998 which allows the decentralization of duties and authorities to the district level whereby local authorities were given more power and autonomy to plan and implement different programs and activities without any interaction of central government. The main point about this reform was to give and help many farmers to access different services provided by agricultural extension officers and other agricultural inputs like credits and fertilizer, and most beneficiaries of this change are the farmers who actually most them reside in the rural. The central government remained only with the task of policy formulation, providing funds and monitors the implementation of different projects.

Ministry of agriculture food Regional Administration and local Government security and cooperatives Down Secretariat of Up arrow=Agricul Regional Agriculture arrow=Represents ture policy reporting chain chain District Agriculture and Livestock Development (DALDO)

Figure 2.1 Organizational structure of agricultural extension service in Tanzania

Source: Elifadhili, 2013

2.3 Empirical literature review

The extension service of agriculture and rural development based on providing education and information for government, particularly its research establishments on production performance and farmers' potential and the way that agricultural research in particular should help farmers to produce more crops. Extension service also used to help farmers to organize themselves into groups where they can get access to different services like finance and other production requirements and to market their products through group action (MALA, 1998). Also extension service provides assistance to rural communities seeking to better manage local agricultural and natural resources through a new style of organizations (associations) such as water user, land care groups and livestock associations.

It has been evidenced that agriculture is number one for contributing growths in many parts of rural Africa, but the investment in human capital and infrastructure is very poor (World Bank, 2002). The emphasis on low external input technologies and so may have the greatest social returns (Pender, 2000).

According to CIMMYT, factors influencing adoption of new technologies include first the characteristics of individual farmers such as education level, sex, size of land owned, income and credit accessibility, the second is farmers asset and capital endowments, and the third is the nature and range of rights to land, water and other natural resources that individual have.

To facilitate the adoption process agricultural extension officers need to use suitable extension training methods for the intended target group and technology applied. Extension teaching methods are the tools and techniques used, by extension agents to create an environment that communication can take place between extension agents and farmers. They are methods of disseminating new knowledge and skills to farmers by drawing their attention towards them to have experience of the new practice, a proper method and selection for a particular type of work are necessary (Hulme, 1992).

In most of African countries still believed that head of the household as the only farmer and it is necessary to receive agricultural education and advisory services from extension agents, most of the government institutions still work under the notion that men are only farmers, contributions of women in agriculture seen as nothing and helping men, most of the government institutions believed by supplying agricultural education to men eventually men will pass that information to the spouses (Fong and Bhushan, 2001).

Tenure are nature and range of rights to land, water and other natural resources that individual possesses in relation to the rights exercised by another individual, in some group of individuals who may exercise co-equal use rights to land, in some corporate entity such as cooperative, at church or in the state, which may establish rules or regulations defining who may use the land and for what purpose (Batz et al, 1999). Lazaro et al (2000) defined land tenure as a system of land ownership or acquisition governed by the land laws, land policies and customary land ownership system that are prevailing. In Tanzania all land belongs to the state under three main forms, namely; the right of occupancy, customary tenure and communal land tenure, in practice four land tenure systems exist in Tanzania villages and are applied in changing land ownership from one person to another, the systems are inheriting, village government, renting and buying (Mkivanda and Kaswala, 2001)

Meinzen-Dick et al (2010) they found that, for the farmer to access extension services must own land or had access to land asset, most of sub-Saharan countries land ownership based on men, for example, in Sub-Saharan African countries women only own land about 15%, in Latin America 20% and 10% in Southern Asia (FAO,2011). This unequal distribution of land blocking women to access extension advisory services and eventually weaken them in decision making on improving and adopting new technology in agricultural activities (Manfre et al, 2013).

The level of coordination at the district level is still quite weak, prior to decentralization of extension services, experience shows that there were no specific fora at the village, ward, district or regional level where specific extension issues were discussed (Rutatora and Mattee, 2001).

There were no efforts made to establish and/or strengthen the coordination mechanisms or linkages. Besides local authorities are called up to establish and strengthen for or avenues where different providers and other stakeholders who operate within a given district meet, interact and share their experiences, knowledge and strategies (Rutatora and Matee, 2001).

Credit is a transaction between two parties in which one is the creditor or lender who supplies, money, goods, services or security in return for promised future payments and the other is the debtor who borrows and makes such transactions of payment as an interest to the lender (Sacerdoti, 2005). Credit provision to farmers lies in the argument that credit will enable farmers to get modern agricultural inputs which led to increase production and enhance economic opportunities (Ponte, 2002). Participation in FFS occurred more in areas where there is a registered operating SACCOS which provide credit to farmers. Farmers with access to credit participate more in FFS than those who do not have (Concern, 2010).

World Bank (2009) stated that there is a limited access to agricultural services and inputs like land, seed, fertilizer, in sub Saharan Africa it has been evidenced that agriculture productivity could increase by 20 percent if women can gain access to such resources as land, seed, fertilizer as equal to men, but still women face difficulties in obtaining important supports for most productive resources such as knowledge, infrastructure, land, fertilizer and market organization(World Bank, 2009).

Access to inputs through provision of agricultural credits can give many women ability to improve their life choices and eventually to control over production within the community, hence empowering them (Mehira, 1997) controlling over credits alone is not a factor for improving women's economy, there are other factors that also can help women empowerment (Mayoux, 2000). Kabeer (1995) stressed that though it is important to help women farmers with agricultural credits, but it looks like many formal microfinance institutions have failed to provide such services to women, she insisted that norms and procedures of many banks prohibit women to

access credits, the prolonged and complexity of the procedures led majority of women failed to access credits (Milner, 2005).

Some new techniques are costly to adopt and require large initial outlays of capitals, only the well-off farmers may be able to adopt the innovations, Rogers (2003), indicated that farmers with larger sized units tend to be an earlier adopters compared to those with small sized units.

The World Bank and IFPRI (2010) in their findings stated that women's access to livestock related extension services are slightly better than for agricultural extension. In Ghana, 0 to 24 percent of female heads of household and 0 to 15 percent of female spouses have access to livestock related extension services compared with 5 to 34 percent of male household heads who have such access (World Bank, 2010).

Gender of the extension agent or livestock officers is one the factor which can influence quality and quantity of information as stipulated in the study of the World Bank and IPFRI (2010), the study found that male dominated the field of extension services, whereby in Ghana only 10 of 70 extension agents interviewed were female, in Ethiopia extension agents were only male, and in India none of 41 of agricultural extension workers was female, imbalance of Gender may prohibit some of the segments to get information for example in Ethiopia, researcher found that there were some cultural taboos, customs that male extension agents were prohibited to contact with the women, male extension officer may be more likely to believe to the common misconception that women are not farmers and overlook women in the household when delivering information (Moore *et al*, 2001).

Agriculture also has sex oriented the life cycle whereby activities like planting or animal grazing separate men and female, this means that different sex has different extension needs, but it is evident that in the world agricultural extension services still dominated the men, whereby about 15 percent of extension officers in the world are women (World Bank/FAO/IFAD, 2009). Agricultural extension services still have the notion that extending services only meant to help men alone and not women (Ibid).

Lahai (2000) in his study found that women farmers who were contacted by female extension officers the data showed that their development was very positive compared to those who was under supervision of male agricultural extension agents, therefore women who were under the female agents showed improvement of adaptation and diffusion of new technology among farmers.

Education can help women to have status in farm decision making in the community compared to less educated women. Aniet *et al* (2004) in their study found that education was the one of the factors that influence rural women farmers to adopt new technology, In Nigeria the data showed that for those women who are educated adopts new agricultural technology easier than those who are illiterate, educated women seems to adopt new technology very quickly (Ibid). However education of farm women is vital for them to participate in the agricultural development. (Ravinderet*et al*, 2007) stressed that there are some of the social cultural issues that in one way or another prohibiting women to access agricultural education. A study conducted by Gundu (2009) stressed that being less educated for a women adversely affects the accessibility of extension services, this is evidenced by the study conducted by unit et al (2004) which showed that the diffusion and adaptation of new technology was too low to the society that are illiterate.

Adenkunle (2013) in his study argued that education status of a household head can positively affect the knowledge, attitude and practices towards accessing to modern agricultural extension service and better agricultural production technology, education promote farmers' involvement and utilization of agricultural extension services. Also Stanley et al (2010) in their study stressed that the attendance at Farmer field school (FFS) is factor and more frequent among farmers with a higher level of education, generally, the low level of education of the farmers is unfavorable to the participation and adoption of innovation, especially one that is complex.

In older women to be empowered in agricultural sectors, women must have control in the usage of natural resources such as land use which will help them to have power in decision making, as according to Allendorf (2007) land is one of the sources of power and status in the community. Mutangadura (2004) emphasized that

land is one of the economic power that women needs as an economic empowerment. It is the case for the countries that depends on agricultural activities as the backbone of their livelihood. Allendorf (2007) stressed that in many sub Saharan African countries land access and land control to the women continued to an obstacle to engage fully in the agricultural development and eventually made them to have no power in decision making. The value of land has been changed and increasing daily, the trend led many women to be disadvantaged, it is also reported that there were challenges of women's right to land even to the community which are matrilineal (Gray and Kevane, 1999). Women can also lose land that was given to her for the food production (Lastarrie-cornhiel, 2006). In Africa men dominate everything in the household starting from decision making whereby they are the ones who decide what to grow and other land usages in the family.

According to FAO (2001) the farmer field school (FFS) emerged as the better approach in group extension teaching method and is now widely used in agricultural extension in different developing countries. FFS being a group based learning process, farmers carry out experiential learning activities that help them understand the ecology of their crop fields and livestock farms. These activities involve simple experiments, regular field observations and group analysis. The knowledge gained from these activities enables participants to make their own local decisions about crop and livestock management practices. The FFS approach represents a radical departure from earlier agricultural extension programs in which farmers were expected to adopt generalized recommendations that had been formulated by specialists from outside the community.

Ochieng' (2009) in his study stressed that poor working conditions of most agricultural extension officers constraint their level of performance, government in Kenya failed to provide necessary resources that enabling these extension agents to perform their duties, for example, there were no transport facilities which can help officers to cover their area of duty especially for the rural areas whereby household are scattered that make difficult for the extension agents to reach those areas on foot, also poor environment for the extension agents coupled with many factors such as availability of allowances like overtime allowance, launches allowance, and

transport reimbursements. All these in one way or another demonolized and eventually affecting badly the performance of agricultural extension officers, by doing so the realization of goals and objectives of the ministry of agriculture would never be achieved (Manda, 2001).

Membership of farmer group/community organization, many extension service providers both in the public and private (profit and non-profit organization) sectors have institutionalized the group approach for delivery of extension services. As well as offering the opportunity for greater efficiency, effectiveness and equity of provision and access, farmers' groups and organizations can be a vehicle through which farmers can pay a contribution for services, become actively involved in the planning and management of extension and act as a voice for their members in 'pulling down' services which meet their needs (Manda, 2001).

Rebecca (2012) noted that there is a need for creating a good environment, both for the farmers and extension agents, this including their perception and mindset, there so many factors that contributing to the poor dissemination of agricultural information to farmers, including the perception and behavior of women farmers, therefore dissemination of agricultural information to farmers depends on the behavior and attitude of the women farmers.

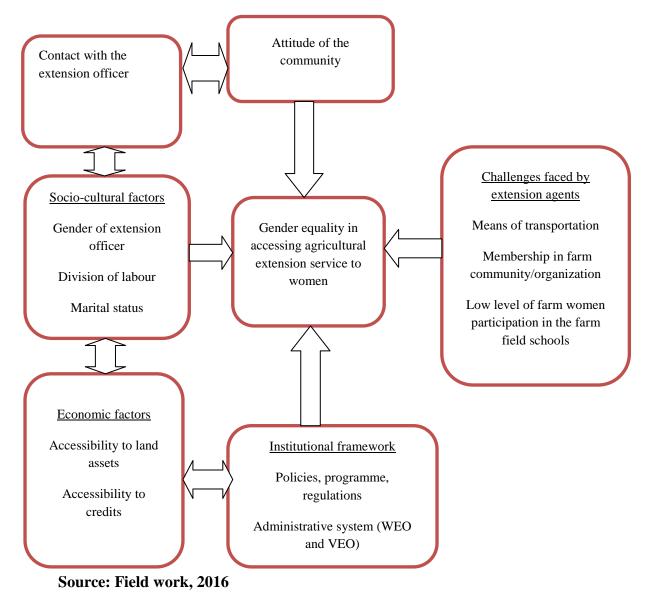
Most of the prominent challenges that face women farmers were financial problem, agricultural credits usually are provided by microfinance institutions which their regulations for a person to access such a credit from them, and one them is collateral, which for anyone who want to be beneficiary must have collateral, Rebecca in her study conducted in Embu County in Kenya found that collateral was the among the challenges that female farmers face when they want to access credits from the financial institutions, whereby 82% of women identified that collateral was the major challenge to them, another challenge based on the issue of accessing extension services whereby about 71% of the women revealed that they were never contacted with the agricultural extension officers, also another challenge was lack of cooperation among the female farmers, about 57% of women were not member of any community group that will enable them for exchange some ideas and easy

accessing agricultural information that are provided by various stakeholders. Also Rebecca in his study suggests that existence of these problems was mainly caused by different factors, including socio-economic factors to both government and farmers.

2.4 Conceptual framework

This conceptual framework presents the whole conceptual plan that guided the study in operationalizing and analyzing the findings. The Independent variables were attitude of the community, contact with the extension officer, socio-cultural and economic factors, institutional framework and challenges faced by extension agents; the dependent variable was gender equality in accessing agricultural extension services. Figure 1.1 shows the relationship between independent and dependent variables. (Variable measurement, see appendix 1).

Figure 2.2: Conceptual framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The chapter presents the systematic procedure on how the study was conducted. It gives the descriptions of the methods of inquiry, and the following sections were included in this chapter, area of the study, research design, target population, unit of analysis, sampling technique, sampling frame, sample size, methods of data collection and finallydata analysis plan.

3.1 Area of the study

The study was conducted in Morogoro region, specifically in Mvomero District in Mlali division whereby two villages were randomly selected, the researcher opted to choose the area of the study because it is one of the few remaining matrilineal societies in Tanzania where filiation is established through women. Therefore, the researcher wanted to get insights of this kind of community in the area of gender equality, especially in the sector of agriculture. Two villages were randomly selected which are Kipera and Mlali Villages in Mlali Ward.

3.2 Research design

The study is all about examining gender equality in accessing agricultural extension service to the women. The study opted to use a case study whereby careful and complete observations of individual(s) or situation(s) is done for in-depth study rather than breadth. This method facilitates intensive study in research (Kothari, 1990). The researcher chooses a case study design because it uses multiple sources of evidence, in this study, the researcher used more than two data collection methods that allows triangulation of findings which, according to Yin (2009) noted that is a major strength of the case study design. And another reason is adaptable to different types of research questions and to different research settings, due to its

flexible nature the researcher believed in it and eventually led to easy facilitation during the data collection.

3.3 Target population

Population is a group which the researcher is interested in gaining the information and drawing the conclusion (Kothari, 1990). The Target population of this study was all farm women in Myomero District (rural).

3.4 Units of analysis

The unit of analysis was all farm women engaging in small holder agriculture and agricultural extension officers in Mvomero District.

3.5 Sampling technique

Both probability and non-probability sampling technique were used, whereby rural women farmers and other members in the community who were assessed their attitude towards women to access agricultural extension service were randomly selected and DALDO, Ward agriculture officer and extension officers were purposely selected.

3.6 Sampling frame

Table 3.1: Sampling frame

S/N	Category of respondent	Type of sampling procedure	Methods of data collection
1	Farm women	Simple random sampling	Focus group discussion
2	Agricultural extension officers	Purposively sampling	Interview
3	Ward agriculture officer	Purposively sampling	Interview
4	DALDO office	Purposively sampling	Interview
5	Community	Simple random sampling	Interview

Source: Fieldwork, 2016

3.7 Sample size

Sample size refers as small proportions selected for observation and analysis, the traits of which can enable the researcher to make a certain inferences about the population from which the sample is drawn (Best et al, 2006). The researcher

expected to get all information and list of all farm women from the District Agricultural and Livestock Development office (DALDO) but unfortunately there were no listings of farm women, this led the researcher to use another way apart from using formula to get the sample size of the study. The researcher borrows sample size from other studies which are similar to this study; hence he came with a sample of 62 respondents whereby 28 farm women, agricultural extension officers were 2 including ward agriculture officers and 30 respondents from the community, and 1 respondent from the DALDOoffice. These studies are, challenges women farmers face in accessing agricultural extension services done by Ndwiga (2014), the case of Kamugere sub location of Embu County in Kenya and the sample size were 30 respondents, also the study done by Rebecca (2012) the tittle of attitude of women Farmers towards agricultural extension services, the case of Ifelodun local Government area, in Osun State, the study used 90 respondents as the sample size. The Table 3.2 shows the location and the number of respondents,

Table 3.2: Sample size of respondents

Respondent	Kipera village	Mlali village	DALDO office	Total
Agricultural extension officer	01	02		03
Community	16	14	-	30
Farm women	14	14	-	28
Officer from DALDO office	-	-	01	01
Total	31	30	01	62

Source: field work, 2016

3.8 Methods of data collection

Primary and secondary data will be used in this study, primary data will be obtained through interview and focus group discussion and in addition to that, the study will use secondary data through document review.

3.8.1 Focus group discussion

Basing on the nature of the smallholder farmers (women) in rural areas, the study aimed to use focus group discussion as the researcher's focus is the ability to produce concentrated amounts of data on precisely the topic of interest, four focus group discussion were conducted and each group consisted 6 to 7 women farmers who had the age at least of 25 years old and above, this is because the researcher believed that they would have enough information about the topic of the study, and also member of the discussion were must be engaged in small hold farming. Therefore 28 farm women were involved in the discussion.

3.8.2 Interview

Agricultural extension officers, ward agriculture officer and officer from DALDO office were interviewed because most of the time they were too busy to invite them in the discussion would be very difficult, and by virtues of their positions they had more information which may not be asked by other methods, also interview were used to collect data from the community to assess their attitude towards accessibility of extension services to women, therefore the researcher choose this instrument in this particular sample because it would enable the researcher to ask supplementary questions based on the topic of the study.

3.8.3 Secondary data

Relevant documents that related to gender equality in accessing agricultural extension services to rural women were reviewed and these are journals, text books and thesis reports. The researcher reviewed the existing literature (Secondary Data Sources) to compliment the primary data. The researcher reviewed both published and unpublished documents as compensation for primary data. The researcher reviewed National Policy on Agriculture (NAP, 2013), and guidelines on District Agriculture Development Planning and Implementation (DADP, 2006) documents. The documents were reviewed to complement data which were collected through focus group discussion and interview method.

3.9 Data analysis Plan

Data analysis means the critical examination of the assembled and grouped data for studying the characteristics of objectives under the study (Kothari, 1990). Descriptive analysis was used to analyze quantitative data by computing average, percentage and table. Words were used for qualitative data analysis. Content analysis was involved to analyze responses from focus group discussion and interview due to their narrative nature, and data were transcribed from audio tape recorded from the discussion.

3.10 Ethical considerations

At the preliminary stage, before going for field work a letter was obtained from the Mzumbe University that was used to obtain a research permit at the Mvomero District Council in order to proceed with the research. The letter was used to get an official 1 letter which granted permission to collect data from the two villages in Mlali Ward whereby the researcher introduced himself to the WEO who introduced him to the VEOs of the two villages which are Mlali and Kipera. Once permission was granted, the researcher began by scheduling focus group discussion and interview sessions. At the beginning of each discussion and interview, the researcher explained the purpose of the study, asking for consent to conduct the interview and explain their rights as participants to contribute to the discussion or to withdraw from the discussion any time they wished to do so.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.0 Introduction

This chapter is structured into two major parts based on the interview and Focus group discussion. This study aimed at examining gender equality in accessing agricultural extension services to women in rural areas. In this chapter, the findings of the study were presented according to four research questions as appeared in Chapter One; which are; what are the attitudes of community towards women's access to agricultural extension services?, What are the socio-cultural and economic factors which promote or hinder women to access agricultural extension services?, How the institutional framework does supports women in accessing agricultural extension services in the rural areas?, How does the challenges of agricultural extension agents affecting the accessibility of extension services to farm women?.

The interview guides facilitated the collections of data from DALDO, Ward agriculture officer, Agriculture extension officers and community. Focus group discussions were conducted to collect data from rural farm women. The data were analyzed by descriptive and content analysis. The results and findings of this study were interpreted according to Themes, sub-themes and aspects based on important four research questions.

4.1 Respondents' profiles

In this sub-section the researcher tried to look at the general overview of all respondents reached in the study by looking on age, sex, marital status, land possession and occupation of the respondent, education, and finally village/location of the respondents.

Table 4.1: characteristics of the respondents

Respondent's attributes	Frequency	Percent	
Village/location			
Kipera	32	57.6	
Mlali	29	46.8	
DALDO office	1	1.6	
Total	62	100	
Sex			
Male	26	41.9	
Female	36	58.1	
Total	62	100.0	
Age			
18-30	24	38.7	
31-43	28	45.2	
44+	10	16.1	
Total	62	100.0	
Education level			
Basic education	11	17.7	
Primary education	44	71.0	
Secondary education	3	4.8	
University/college	4	6.5	
Total	62	100.0	
Marital status			
Single	16	25.8	
Married	38	61.3	
Widow	08	12.9	
Total	62	100.0	
Respondent's occupation			
Farmer	51	82.3	
Business	7	11.3	
Teacher	2	3.0	
Nurse	2	3.0	
Total	62	100.0	
Land ownership			
Land owner	40	64.5	
Landless	22	35.5	
Total	62	100.0	

Source: Fieldwork, 2016

4.1.1 Respondents' distribution by village/location

The total number of respondents used in this study was 62 respondents which two villages were selected that are Kipera and Mlali, Kipera were 32 respondents, which is equivalent to 57.6% and Mlali were 29 respondents, which is equivalent to 46.8%, and 1 respondent from the office of the DALDO Mvomero District. The data show that respondents from Kipera dominated the study because most of the women are engaged in agriculture compared to Mlali. In Mlali most of women are engaged in small business like food vendors. This has been shown in the table 4.1.

4.1.2 Respondents' distribution by sex

The study capture both female and male, according to the data collected the female seems to dominate the study with the 58.1%, while male was 41.9%, this is because the study was based on examining gender equality in accessing the agricultural extension service to women, therefore women were the unit of inquiry, though men were involved to see their attitude towards farm women to access agricultural extension services, this information presented in table 4.1.

4.1.3 Respondents' distribution by age

The study managed to settle three age groups from which respondents were asked to identify their age group to the researcher. The groups were; 18-30 years, 31-43 years, and lastly were 44 years and above. The data revealed that the age group of 31-43 years dominated the study with 45.2%, followed by the age group of 18-30 years with 38.7% and the last one were age group of 44 years and above with 16.1%. The researcher wanted to see which age group mostly involved in agriculture and the data revealed the age groups of 31-43 are the ones who are engaged in agriculture compared with other age groups, for example age group of 44+ were not involved much in agriculture and this is because most of agricultural activities needs more energy which most of them do not have because of ageing. This has been shown in table 4.1.

4.1.4 Respondents' distribution by education level

Under this section, the researcher established four categories to identify the education of the respondents, the categories were; basic education, primary education, secondary education and university/college. The data revealed that 11 respondents which is equivalent to 17.7% were attained basic education, 44 respondents which are equal to 4.8% were secondary education, and finally were university/college with 4 respondents which is equal to 6.5%. This implies that the study dominated with the respondents with primary education, education is the important factor for the farm women to seek for the agricultural extension services, therefore the researcher wanted to assess the education level of the respondents to see whether they have knowledge about the agricultural extension services, and the data revealed that most of the respondents attained primary education that can help someone to know how to read and write which is very important to the farmer to receive training from agricultural extension officers. Table 4.1 presented the results.

4.1.5 Respondents' distribution by marital Status

In this variable of the study, the researcher established three marital status categories where the respondents were asked to identify their marital status, The data collected revealed that 16 respondents which is equal to 25.8% were Single, 38 respondents which is equivalent to 61.3% were married, and 8 respondents which is equivalent to 12.9% were widowed. Therefore, data revealed that most married women were not good attendees in the agricultural trainings like farmer field schools and other trainings prepared by agricultural extension officers compared with being single or widow, this is because many them denied by their spouses to attend those trainings Table 4.1 show the results.

4.1.6 Respondents' distribution by occupation

Under this section, the researcher established three modalities to identify the occupation of the household respondents, the modalities were; Farmers, Businesswoman/man, Teacher and Nurse. The data revealed that 51 respondents

which is equivalent to 82.3% were the farmers, 7 respondents which is equal to 11.3% were the businesswomen/men, 2 respondents which is equal to 3.0% were teachers and 2 respondents which is equivalent to 3.0% were nurses. The data imply that the study was dominated the farmers by 82.3%. Table 4.1 presented the results.

4.1.7 Respondents' distribution of land ownership

The study aimed to know the land statistics ownership, the modality was to answer yes if the respondent's own land and no if they don't. The data collected revealed that 64.5% of the respondents own land, while 35.5% of respondents doesn't own the land. This implies that the study and information provision dominated by the farmers who own land by 64.5%. Table 4.1 shows the results.

4.2 Attitudes of the community towards women's access to agricultural extension services.

Descriptive analyses were involved in this research question due to its nature whereby the frequencies and statistical data information obtained from sample and occurrences of the data from the field, research question aimed at finding out the attitude of the community towards women to access agricultural extension service and likert scale were used to assess the attitude of the community through four statements which are; women can get extension services through their men/husband, agricultural extension officers failed to recognize women as farmers, there is no need for women to access agricultural extension services because they have to look after children at home and the last one was women are not farmers.

Table 4.2 Community attitude towards accessibility of agricultural extension services to women (N=30)

Statements	Strongly	Agree	Disagree	Strongly	Total
	agree			disagree	
(1) Women can get agricultural extension services through men or their husband	3.3%	13.3%	70.0%	13.3%	100.0%
(2) Extension officers failed to recognize women as the farmers	10%	10%	66.7%	13.3%	100.0%
(3) There is no need for women to access agricultural extension services because they have to look after children at home	-	-	13.3%	86.7%	100.0%
(4) Women are not farmers	3.3%	3.3%	-	93%	100.0%

Source: field work, 2016

4.2.1 Women can get agricultural extension services through men or their husband

The data show that 21 respondents disagree which is equivalent to 70.0%, 4 respondents equivalent to 13.3% strongly disagreeing, 4 respondents equivalent to 13.3% agreed and lastly only 1 respondent which is equivalent to 3.3% were strongly agreed. The result shows that 83.3% of the respondents disagree and strongly disagree and this implies that community have a positive attitude towards women to access agricultural extension services direct from extension officers and not from their husband. This has shown in the table 4.2.

4.2.2 Extension officers failed to recognize women as the farmers

According to the findings the respondents were categorized by four categories which are strongly disagree, agree, disagree and strongly disagree. The results revealed that 20 respondents which is equivalent to 66.7% disagreed with the statement, 4 respondents equivalent to 13.3% strongly disagreed, 3 respondents which are 10.0% agreed and 3 respondents equivalent to 10.0% strongly agreed. Therefore the result shows that 80% of the majority have a positive attitude towards agricultural extension officers this implies that extension officers working closely with the

women in providing training and technical services to the rural farm women. This has shown in table 4.2.

4.2.3 There is no need for women to access agriculture extension services because they have to look after children at home

The data show that the attitude of the community towards women to access agricultural extension service is positive due to the data revealed by the study, whereby 26 respondents which is equivalent to 86.7% strongly disagreed and only 4 respondents which is equivalent to 13.3% disagreed. According to the results there were no respondent responded in the categories of agree and strongly agree this indicating that the community recognize and cooperating women in the area of agriculture compared to other area in Tanzania especially herders society. This has shown in the table 4.2.

4.2.4 Women are not farmers

The study revealed that most of the people strongly believe that women are the farmers, the data show that 28 respondents which is equal to 93.3% strongly disagreed with the statement, whereby 1 respondent equal to 3.3% disagreed and only 1 respondent which is equal to 3.3% strongly agreed. Table 4.2 shows the results.

4.3 Socio-cultural and economic factors which promote or hinder women to access agricultural extension services.

4.3.1 Introduction

The second research question focused into what are the socio-cultural and economic factors which promote or hinder women to access agricultural extension service. This research question aimed at finding out if there are practices or factors that are hindering farm women to access agricultural extension, services, four focus group discussions were conducted to get responses from the farm women. Content analysis was used to analyze the data after recording by using a tape recorder and transcribed. The discussion had eight questions. This subsection will be divided into

six themes according to the questions raised during the focus group discussion which are; contact with extension officer, social-cultural factor (division of labour in the household, gender of extension officer and marital status), economic factors (ownership of the land asset, accessibility of credits).

4.3.2 Contact with the extension officer

In this subsection the findings revealed that most of the farm women do not have contact with the agricultural extension officer in their field and this is because of many District Agricultural Development Plans encourage farmers to join into farm community which will be easy for extension officers to provide trainings as one of the farm women say;

".. Since I have started the agricultural activities, I have never seen the extension officers, but I heard they are here and they go directly to the agricultural communities and I have never attended there, in general the extension officers they don't pay visits to the farms..."

One of the reason for not visiting every farmer in their field is the means of transport, which seems to be a problem and the factor that hinder extension officers as one of the agricultural extension officer say;

".. The task is difficult as we don't have a means of transport to reach outer there, as you can see the residents are scattered which makes difficult to reach every farm woman, unless we would be much in each village which is not the plan of the government"

It seems that most of the farm women are not members of agriculture, community groups where training and education are given out by the extension officers; this is because of many factors, including lack of education among farm women to know the importance of joining these farmer community groups/organization as one of the farm women revealed

"It's not like we are reluctant to be in the community groups, but we think the government hasn't done much effort to educate us about the importance of joining in community groups, again as a woman we have many things which hinders us not to join groups, including a prohibition from our spouses..."

4.3.3 Social-cultural factor

4.3.3.1Division of Labour in the Household

Under this section, the Focus group discussion stresses on whether the division of labour within the household can be among the obstacle to farm women to access the agricultural extension services. The discussion synergy out that, most of women in Mlali and Kipera the issue of division of labour in their household does not affect them to get agricultural extension services. If the woman wakes up early in the morning and do all domestication activities, then she can have the time to go for extension training. As one woman had this to say;

"...Division of labour in the household does not hold me to the extent that I cannot go to the agriculture community group and even attending farm trial prepared by the extension officer... because I manage my time for the domestic activities and spare for agriculture training too..."

This is exactly what the women in the discussion said; they spare and manage their time, so as they can get the chance for extension services in communities.

4.3.3.2Gender of the Extension Officer

The discussion in this area wanted to sort out whether the gender of the extension officer has been affecting them from attaining the extension services. The discussants revealed out that the women in Mlali have been positive with the gender of the extension officer and that be a man or woman who give out the extension services, they do not have problem with that. What matters is education itself. This is evidenced by one of the members in the discussion;

".. For me, being a male or female extension agent does not have any effect to me, to receive agricultural training, as you can see here in Mlali Vilage, we are saved by male extension agents without any problem and of course they help us in any ways..."

These words also shared by one of the agricultural extension officer who said that being a female or a male extension officer not have any problem in delivering their services;

".. Since I have started to serve here in Mlali I have never been compromised by being a male agricultural extension agent for women because this community is very understanding and they do not have any problem for male extension agent to contact with their wife, and this is quite different when you go to the Maasai society whereby to contact with the female you need to get authorization from their leader and is very complicated.."

The situation in Mali goes contrary to the study conducted by Dagnachew (2006) who found that extension efforts and technological packages usually address men farmers male, male extension agents are most likely to visit male farmers than female farmers because of cultural barriers and social customs that prohibiting women to contact male extension agents.

4.3.3.3Marital Status

The researcher ran a discussion on whether the women who are married and those who not married, who has got easy access to the agricultural extension services. The discussion revealed that those who are not married, have easier access because they can arrange their own time, without needing any permission from their spouse compared to those who are married, as the one woman had this to say;

"... For us, who are single, we have a freedom in the decision to go in agriculture communities or not, we don't need any permission from someone compared to those who are married..."

Therefore, the majority of farm women who are married complained about their spouses as the one the factor for not accessing agricultural extension services. This result was proved by one of the women during the discussion and case study 1 confirm the findings

Case study 1 The story of Mrs. Chilonwa on how she faced the problem to access agricultural extension service because she is married.

In the study of farm women on how marital status can affect farm women to access agricultural extension services, for those who are married must negotiate with their spouses to seek permission to attend different trainings prepared by agricultural extension officers.

During the focus group discussion with farm women at Kipera village, Mrs. Chilonwa told the following story she had experienced.

Mrs. Chilonwa is 43 years old, married and lives at Kipera. She is engaged in tomato growing and owns almost 4 acres of land.

Village extension officers prepared farm field school on how to use pesticides for Tomato growers in the village, and Mrs Chilonwa was among the members who participated, She attended only one week; after that she started to see some constraints from her husband by complaining why she was leaving every day to attend such a training and he insisted that he can go on behalf of his wife, but Mrs. Chilonwa tried to educate her husband that his idea is not good because to attend such training you need to start from the scratch (at the beginning). Therefore, Mrs. Chilonwa managed to negotiate with her husband until she completed the training. "It was a very difficult task to educate my husband on the importance of me continuing to attend the training. Thanks God, finally, he understood and I completed the training."

This is one of the many voices raised by farm women in focus group discussions. Basically, most of the married farm women do not attend meetings, do not join any community organization, and it is even very difficult to attend farmer field schools.

To participate in the agricultural extension trainings, women must negotiate with their spouses to seek for a permit.

4.3.4 Economic factors

4.3.4.1 Ownership of land asset

Land ownership for women in most of African countries, women's land ownership lags behind men (FAO, 2011). The situation in Mlali is quite different, women enjoy equal accessibility of land like men, this is contrary to places in the country like lake zone and places which are patrilineal society and in the discussion farm women revealed that most of them own land and land is not a problem to them as to access agricultural extension service as one of farm women say;

"For the case of Mlali, there is no problem in land accessibility and ownership between men and women, and of course most of us own land and if it is happenings someone do not have land they usually lease the piece of land from landlords, so land is not a problem at all for us".

The situation of equality above has been contributed by the attitude of the people themselves around Mlali, that they see there is no difference in land accessibility between men and women, also during the interview with the ward agricultural extension officer who is in charge of agricultural development in the ward explained the situation of land ownership in his area, and had this to say:

".. As you know this society is matrilineal society which women got more power in the decision making in the family, so most of women enjoy land ownership which make them to decide what to do in those land".

It is true that land is the source of accessing the agricultural extension service and this is supported by the study done by Meinzen-Dick et al (2010), they found out that, Farmers who had access to land asset were the only people that agricultural extension service targeting and not those who are landless.

In many parts in the world men usually own land asset, women only own for about 15 percent in sub Saharan countries, in Latin America only 20 percent of women owns land, and in Northern and Southern Asia is 10 percent (FAO, 2010). Also study conducted by Rebecca (2012) found that inadequate access land has been a challenge for women in accessing and agricultural delivery services among women farmers. This finding goes contrary to this study because the data showed that women enjoy land ownership as the men do.

4.3.4.2Accessibility of Credits

Small scale farmers generally do not receive credit from banks or other credit institutions, in the past cooperative unions provided agricultural credit in kind to growers of cash crops, and the credit was recovered when the crops were sold. Food crops, however, did not qualify for such credit, many marketing channels for these crops made it difficult to recover the loans, therefore most of the small holder farmers in these two villages did not get agricultural credit from any organization apart from those fertilizers which are coming from the name of agricultural credit but in a reality they are given for cash, this is evidenced by the one of the farm women;

"Since I have started to engage in agricultural activities I have never got any agricultural credit, and of course I never heard any organization in our village which deals with those credits, and this makes us to continue to use traditional ways farming"

The researcher set up this theme to know whether the accessibility of credits may affect the women from accessing the agricultural extension services, the discussion revealed that the women have been affected by agricultural credits, and this is evidenced by one of the farm women;

"Modern agriculture needs modern equipment such as fertilizers, pesticides, tractors and so many and all these things are expensive for a poor farmer like me to afford, if there is no any agricultural credits that can serve us then I do not see the importance of seeking advice or

training from agricultural extension officers because what he/she is going to tell me is to use modern equipment which I do not have, so agricultural extension service is useless for that case".

The discussants seemed to have morale of extensions services and trainings, but lack of accessibility in credits discouraged them, this is supported by the Niyegila (2007) who pointed out that most of the small holder farmers admitted failure of adoption of crop disease control; this is because of excessive poverty among farmers. This is evidently that without any agricultural credits most of women will continue to be left out in accessing agricultural extension services because most of practices demand money (a lot of money).

4.4 How the institutional framework supports women in accessing agricultural extension services in the villages.

4.4.1 Introduction

The third research question based on looking at how the institutional framework does support farm women to access agricultural extension services, these are systems of formal laws, administrative system (WEO, VEO), regulations and procedures, and also can be informal conventions, customs and norms that can shape socio-economic activity and behavior.

It is evidenced that policies and different programs are only ways that can help farm women in the rural to have equal access in agricultural extension services, the National Agricultural policy of 2013 recognize women as the food producer who producing about 70% of the country's food requirements, they are also actively involved in the production of cash crops and in household activities.

Despite all these efforts or contribution women faced with inadequate skills, knowledge, and inequitable access to productive resources, inappropriate technologies, social cultural practices and beliefs. The findings of this study after interview and discuss the data show that there is no any programs which is

specifically dealt with farm women to get agricultural extension services, this is evidenced by one of agricultural extension officers

"In that case as extension officers, we don't have a programme which is especially for women farmers; sometime we join with other stakeholders to give them the extension education and training, like we do here in Mlali whereby we collaborate with one of the Non-Governmental Organization (NGO) called HakiyaMwanamke to give agricultural trainings and education."

In this aspect, most of the agricultural extension officer says that It would be very easy and clear if there will be an agricultural extension service policy which specifically state formal systems like policy to state clearly programs that can help extension agents to perform easily their duty to the farm women to access agricultural extension service, this is evidenced by the ward extension officer

"... As extension officers, our problem is that there is no specific national agricultural extension service policy which guides the extension services, this would help to explain some of the strategies on how to accommodate various communities with the special needs, including women, Kenya and other countries do have national agricultural extension service policy, so we would learn from them."

Formal systems give guidelines on addressing and devising funding modalities which is the problem when it comes the issue of training and education to the farmers, packaging of technologies, technical capacity building and research-extension-farmer linkages and application of ICT in general. It also offers guidance on the role the private sector, which will help government in providing agricultural extension service.

The administrative systems of the government especially in the level of Ward and Village also has the big role to play to help farm women to access agricultural extension services, a part of having agricultural extension officer in every village as stipulated in the national agriculture policy of 2013, but still more effort is needed especially for WEO and VEO to collaborate with the village extension officer to find some organizations which are dealing with agricultural trainings and credit

institutions, in this study the researcher asked whether WEO and VEO has done anything to help farm women in agricultural development, and this one of the member in the discussion had to say;

"..WEO and VEO are the ones who support to organize some programmes that will help farm women to access agricultural trainings and this can be done by collaborating with other organizations like credit organizations and universities, and thanks God we have Sokoine University of Agriculture (SUA) here in Morogoro, so our leaders could communicate these organizations and eventually we will develop our agricultural activities, but unfortunately there is no any effort made by these leaders in our villages."

The finding concurs with the study of Ngonyani (2013) who stressed that there is poor communication between local government and other organizations, including credit institutions, input suppliers, Non-governmental organization and research organizations, and this has negative implications on the agricultural development especially in the rural areas.

4.5 Challenges of agricultural extension agents affecting accessibility of extension services to farm women.

4.5.1 Introduction

The fourth research question focused on those challenges which adversely affecting agricultural extension officers in providing extension service to farm women, in this sub-section it covers different issues like transportation, problem of women's participation in farmers' organization and lastly low participation in farm field school which are organized by the extension agents.

4.5.2 Means of Transportation

Basing on the nature of many villages in Tanzania the houses seem to be dispersed which makes difficult for the agricultural extension agent to reach every place/house

in time without transportation, during the interview one of the extension agents revealed by saying that

"The difficulty is, we don't have a means of transport, which can simplify to reach out many farmers, especially women, as you can see the residents are so scattered to the extent that you can't reach them in the easiest way without transport"

In this respect, there was only one motorcycle which is used by the ward agricultural officer who is the in charge of all extension officers in the ward level but the rest they do not have any transportation. Therefore, this situation led many farm women not to access the agricultural extension services and they are not aware about the issue of extension service if it has existed as one of the farm women during focus group discussion evidenced,

".. As for me, the agricultural extension services and agriculture extension officers have never been reached to me, and if these services are available here, then I don't see any significance pertaining to them"

Despite the effort made by the agricultural extension officers to educate and instruct farm women on how to use modern way of farming but it seems their effort is undermined by the transport that can enable them to reach many areas in their respective villages. The findings concur with the study of Elifadhili (2013) in his study conducted in three regions in Tanzania mainland which are Ruvuma, Mbeya (Kyela) and Morogoro found that agricultural extension officers reached only 55% percent of farmers and the main challenge was the means of transportation, agricultural extension agents would like to reach many farmers as possible but the transportation was the main problem.

4.5.2 The majority of farm women are not members in the farm organization/community

The findings shows that most of farm women are not members of the farmers' community which makes them not to get extension services, it seems that most of women especially those who are married they must negotiate first with their spouses

to get permission to join or to participate in the farm community group, therefore joining or not, depends on the wish of their spouses, so the possibility of these women to join in the farm community group is minimal, this is evidenced by one of the farm women during the focus group discussion;

Case study 2 The story of M/s Pepetua Edward on how she experienced hardship when she joined the farmers community group/organization

M/s Pepetua Edward is 39 years old, divorced and lives at Mlali Village, and she is engaged in vegetable growing and owns almost 2 acres of land.

According to the District Agriculture Development Plan (DADP), insists there must be an agricultural extension officer in every village whose work is to facilitate and support farmers group formation and farmers networking, that is why Pepetua and other women decided to join those groups to get agricultural trainings. She was married but now she is divorced.

It was 2014 when she decided to join one of the farm community group called Tulizana Group. One day the group prepared a meeting which was facilitated by the Ward agricultural extension officer with the collaboration of one NGO called Haki ya Mwanamke and meetings had many agenda items to discuss and ended at 7.30 pm which is very late according to her. After the meeting she went home and found that her husband was furious for her for coming late. He started to interrogate her where she had been, and the answer was very clear that she had been in a farm community group meeting but her husband did not accept the answer given to him. He started beating her and accusing her of cheating with other men." I have been beaten very badly by my husband and one thing was hurting me most was accusing me to cheat him. For that case I decided to leave that man and continue with my life. So this show it is difficult for a married farm women to join the community group"

As the guideline for the District Agriculture Development Plan (DADP) which shows the role of extension officer, which is stated that; there should be a Village Agricultural Extension Officer who will work in collaboration with the Ward Facilitation Team. The Village Agricultural Extension Officers shall train, facilitate and support farmer group formation and farmer networking,

In this respect the DADP insists to the village agricultural extension officer to give training and support farmers group formation and farmer networking rather than house to house training which, according to the findings many farm women are left out especially for those who are married.

4.5.3 Low level of Participation of farm Women in the Farm field schools

The research in understanding the challenges facing the extension agents, the data collected revealed that the extensions agents have been preparing the farm trials for the farmers to learn, however, the women participation have been low, and its decreasing, as the extension agent had this to say;

"...We prepare farm trials for the farmers to learn, despite this effort, has been undermined by the attendance, the attendance has been very low, especially the women..."

It is evidently that low participation of women in farm field school has been caused by the prohibition of their spouses as we discussed in the previous section, which they dare to say that, they can go to the agriculture training on behalf of their spouses. And the finding shows that most of women do not attend these trainings because of their men. This hinders the efforts made by extension agents in providing equal access of agricultural extension services to farm women.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS

5.0 Summary

The study is all about examining gender equality in accessing the agricultural extension service to the farm women. The study was conducted in Morogoro region specifically in Mvomero District in Mlali division whereby two villages were randomly selected. The study used 62 respondents who were both purposively and randomly selected.

The researcher employed Primary and secondary means of data collection, primary data were obtained through interview and focus group discussion and in addition to that, the study used secondary data through document review. In order to understand the objectives of the study, the research questions were used to reflect the objectives, these were; what are the attitudes of the community towards women's access to agricultural extension services?, What are the socio-cultural and economic factors which promote or hinder women to access agricultural extension services?, How the institutional framework does supports women in accessing agricultural extension services in the rural areas?, How does the challenges of agricultural extension agents affecting the accessibility of extension services to women?.

The data collected were Descriptive analyzed into percentage, table or graphs; content analysis also was used for the data obtained from focus group discussion and interview.

5.1 Conclusion

The first objective was to assess the attitude of the community towards women to access agricultural extension services. The findings indicated that the community had a positive attitude towards the farm women to access the agricultural extension services.

The second objective findings indicated that there were two factors that affecting farm women to access agricultural extension services, includes promoting factors which are, contact with extension officer and accessibility of land asset and there were factors that hinder women to access agricultural extension services which are, marital status of farm women and lack of accessibility of agricultural credits.

The third objective the findings indicated that there were no any programs that are specifically targeting farm women to access agricultural extension service, also there is no agricultural extension policy which can be used to guide extension agents on how to deal with the farm women in the rural areas, therefore the findings indicated that WEO and VEO do not have any communication with other agricultural stakeholders who are capable for providing agricultural credits and trainings to the women.

The last objective was to see how does the challenges of agricultural extension agents affecting the accessibility of extension services to farm women, the findings indicated that there were many challenges but in the discussion the study found three challenges which are, lack of means of transportation, majority of farm women are not members in the farm community group/organization and lastly there were low level of participation of farm women in the farm field schools, this concludes that extension agents prepare agricultural trainings but attendance were poor.

5.2 Policy implications and recommendations

5.2.1 Ministry of Agriculture, Food Security and Cooperatives

It is very known that women, especially in rural areas are the ones leading in agricultural activities compared to men. Besides, it is obvious that the agricultural activities in Tanzania stand as the main economic stay of the country (NAP,2013). Survival of the rural people mostly depends on agricultural activities in which with have taken the lead. inadequate agriculture extension women services/education, hence to be among the factor enhancing production in agricultural crops. Therefore, there is a need for the Government to formulate agricultural extension service policy which will help and guide extension agents to deal with women, also policy will help to articulate directly some programs and activities that will integrate farm women to education and trainings which are given by extension agents in the rural areas, by doing so, women will get a chance to participate fully in training without being restricted by their spouses. Therefore, this will enhance the easy accessibility of extension services and eventually increasing food production in the household.

5.2.2 District council

The Government has to make sure that the agriculture extension agents get the means of transport to make, the easier reach out of the women farmers in various areas in Myomero District.

Contact between women and extension officers are lacking, the most difficult thing is that, extension officers are directly giving services into groups (community groups or associations) rather than to the individuals. This process left out many farm women who have not joined the groups for various reasons including being prohibited by their spouses. Therefore, there is a need for District councils through the DALDO office to promote both farm visit and at the same time farm community groups/organization and this will enable extension agents to reach every farm women including those who are not members in the community groups.

5.2.3 WEO and VEO

There is a need for WEOs and VEOs in their areas to communicate with other institutions or organizations which are dealing with the provision of agricultural credits and trainings, these organizations will help to fill the gap where the government failed in one way or another to provide agricultural services, as we can see most of these organizations are non-governmental, therefore there must be an efforts to collaborate with them so that farmers can get access to agricultural credits and trainings.

5.2.4 Women and other community members

There is a need for the women and the community at large to join in the community groups, organizations where will be easy to access different agricultural services including agricultural credits and trainings which are provided by different stakeholders.

5.3 Area for Further Research

- Further research should be stressed about whether the education attainment can affect the accessibility of extension services to the women farmers in rural areas.
- The study was based much on qualitative stance rather than a quantitative stance, though the quantity has been used on several occasions, so the researcher appeal to other study to use a quantitative stance to see if the study can yield the same results or not

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APPENDICES

APPENDIX 1

Variables and measurement on gender equality in accessing agricultural extension service to women

Variable	Measurement	Source of data		
Attitude of the community	• Likert scale To assess the attitude of the community towards the accessibility of the agricultural extension service to women.	• Community		
Gender of extension officer	Male or female To see whether the gender of agricultural extension officer can affect the accessibility of extension service to women	Farm womenExtension officers		
Division of labour	Formal or informal To see whether the division of labour can hinder women to access the agricultural extension services	Farm womenExtension officers		
Marital status	Married, single or divorced To see whether marital status of the farm women can affect the accessibility of agricultural extension services.	Farm womenExtension officers		
Accessibility to land assets	Access to land or not To see whether the accessibility of land assets can affect women to access the agricultural extension services	Farm women Agricultural extension officers		
Accessibility of agricultural Credits	Access to credits or not To see whether credits can be the factor that affecting the accessibility of agricultural extension services to women	 Farm women Extension officers Ward agriculture officer 		
Institutional frameworks	• Support or not support To see whether there is a formal systems (programs, policies) that are specifically supporting farm women to access agricultural extension services.	 Farm women Extension officers DALDO Ward agriculture officer 		

Challenges

- Means of transportation
- Membership in farm community
- Low level of farm women participation in the Farm field schools
- To see whether means of transportation to the extension agents can affect accessibility of agricultural extension service to farm women.
- To see whether being a member or not in a farm community/organization can affect the accessibility of agricultural extension service to farm women
- To see whether low participation of farm women in farm field school can affect the accessibility of extension service to women

- Farm women
- Extension officers
- DALDO
- Ward agriculture officer

APPENDEX 2

APPENDIX 2 A

COMMUNITY INTERVIEW GUIDE

Preamble: Introduction (interviewer and interviewee)

Personal details

- 1. Name of respondent
- 2. Age of respondent
- 3. Marital status
- 4. Education level

Community attitude towards women's' accessing agricultural extension services

Statement	Strongly	Agree	Don't	Disagree	Strongly
	agree		know		disagree
Women can get extension services					
through men or their husband					
Extension officers fail to recognize					
women as farmers					
There is no need for women to					
access agricultural extension					
services because they have to look					
after children at home					
Women are not farmers					

APPENDIX 2B

CHECKLIST FOR FARM WOMEN

- 1. Do you have any contact with extension agents?
- 2. What challenges are you facing when you want to access extension services?
- 3. How does ownership of the land asset can affect you to access extension services?
- 4. How does the division of labor in the household can affect you to access extension services?
- 5. How does the gender of extension officer can affect you to access extension services?
- 6. How does the marital status can affect you to access extension services?
- 7. How does the level of education affecting you to access extension services?
- 8. Do you think accessibility of credits can affect you to access extension services? And why?

APPENDIX 2 C

INTERVIEW GUIDE FOR EXTENSION OFFICERS

- 1. What challenges are you facing while discharging your duty to farm women? (Gender norms and number of extension officers)
- 2. How can the gender of extension officer affect the accessibility of extension services to women?
- 3. How does the division of labour in the household can affect accessibility of extension services to women?
- 4. Do you think marital status of farm women can affect their accessibility of extension services?
- 5. Does the level of education of farm women affect their accessibility of agricultural extension services? How and why?
- 6. Does the availability of land asset to farm women can affect their accessibility of agricultural extension services? How?
- 7. Does the availability of credits to farm women can affect their accessibility of agricultural extension services?
- 8. Is there any program that specifically targeting farm woman to access agricultural extension services? If 'No' why? If 'Yes' How?

APPENDIX 2D

INTERVIEW GUIDE FOR WARD AGRICULTURE OFFICER

- 1. What is your role in supporting farm women to access the extension services in your area?
- 2. What are the challenges do farm women face in accessing agricultural extension services?
- 3. What are the challenges do extension agents faces while discharging their duties in your area, especially in reaching out farm women?
- 4. Do you think land ownership can affect farm women to access agricultural extension services? How?
- 5. How many extension officers working in your area?

APPENDIX 2E

INTERVIEW GUIDE FOR DALDO

- 1. How many extension officers are in your district?
- 2. What are the challenges do extension officers face while discharging their duties to farm women?
- 3. Is there any extension program which is directly targeting farm women? If 'Yes'how does it support women to access extension services? If 'No' why?
- 4. Do you think land ownership and accessibility of credits to the farm women can affect them to access extension services?