

**INFLUENCE OF FARMER GROUPS CAPACITY ON THEIR
ABILITY TO ADVOCATE FOR GOVERNMENT AGRICULTURAL
SERVICES IN KHWISERO SUB-COUNTY KENYA**

MWANZIA KAMENE JESSICA

**A research project is submitted in partial fulfillment for the award of the degree
of Masters of Arts in Project Planning and Management of the University of
Nairobi**

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DECLARATION

This research project is my original work and has never been presented for a degree or any award in any university

Sign _____ Date _____

MWANZIA JESSICA

L50/84297/2012

This research project has been submitted with our approval as university supervisors

Sign _____ Date _____

DR RAPHAEL NYONJE

SENIOR LECTURER

DEPARTMENT OF EXTRA- MURAL STUDIES

UNIVERSITY OF NAIROBI

Sign _____ Date _____

DR SAMUEL WANJARE

SENIOR LECTURER

SCHOOL OF BUSINESS STUDIES

UNIVERSITY OF NAIROBI

DEDICATION

This project is dedicated to my parents and siblings who encouraged me during the course of my studies.

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ABSTRACT

Farmer groups have been in existence since 1920's. They have been used as a strategy to address many development issues in different societies. In Kenya, the concept of farmer groups (FGs) has been employed in delivery of agricultural services. Today the agricultural extension services are demand driven hence it is important to investigate whether the FGs have the capacity to engage the government in provision of such services. This study sought to: determine the level at which size and status of farmer groups influence their ability to advocate for government agricultural services; examine the extent to which farmer group management influence their ability to advocate for government agricultural services; Investigate whether the financial status of farmer groups influence their ability to advocate for government agricultural services and establish the extent at which farmer groups empowerment influence their ability to advocate for government agricultural services in Khwisero Sub County. This study adopted a descriptive design. The target population was 3630 farmers belonging to 242 farmer groups in the study area. A sample of 351 farmers was drawn from the target population using sampling table by Krejcie & Morgan (1970). This study adopted multi stage cluster sampling technique. The first stage employed area sampling in which the study area was divided into seven location or strata namely: Kisa South, Mulwanda, Kisa West, Kisa North, Eshirombe, Kisa East and Kisa Central. Proportionate stratified simple random sampling technique was used to determine the number of groups to be sampled in each selected stratum. Sample groups from each stratum were chosen randomly including the individual farmers to be interview. Key informants and FGs for Focused group discussion were purposively selected from the four sampled strata. Primary data was collected by the aid of questionnaires. Validity of the questionnaire was attained by carrying out a pilot test and reliability through test re- test and half split reliability. Both qualitative and quantitative data collected was scored, edited, coded and analyzed using computer software known as Statistical Package for Social Sciences (SPSS) version 22 to compute descriptive statistics (frequencies, means, percentages and standard deviations).

Content analysis was also employed on data collected using open ended questions through interviews and FGDs. The analyzed data was presented using tables. This study found out that the size and status of farmer group and levels of FGs financial status account for 18.5% and 26.6% of all the variation in advocated government agricultural services respectively. Group management accounts for 15.4% of all variation in advocated agricultural services. This means that there must be other factors that influence FGs ability to advocate for agricultural services. There was no statistical evidence to show that farmer empowerment had influence on dependent variable. Only 66 (20.1%) of the respondents had sought agricultural services. However most of the farmers who had sought the services had received agricultural training. The study recommends that the government should consider reviewing its extension policy that requires the farmers to seek for agricultural services from the government officers at a pay. The FGs should be trained on financial mobilization especially proposal writing to enable them seek external funding from donors and government institutions. The researcher recommended this study to be replicated in other areas of the country to generate evidence for farmers to engage the government in policy reforms. Further studies are needed to investigate whether the county governments have the capacity to provide agricultural services to farmers.

LIST OF ABBREVIATION AND ACRONYMS

AAIK	Action aid International Kenya
APO	Asian Productivity Organization
ASDS	Agriculture Structural Adjustment Strategy
CEJA	European Council of Young Farmers (CEJA)
CIGS	Common Interest Group
DMEC	District Monitoring and Evaluation Committee
ENRD	European Network for Rural Development
FAO	Food and Agriculture Organization
FFS	Farmers' Field Schools
FG/FO	Farmer Groups/ Organizations
FRGS	Farmer Research Groups
GCI	Group cohesion index
GCRI	Group conflict resolution index
GDP	Gross Domestic Product
GOK	Government of Kenya
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
MGCSS	Ministry Of Gender, Children and Social Services
NALEP	National Agriculture and Livestock Extension Programme
NES	National Economic Survey
NGO	Non Governmental Organization
SHFS	Self Help Groups
SID	Society for International Development
PSSR	Proportionate Stratified simple random
QRR	Questionnaire rate of return
USA	United States of America
USAID	United States Agency for International Development
SSA	Sub Saharan Africa

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Collective action among farmers' dates back to the 1920s, when active debates surrounded whether cooperatives were necessary to unite farmers for market power and higher returns to agriculture, or whether they were a means to increase competitiveness within the agricultural business system (Staatz, 1989). Several decades of productivity growth and the structural transformation of societies saw less emphasis placed on collective action among farmers and farmer cooperatives. Recently the focus has shifted to institutions of collective action such as farmer groups for economic growth and poverty alleviation (World Bank, 2007; Barham and Chitemi, 2009).

According to FAO (2013) rural organizations are essential mechanisms for promoting rural development and sustainable rural livelihoods. Farmer groups have been formed to facilitate access to better agricultural technologies (Gibson, R.W., Byamukama, E., Mpembe, I., Kayongo, J., and Mwanga, R.O. (2008), to improve access to better earning markets for produce (Aliguma, L. Magala, D & Lwasa, S, 2007) and facilitate produce transport to markets (Mwaura *et al.* 2012). Farmer organizations (FOs) have also been used for financial security and household investments (Mutoro , 1997); access to credit where groups members acts as collateral for each other (Loevinsohn, M, Mugarura, J.& Nkusi, J, 1994); to invest in agricultural value addition and milk processing plants (Mbowa *et al.* 2012); in infrastructural development e.g. rural roads, small power generation projects, schools and health facilities (UN, 2010) and also in natural resources management and conservation (Nyakaana and Edroma, 2008).

In the USA, the government has promoted Farmer interest groups (FIGs) since 1930s as an economic strategy to distribute the opportunities to provide small-scale farmers with opportunity to compete with the better organized big business in agric. Farmer unions protect and enhance the economic well-being and quality of life for family farmers and ranchers and their rural communities. It does this by promoting legislation and education beneficial to farmers, and by developing cooperative buying and selling methods and

businesses. A single farmer organization has more than 250,000 families in USA (American government, 2010). In Mexico and Central America FOs have been avenue s through which development agencies promote the growing of fruits and vegetables to complement the existing food security options (Halmilton and Fisher, 2003; IFRI 2006).Farmer cooperatives have been instrumental in enabling the coffee farmers in south America (Bolivia, Brazil, Peru, Ecuador and Colombia to participate in value chain (Hellin and Higman, 2003).

United Kingdom, France, Belgium and Germany have developed and formed federations and have subsequently become strong enough to sit in the European Economic and Social Committee of the European Union (FAO, 2009). In Europe a FO known as European Council of Young Farmers (CEJA) formed in 1958 has been a platform to promote know how and skills in the sector. It offers training to farmers and directs their concerns towards European institutions (ENRD, 2013). Sabates (2006) study on local strategies for survival and growth in Romania and Kyrgyz Republic found that smallholder farmers participated in groups as an avenue to achieve higher levels of production and manage risk.

The group approach has attracted the attention of many research and development organizations as a way to address agricultural and natural resources management problems in the tropics. Notable examples of such group-based participatory research approaches include the Local Agricultural Research Committees (CIALs) in Latin America (Ashby *et al.*2000; Anna and Nina, 2004), Farmers' Field Schools (FFS) in Asia and Africa (Braun *et al.* 2000; Leisa, 2003), and Farmer Research Groups (FRGs) in southern and Eastern Africa (Jassey, 2000; Stroud, 2003).

The shift to use farmer organizations (FO) as a tool to provide farmers with extension services to improve productivity is also observed in several parts of Asia in India states such as Udhra Pradesh and Tamil Nadu (Shukla, 2003).Considerable success with respect to access to technology, skill up gradation and marketing with Self help groups (SHGs) and FIGs has been demonstrated under the National Agricultural Technology Project in

India. Village level groups federate upwards into block and district level unions for wielding greater influence on the agricultural research and extension agendas as well as for bulk marketing. MYRADA a large NGO in India has promoted the SHG strategy in management of savings and credit since 1984. Initially MYRADA used to identify SHGs, builds their capacity and match their saving after a period of 3-6 months. Today the NGO does not offer the grants but links the SHG with the banks that lends the SHG directly to enable the members' access loans at a cheaper cost. By March 2005, this programme had provided credit to 1,618,456 SHGs with a membership of 120 million poor people making it the largest microfinance initiative on earth (IFAD India, 2006).

Today there are tens of thousands of grass-roots FOs across Africa. Most play a dual role: as producers' groups or cooperatives they provide services to their members and represent their interests' to stakeholders, and agricultural policymakers. Many grass-roots FOs set up local unions and federations that are joined to national umbrella organizations (IFAD, 2013). A Study by Tasie, (2010) in Nigeria shows that organized groups have been used in the implementation of input (fertilizer subsidy) voucher program sponsored by World Bank and piloted in Kano and Tabara states in 2009. This program was expected to improve on the traditional system of subsidized fertilizer distribution to make it available to smallholder farmers on time. In Ghana farmer group are widely used in agriculture development under the Ministry of Food and Agriculture. In 2007, there were over 10,000 farmer groups (Salifu *et al.* 2010; Adongo, Mwaura and Okoboi, 2012).

In Tanzania and Uganda, FGs are at the centre of the poverty reduction strategy, extension delivery and crop marketing (Uliwa and Fischer 2004; Salifu *et al.* 2010). They also form important avenues for mobilizing farmers around a common objective especially in delivery of services and formulation of policies that support agriculture development. It is argued that a group approach is more effective than individual ones as it promotes collective learning and sharing (Heinrich, 1993; Hagmann *et al.*, 1999) and ensures that more people participate.

The concept of FGs in delivery of agricultural services was introduced in Kenya in 2000 to accelerate the involvement of farmers at the grass root level in the fight against food insecurity through implementation of new technologies (GOK, 2004). It was hoped that

the use of FGs would lead to improved use of certified seeds, proper use of fertilizers, improved breeds, use of production records among farmers in Kenya (Muyanaga & Jayne, 2007; GOK, 2007, 2009) and food security. However, a study by Amatalo et al (2003) in Kakamega and Vihiga district reviewed that the soils were infertile and lacked important plant nutrients such as nitrogen, phosphorus and potassium due to little or lack of fertilizer application. Inadequate use of fertilizer was attributed to high prices hence most of the farmers could not afford to buy.

Nonetheless FGs have been formed and used by many Nongovernmental organizations (NGO) in Kenya to address diverse development issues. Action aid International, World vision and Farm Africa have used Group approach to address food security, governance, health and environmental issues in many regions of the world such as in Europe, Asia, Africa and Latin America. In Khwisero, the researcher will be collecting information from groups organized by the government for extension services and Action aid International Kenya (AAIK) that operates in the sub county to address poverty.

1.2 Statement of the Problem

Farm productivity has been declining over the years in Kakamega County. The soils in many areas are infertile and lack important plant nutrients such as nitrogen, phosphorus and potassium due to little or lack of fertilizer application (Amadalo et al. (2003). Khwisero district has predominant shallow sandy loam soil that is mostly eroded, but the eastern part has red soil. The poor soil leads to low level of crop production since they require a lot of conservation to support crops (GOK, 2011) report. A study by the Society for International Development (SID, 2010) reveals that 64% of the population in Khwisero lives below the poverty line. Agriculture accounts for 90% of household income with 65% of the people directly employed in agriculture. The average farm family is made up of 8 persons while the average land holding is 1.5 acre per household.

According to Ministry of Agriculture (MOA, 2010) the potential of food production is far from being actualized. The production currently is at 60,000 bags of maize per year while the need is at 1,500,000 bags per year. The main constraints are the soil infertility, low

usage of high quality seeds poor attitude of farmers (linked to low literacy levels), poor governance, lack of farming skills and high interest rates on loan(AAIK, 2010,2011,and GOK,2011).

Although access to agricultural services is key to food security and poverty reduction studies shows that the government assistance to farmers has been dwindling over the years. The current government policy on extension services is demand driven implying that farmers should visit the government offices to request for them (Vision, 2030). Khwisero district monitoring and evaluation report (2011) and a baseline study conducted by AAIK(2012), reviews that farmers have shied away from seeking government services hence continued poor crop yields. Consequently, many farmers in the area have been confined in a vicious cycle of poverty. To break this cycle of suffering, the FGs need to increase their agricultural services uptake in order to transform their food productivity. For this to happen there is need to investigate whether the FGs have the capacity to advocate for government agricultural services in the area since many studies focus on their benefits and not challenges .

1.3 Purpose of the Study

The purpose of this study was to determine whether farmer groups capacity influence their ability to advocate for government agricultural services in Khwisero Sub County.

1.4 Research Objectives

This study sought to:

- I. Determine how size and status of farmer groups influence their ability to advocate for government agricultural services in Khwisero Sub County.
- II. Examine the extent to which group management influences its ability to advocate for government agricultural services in Khwisero Sub County.
- III. Investigate whether the financial status of farmer groups influence their ability to advocate for government agricultural services in Khwisero Sub County.
- IV. Establish the level at which farmer empowerment influence their ability to advocate for government agricultural services in Khwisero Sub County.

1.5 Research Questions

The study sought to answer the following research questions:

- I. How does the size and status of farmer groups influence their ability to advocate for government agricultural services in Khwisero Sub County?
- II. To what extent does the group management influence its ability to advocate for government agricultural services in Khwisero Sub County?
- III. How does financial status of farmer groups influence their ability to demand for government agricultural services in Khwisero Sub County?
- IV. To what level does farmer empowerment influence their ability to advocate for government agricultural services in Khwisero Sub County?

1.6 Research hypothesis

This study sought to test the following hypothesis

- I. The size and status of farmer groups does not significantly influence their ability to advocate for government agricultural services in Khwisero Sub County.
- II. There is no significant relationship between the group management and its ability to advocate for government agricultural services in Khwisero Sub County.
- III. There is no significant relationship between the financial status of the farmer groups and their ability to advocate for government agricultural services in Khwisero Sub County.
- IV. There is no significant relationship between the level of Farmer empowerment and their ability to advocate for government agricultural services in Khwisero Sub County

1.7 Significance of the study

The knowledge on FGs capacity may inform the extension officers to explore the appropriate strategies to ensure the farmers get quality and timely service that translates to increased productivity. Private sector may use the information generated to assess the capacity gaps among the FGs to inform their future capacity building interventions. The policy makers would use the findings to assess whether the agricultural policies addresses the aspirations of the farmers. This may result in review of government policies to create

an enabling environment for farmers. It is anticipated that researchers and scholars may benefit from this study due to the new knowledge it will contribute particularly in the area of government accountability in delivery of services in light of devolved government. The study is hoped to contribute to national development by making recommendations that could enable the government to invest more money towards agriculture in line with CAADP framework to grow the sector.

1.8 Basic assumption

The researcher assumed that the respondent understood the questions asked and gave accurate information to facilitate data analysis and generalization of the results for the whole population. This being a household and group level study the researcher recognized the influence of factors such as cultural beliefs, personal opinions, gender issues and level of education. However, these factors did not hinder the study's success.

1.9 Limitation of the study

The rain season was a major limitation to this study since the long rains begins on April to August. The rains make the roads slippery and impassable and the only reliable and available transport in Khwisero is motorbike. The problem was solved by collecting the data prior to onset of the rains. Language barrier was a limiting factor to the researcher who was not conversant with the local Luhya dialects. Consequently the researcher used Swahili since majority of the farmers are fluent in it. Research assistants were also recruited locally, and adequately trained to ensure collection of quality data from the sample.

1.10 Delimitations of the study

This study targeted 242 SHGs of smallholder farmers that were registered with Ministry of Gender, Children and Social Services (MGCSS) in Khwisero Sub County due to constraints of time and money. The study sought to make a comparison between the characteristics of those FGs whose members engage the government in delivery of agricultural services and those who didn't and the way it impacted on their food production. This was done by collecting and analyzing data on four variables namely: the

size and status of the farmer group, group management, financial status of the farmer group and the level of farmer empowerment.

1.11 Definition of the significant terms

Ability: refers to a natural or acquired skill or power that enables an individual o farmer to do something successfully.

Advocate: Ask or request for agricultural services service from the government officers.

Agricultural services: those vital services required by farmers to produce food such as research, inputs, extension services markets and technology and training.

Farmer Group: SHGs that are registered with the MDCSS and are practicing some form of agricultural activity along the value chain.

Farmer group capacity: Refers to farmer groups characteristics that enable the farmers to engage the government in provision of agricultural services. In this study the farmer groups' capacity will be measured in terms of size of the group, group Management, and financial status of the farmer group and farmer empowerment.

1.12 Organization of the study

This research project was organized into five chapters. Chapter one describes the background of the study, study objectives, research questions and hypothesis. The same chapter expounds on the purpose of the study, the significance, limitations, delimitation and the definition of the key terms used in the study. Chapter two is composed of literature review related to CIG approach, accountability and agricultural services. It also contains the theoretical and conceptual frameworks. Chapter three describes the methodology of the study, design, and target population, sample size, sampling techniques, research instruments, reliability and validity of the instrument. Chapter four presents interprets and discusses the research findings in line with the data analyzed. Chapter five is comprised of summary of research findings and recommendations and areas for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter highlights the major concepts reviewed and found to be of relevance to the study. It covers the farmer groups' concept and how it has been used elsewhere in the world. It also presents both theoretical and conceptual framework and ends with a summary on literature reviewed.

2.2 Concept of farmer organization

Farmer group is a method of organizing people together to solve their individual problem. This method is used by the government, NGO's and others worldwide (Voice, 2009) to improve agriculture productivity and in other sectors. Farmer groups approach dates back to the 1920s. Its adoption was seen as a way of increasing the farmer's market power and competitiveness in business (Staatz, 1989). The use of FGs approaches to deliver development services to small holder farmers has proven to be an effective institutional device for lowering the delivery costs of these services, and for promoting small farmer self-development. They are useful in mobilizing small farmer collective self-help actions aimed at improving their own economic and social situations and that of their communities (FAO, 2006; Voice, 2009).

Consequently, FOs' plays an important role in tackling the systemic causes of poverty because they give farmers a legitimate voice in shaping pro-poor rural policies. By articulating farmers' interests to public and private institutions, they encourage those institutions to tailor their strategies, products, and services to farmers' needs. Given a supportive policy framework, farmer organizations are well able to drive balanced social and economic development (Agricord, 2010).

According to Fernandez, (1995) Farmer group is a dynamic institution that grows on the resources and management skills of its members and their increasing confidence to get participate in the public and private spheres. Considerable success with respect to access to market and technology with SHGs and Farmer Interest Groups (FIGs) has been

demonstrated under the National Agricultural Technology Project in India. Village level groups have federated upwards into block and district level unions for wielding greater influence on the agricultural research and extension agendas as well as for bulk marketing.

In Kenya the Baraza approach (Village gathering) was adopted immediately after independence to provide farmers with updated technologies, information and methods. The Baraza was a complete top-down method that excluded women. On average baraza lasted two to four hours and extension officers lectured and explained their activities to farmers (Kitetu, 2005). This approach failed to meet the expectation of the Kenyan Authorities (Action aid 2011). In next couple of decades, the Government tried other approaches to address the past failures of top down system such as Farmer Groups strategy. As a part of the agricultural extension services, the Government created the National Agricultural Extension Policy (NASEP). This policy encouraged farmers to interact with each other while sharing knowledge, resources and experience by using the Farmer-Group approach (Jayne & Muyanga, 2006). An ideal farmer group would maintain the number of its members between twenty and thirty. FGDs did not have specific structure to govern their meeting.

In 2000, the government launched NALEP to implement the demand driven extension service through use of groups. The major thrust was to build capacity of CIGs to improve their performance and demand for extension services (MOARD, 2001). Extension officers would attend the farmer meetings disseminate information and take notes to be considered by the government officials when making policies. The lacks of detailed structure in many FGs lead to inefficiencies during the meeting where members would tend to go off the topic. The Scholars have warned this challenge may impact negatively on the extension program (USAID, 2003). However, since the introduction of FGs the agriculture in Kenya has been making a steady improvement (USAID, 2003).

The FAO experiences after more than two decades of direct project implementation in 17 countries identified the following common features of the most successful and

sustainable economic Small Farmer Groups (SFGs): they are small in size (between 10-15 members), informal, their membership is homogeneous, their primary focus is on income generation, and the group has its own savings which members contribute regularly. FAO further noted that Farmers adopt group approaches when the expected benefits of collective action outweigh the expected costs. The SFGs People learn more quickly, there is more face-to-face contact and decisions are made quickly than in larger group situations (FAO, 1999). However, IFRI (2014) study reveals that the most successful collective action in agricultural marketing has group size of 20 to 40 members.

The participation is completely voluntary and the Farmers exercise their rights whether to participate or not. Some FGs have set bars of membership requirements so that not all farmers can join the group (Kitetu, 2005). The participants see each other as equals and voice their opinions. They are run freely and without a specific structure. According to (Browne, 1995), the most important feature of interest groups is their capacity to represent the collective views of various segments of society in a way the government cannot ignore.

2.3 Size and status of the farmer group

Studies by Asante *et al.* (2011) found that farm size, farming as a major occupation, access to credit and access to machinery services influenced farmers' decisions to join farmer based organizations in the Eastern Region of Ghana.

A research by Adongo *et al* (2012) on what factors determine membership to farmer groups in Uganda identifies education levels of the household head, marital status, participation in nonfarm activities, age, gender, household size, distance to tarmac road, farm size and regulations as some of the potential factors that would influence the decision of households or individual to participate in farmer groups. Younger farmers were more likely to participate in FFS groups than the older farmers in Uganda, Tanzania and Kenya (Davis *et al.* 2010). Access to infrastructures such as the tarmac road and the market has also been shown to influence membership to farmer groups.

Empirical data from a study of FRGs in Uganda, examines the patterns and dynamics of participation found that married individuals were more likely to be members of a farmer group as compared to unmarried individuals. However, divorced women separated or widows were more likely to belong to farmer groups (84%) than their male counterparts (16%). In Uganda, Davis *et al.* (2010) found that lack of information reported by 53.2 % of farmer followed by lack of time and commitments including stringent membership requirement were the major reasons not to participate in groups.

According to Browne (1995) there is strength in numbers and more attention is given to established, well-respected groups. The membership is participatory and not obligatory and the theme of the group is decided by the members. The group's membership ranges from 15-30 farmers of mixed gender or a single gender. Small group size and homogeneity are pre-requisite for success. Larger groups face greater organization problems than smaller ones (Ostrom 1990; Varugee & Ostrom, 2001). Thus self selection is important and usually leads to more cohesion than when an outsider exerts too much influence on membership. The groups with larger membership produced more quantities; enjoy economies of the scale and a bigger lobbying voice. The successful development of large organizations creates a lobby voice for favorable policies and business environment. The bigger/ louder the voice increased the chance for the CIGs of getting policy changes to be made in their favor Where there are small membership numbers with low quantity levels of produce offered for sale, the commercial viability potential is low (MOA, 2010). However, the organizational operation costs increases with the size.

A study by Stubbs *et al.* (2010) on strengthening the viability of common interest groups (cigs) for agribusiness development reveals that most FGs in Kenya register with the MCSS as a way of lowering business costs and increasing access to financial support. Lack of legal status of the farmer groups mean they cannot sue for fraud hence such groups are at higher risk of failure through mismanagement. He further notes that membership asset ownership (cash or fixed assets) is better protected under the cooperative / company structures.

In Kenya for a group to be registered with MGCSS it must meet the following requirements: a) have ten or more members, b) members should share the mission, vision and objectives of the group. c) Have by-laws or a constitution that guides its activities and operations, d) pay a registration fee of Sh1, 000. Every registered group must furnish the registrar with the annual returns at a fee of Sh100 failure to which a group can be de registered. In case of change of group officials, office titles, a group must notify the registrar within 14 days of notice. Permission to amend a group constitution or name must obtain permission from the registrar by writing a letter signed by three officials — the chairperson, secretary and treasurer.

The letter must be accompanied with a copy of minutes, certified by the three officials as a true copy of the minutes of the meeting at which the resolution to make such a change was passed. Every registered group is required to hold an annual general meeting once a year and all members must be invited. The advantage of registering a group is that it will be recognized by law as a body and can transact business in its own name. The group can also own property on behalf of the members and they contribute their money to the group activities. All the group members are jointly liable to account for debts and obligations of the group.

2.4 Farmer group management

Farmer organization in respect to this study refers to those SHGs that are registered with the MGCSS and are practicing some form of agricultural activity along the value chain.

Farmer organizations (FOs) take many different forms, varying in the both size (size of membership) and the services they provide. According to IFAP (1992. p.4) FOs includes: Farmer groups, agricultural cooperatives, farmer associations, federations and unions, owned and controlled by members. The type of FO determines the external attention the members are it's likely to be received from the donors, government and development partners.

For the FOs to function as well the entire group should be organized as a cohesive unit in order to achieve its collective objectives. Cohesiveness is the degree of mutual affection

among members and their attraction to the group (Yuki, 1989 and Buchanan, 1991). Internal cohesion is characterized by a common sense of purpose and accountability among the members (Stockbridge et al 2003). Evidence of cohesion appears when members begin to refer to themselves, each other, and the group as “we” and when they take hold of an idea or problem and work together on it (Hartford, 1971). Increased cohesiveness reflects the growth of group norms that regulate and stabilize the group internal dynamics. And if groups are to be used as change agents, then the members should have a strong sense of group identity and belonging in order to have sufficient influence over their members (Forsyth, 1990). Other factors contributing to cohesion includes homogeneity, kinship, tradition, group activities, small group size, rules, constitution and systems and structures. Norman *et al.* (1989) observes that the FO's that exhibit high levels of cohesiveness are likely to work better and this may lead to better performance.

However, a study by Stockbridge et al. (2003) noted that, in commercial environment, the balance between the need for democratic control and membership participation hampers decision making, resulting in missed opportunities. Too little participation can also alienate members from the leadership leading to loss of motivation and ultimately organization failure. He further noted that, this challenge can be addressed by proper systems and structures by setting clear and constitutionally defined rules to govern how different types of decisions are made to ensure transparency and accountability.

The success of many FOs mostly stems from the skills, charisma of individual leaders and their interaction with the rest of group members (Forsyth, 1990; Collin& Rondot 2000). Yukl (1989) recommends that leadership should be shared among group members and should shift from person to person depending on the task the group needs to accomplish at that time. Popular and charismatic leaders help influence government (Browne, 1995). A study of 21 farmer research groups (FRGs) in Kabale Uganda revealed that participation in these groups follows a U-shaped pattern. Participation is initially high when groups are formed then declines as members drop out and motivation wanes. Once group shows successful results, more farmers join. Women tend to dominate

FRG although men tend to occupy leadership roles in mixed groups. Members participate as individuals and not on behalf of the community.

2.5 Farmer group financial status

Farmer organizations can obtain their resources either from "outsiders" like banks, government or suppliers or from "insiders" either by retaining net revenues generated from their business or from members themselves. However the main source of FOs finances is from the members contributions (Rouse, 1999). The sustainability of FGs is more likely in groups that are able to mobilize their own savings in order to undertake their joint activities either through membership fees or revenues generated through economic enterprises. Money is needed for organizational costs and lobbying efforts (Roger, 2013). Regular contribution by members to their group demonstrates their commitment to the organization and its future (Collion & randot, 1999). The conditions and terms under which member-users will voluntarily provide funds to their organization depends on the rewards or incentives they receive, or expect to receive in return, i.e. in terms of access to services, control over decision-making processes or financial returns.

A study of CIGs in 8 districts in Kenya by Stubbs et al. (2010) reviewed that farmer group capacity for mobilization and diversification of savings into non farming investments (savings accounts) is low, especially in areas with marginal potential. High potential areas have had a higher success rate of accessing finance. He further found out that farmers are reluctant to borrow money from commercial sources due to low profit margins hence low capacities to service debt. This inhibits FOs enterprises growth. As a result, Stubbs recommended that FOs should be sensitized to open saving bank accounts with financial service providers who offer advisory and on the financial service providers and packages available and their terms and condition. Moreover, FGs should be trained on financial resource mobilization such as writing of proposals to enable them access external assistance from a wider stakeholders such as donors, government and NGOs.

2.6 Farmer empowerment

The concept of empowerment itself is highly contentious (Kaber, 1998). In this study farmer empowerment refers to a process of strengthening people's capacity and ability to access resources that will enable them to manage those variables that most affect their lives (Bernet *et al.* 2006). It fosters power in people, for use in their own lives, their communities, and in their society, by acting on issues that they define as important (Wilson, 1996). Individual change is prerequisite for community empowerment.

Empowerment and creation of social assets comes about through: participation and self-empowerment – voice; individual and corporate capacity building; representation and democratic governance; female and 'minority' participation and advocacy (Kachule, Poole and Dorward (2005). FOs requires a " voice" to countervail the policy biasness through policy dialogue to demonstrate to policy makers where policy change is required (Tumushabe & Musyenyi 2011).

Farmer empowerment is widely regarded as the most sustainable approach to helping poor farmers in Africa move out of poverty (Beaudoux et al.1994). It can be a cornerstone of the new approach to agricultural services. Although FGs cannot give farmers power and make them "empowered", they can provide the opportunities, resources and support that they need to become involved themselves. Farmers can get involved though policy advocacy because farmer interests receive the government attention by lobbying for improved agricultural policies and business environment. As a result, FOs should acquire appropriate skills to enable them gather the relevant policy information for effective government policy influencing. According to (William, 1998) it is until the groups manage their issues in great detail and with considerable expertise, the time that policymakers consider them.

For many NGOs' empowering farmers is an act of helping communities to build, develop and increase their power through co-operation sharing and working together. Empowered FGs can act as convergent points or plat forms for solving local problems and mobilizing human and financial resources for sustainable development (Chamala, 1990). Lack of economic and political power makes it difficult for the poor to access resources that

would help them move out of poverty. However, improving their access to knowledge and greater participation in the creation of knowledge can make an important contribution to their empowerment (Owen *et al.* 2005). This can also help them to represent themselves at both local and national level and stop relying on KENFAP that represents all farmer interests in Kenya (Stubbs *et al.*, 2003).

Ultimately success of FGs depends upon local initiatives, individual motivations, consensus and voluntary participation. To survive and grow many new groups should be dynamic, creative, flexible, responsive to change and probably somewhat optimistic. However most importantly they will need to be well structured and managed, continuously to improve their activities, identify competitive and added value market opportunities, focus on quality and service, and most essentially, maintain a committed and active membership (FAO, 1999).

Farmer organizations face many challenges such as conflict of interest. This arises when commercial and social objectives and obligations are confused. The group members are not able to raise sufficient capital or provide clearly measurable benefits to their members (Ostrom, 1990). According to Chamala, (1995b) many FOs have failed because of corruption, mismanagement, conflict, and lack of clear goals. Outside pressure to expand group membership from different actors such as the government, donors or NGOs affects FGs. FO's are forced to undertake activities without the relevant skills and experience in pursuit of social objectives of their supporter. This pressure should be balanced against the interest of existing members. Poor financial managements due to lack/ poor systems and structures, limits the group accountability and transparency to both group members and the external supporters.

Other group dynamics challenges includes how to: arrive at the rules/ institutions the collective action to be based upon; obtain credible commitment of the group members to abide by the set rules and norms and abstain from free-riding; monitor and enforce compliance with the rules, develop trust and communicate among the members and availability/ management of incentives (Ostrom, 1990, 1999).

2.7 Theoretical framework

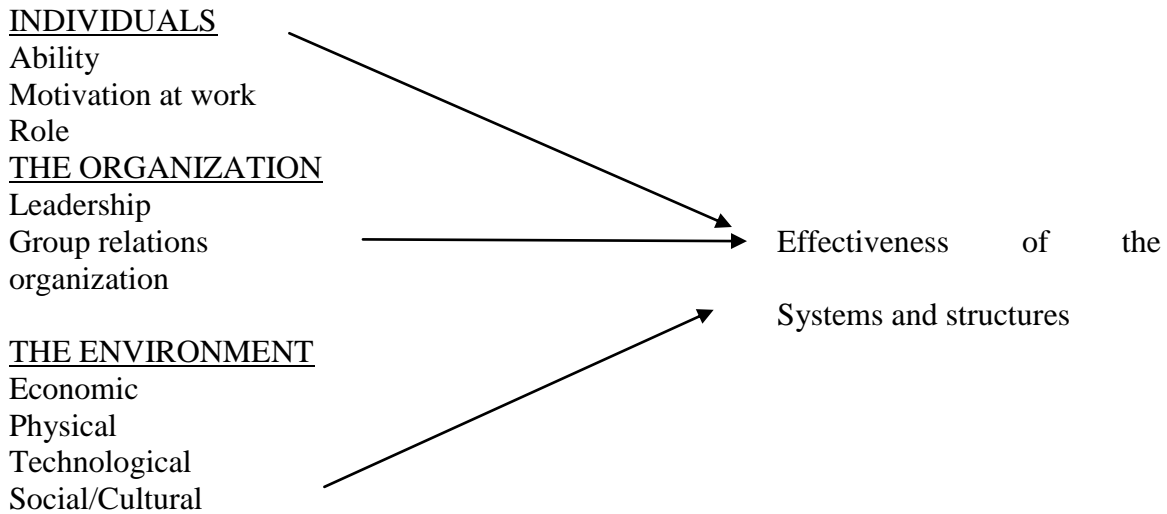
The theoretical framework adopted for this study is embedded on organizational theory that is also consistent with the Mancur Olson's *The Logic of Collective Action*. Organizational theory contributes towards a larger framework for understanding Farmer organizations, based on Handy (1999); Mullin,(2000) and Pugh and Hickson(1989). This theory is concerned with the factors that determine whether or not an organization is effective in meeting its objectives. Handy (1999) divides these factors into three broad categories: Individuals, the organization and the environment (See figure 2.1 below).

Organizational behavior theory focused on how jobs could be done more efficiently. The leaders and the farmers are viewed as important. The members (Farmers) are the owner of the organization and the people to which the management is ultimately accountable. FOs usually requires much greater participation by its members than private firms require stakeholders to succeed.

In many respects the role of the member in FOs is a blend between that of owners, manager, client and employee. The ability of individuals to carry out their role in an organization has significant effect on the organizations capacity to meet their objectives. Matching roles to the abilities is therefore important. For instance treasurers need good numeracy. Management roles should be distributed effectively not concentrated in the hands of too few as this can impair performance and affect motivation. The farmer groups should focus on both incentives and needs and the relationship that exists between the individual's effort in pursuit of organizational objectives, and the resulting satisfaction of these needs.

Any organization including farmer groups consists of leadership, various groups of together on specific tasks and activities and the structures and systems which coordinate activities, define roles and facilitate decision making. Handy (1999), advocates for a "best fit" approach to leadership style in which leader adopt a style that is preferred by the people being lead and the nature of the activity being led. Fos should have a clear set of constitutional defined rules and procedures governing how different types of decisions are made to ensure transparency.

Figure 2.1: Factors affecting organizational effectiveness



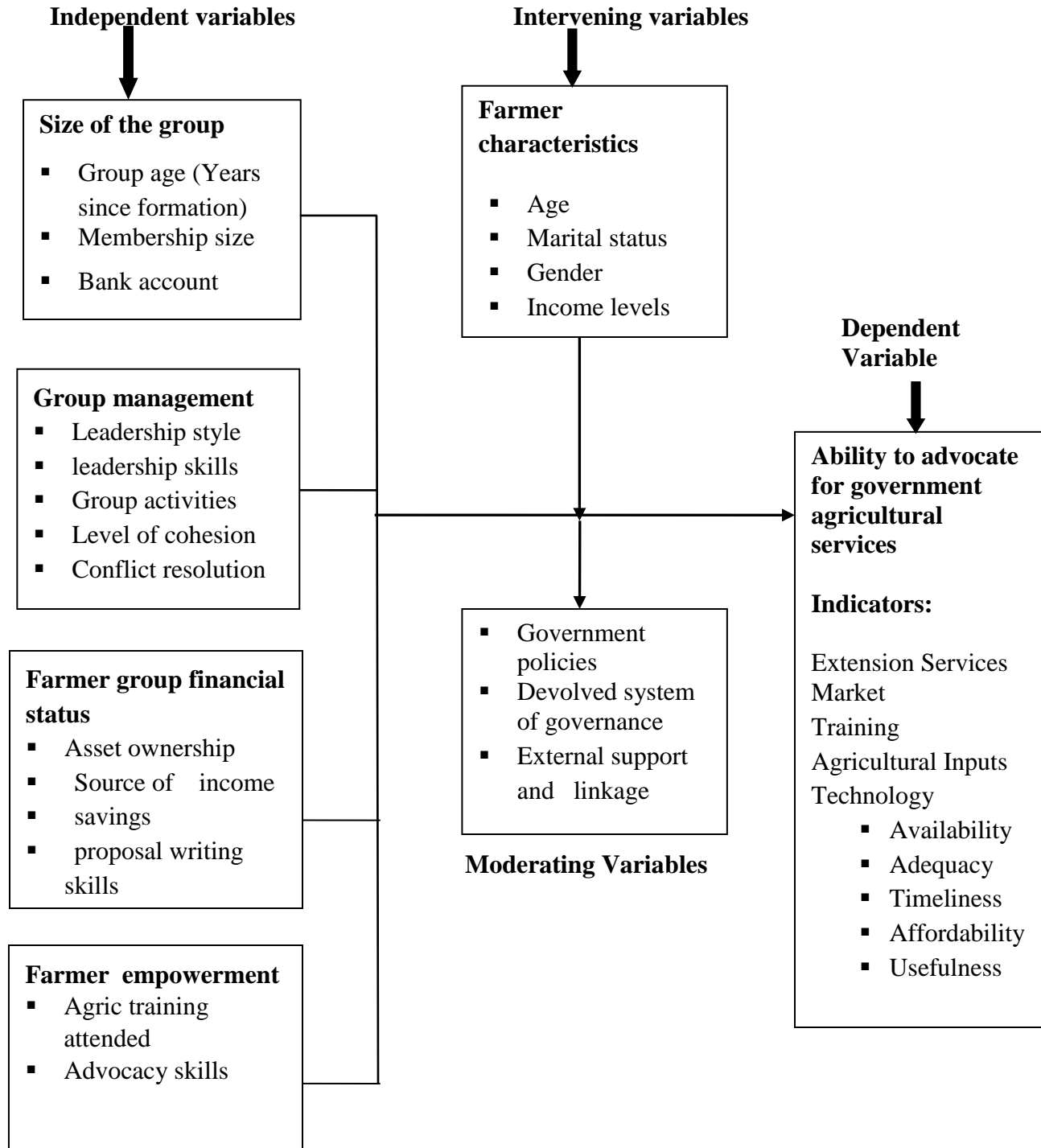
Source: Adapted from Handy, C. (1999): Understandings organizations Figure 1:pg 15

Institutional, political, cultural and economic Environment has a considerable influence on FOs internal and external relations. The formal laws of state as well as local institutions based on customs and traditions, determine whether the environments for FOs development is enabling or not.

2.8 Conceptual framework

The conceptual framework is embedded in organizational theory by Handy (1999), described above. The important factors for this study were farmer characteristics that influence their capacity to advocate for government agricultural services. The farmer group's characteristics are the independent variable composed of size and status of the group, farmer group management, FGs financial status and farmer empowerment. The dependent variable is the ability to advocate for government agricultural services. The FGs' characteristics may be affected negatively or positively by the intervening and moderating variables depending on the situation. The individual farmer characteristics such as age, income, gender and marital status determines whether a farmer is eligible to join a certain SHFG due to varied norms and requirements of membership. Some FGS are purely women or mixed gender others are formed by specific segments of the society to champion their causes such as widows, disabled and the youth. The FGS characteristics were measured using nominal, ordinal, ratio and interval scales

Figure 2.2: Conceptual framework shows the relationship between the independent variables, dependent variable, intervening variable and moderating variables.



—————> Indicates the relationship between the variables under study

2.9 Gaps in knowledge

Majority of the literature reviewed on FGs focused on their benefit. However some empirical studies have demonstrated that membership in FGs or cooperatives can have limited benefits for certain activities such as the quality of output (Francesconi & Ruben 2007) and for some types of farmers such as the poor or women (Bernard, Taffesse, & Madhin 2008; Kerby *et al.* 1996). There was limited systematic research into FGs dynamics, composition, performance, capacity and effectiveness. Yet, such analysis is critical to building more effective ways of organizing and working with FGs building their capacity to innovate and experiment, and participate in decision making.

A study by Michuki (2013) on influence of selected institutional factors on performance of cigs of small holder farmers in Gilgil focused on crop production, access to markets, credit and training. It did not look at other agricultural services and whether the Farmers were able to access them from the government officers. Moreover, a study by Wambugu et al (2009) in western Kenya on Effect of Social Capital on Performance of Smallholder Producer Organizations examined only a few internal factors to explain the differences in the performance of producer organizations. It failed to touch on how FGs capacity and external factors influence the farmers' access to government agricultural services key in improving agricultural productivity. In light of literature reviewed, it is clear that the farmers are yet to embrace the concept of seeking government agricultural services, yet such move is critical in transforming their small scale farming into viable enterprises capable of eliminating poverty. Therefore this study sought to investigate whether the farmer organization have the ability to engage the government in provision of agricultural services in Khwisero sub county.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a detailed description of how data was collected, processed, analyzed and interpreted in accordance with the research objectives. It also discusses the research design, sample size selection, sampling procedure, target population, research instrument, the instrument reliability and validity, data analysis techniques and ethical considerations.

3.2 Research design

Descriptive survey design was adopted for this study. Descriptive analysis studies the relationship between differing variables at a given point in time by obtaining information that describes the existing phenomenon by asking individuals or groups about their perceptions, attitudes, behaviors or values (Sekaran, 2006; Kothari, 2004). Descriptive design was appropriate for this study because the researcher wanted to study how the independent variable the farmer groups' capacity influences the dependent variable, ability to advocate for government agricultural services in Khwisero Sub County.

Qualitative research methods were employed to collect data from the target population in relation to dependent and independent variables. Quantitative methods were used to analyze the data gathered from the field.

3.3 Target Population

A target population is the larger group of individuals, objects or items from which samples are taken for measurements and the findings are generalized (Oso& Onen2008). The target population for this study was the 3630 farmers belonging to 242 SHFGs registered with MGCSS in Khwisero Sub County. Due to information limitation the researcher assumed every group had 15 members. According to information obtained from MOA and MGSS (2013), all the SHGs are comprised of 15 -20 members. Although the ministries had the list of the SHFGs members, the information had not been analyzed hence they could not provide the exact membership in each group. Moreover, it was difficult for the researcher to contact every group to get the information due to constrain

of time, money and expansiveness of the area. Consequently the target population was obtained as follows:

$$N = N_i \times n_i$$

Where

N = target population

N_i = the total number of SHFGs in Khwisero sub county

n_i = number of farmers in each group (15)

Therefore $N = 242 \times 15 = 3,630$ farmers

3.4 Sample Size and Sampling Techniques

Sampling is a process of selecting a sufficient number of elements from the population for the purpose of determining their properties or characteristics and generalizing the findings to the whole population ((Sekaran, 2008).

3.4.1 Sample size

A Sample size refers to the number of items to be selected for observation in order to obtain accurate information on the universe (Sekaran, 2008; Oso and Onen 2008).The sample should be optimum, not excessively large or too small. An optimum sample is the one which fulfills the requirements of efficiency, representativeness, reliability and flexibility (Kothari, 2004). It should be economical in terms of time, money and the findings should be generalized to the entire universe. The target population was 3,630 farmers in the study area. The sample size was drawn from the target population by reading across the Krejcie and Morgan's'(1970) table for determining sample size 5% margin error, (95% confidence level). The sample size for a population of 3,630 was 351 farmers.

Note: Target population (N) =3630

Sample size (S) = 351

The researcher also interviewed three government extension staff, and the County director for agriculture.

3.4.2 Sampling techniques

This study adopted multistage cluster sampling in which sampling was done in stages using smaller and smaller convenient clusters at each stage. In the first stage area cluster sampling was used in which the study area was divided according to locations/strata namely: Kisa South, Mulwanda, Kisa West, Kisa North, Eshirombe, Kisa East and Kisa Central. Out of the seven strata, four were randomly selected for sampling. The selected locations were Kisa North, Kisa Central, Kisa South and Kisa west. The second stage employed proportionate stratified sampling (PSS) to ensure the desired representation of the various subgroups was achieved. 20% of the groups from each sampled stratum were drawn to determine the number of SHFGs to be targeted. The targeted number of groups (SHFG) in each selected stratum was given by:-

$$Y_i = 20\% \text{ of } X_i$$

Where X_i = Number of groups in a given stratum/location ($i = 1, 2, 3, 4$)

Y_i = Target number of groups in a given stratum ($i = 1, 2, 3, 4$)

From the table 3.1 a total of 31 FGs were targeted. The third stage adopted Simple random sampling to select the required number of individual farmers in each target group. The number of farmers to be drawn from each FG (F_i) was determined by the following formula:

$$F_i = \frac{S}{\Sigma Y_i}$$

Where S = sample size (351)

ΣY_i = Total number of targeted groups in all selected strata = 31

$$F_i = \frac{351}{31} = 11.32$$

The results were presented in the table 3.1.

Table 3.1: List of the targeted groups and farmers in each sample strata

Selected Location/ Stratum	# of groups per stratum (X_i)	Target groups per stratum $Y_i = 20\%$ of X_i	# farmers selected per stratum (F_i)
1. Kisa South	48	10	113
2. Kisa West	35	7	79
3. Kisa North	38	8	91
4. Kisa Central	28	6	68
Total	$\Sigma X_i = 127$	$\Sigma Y_i = 31$	$S = \Sigma F_i 351$

Finally, Purposive sampling was used to identify the key informants and the groups for FGDs. The FGDs were contacted in Kisa central, Kisa north and kisa south. Key informant interviews targeted the county director for agric, DAO, DLPO and a chief

3.5 Data collection instruments

Secondary data was gathered from the published books, Government publications, internet materials, magazines, empirical studies and journals. Primary data was obtained by use of interview guides and questionnaires which were reviewed by university supervisors. Primary data was collected using questionnaires, in depth interviews and documentary check list or an observation guide. Cohen *et a l* (2000) noted that use of more than one instrument enhanced triangulation (validity and reliability of data collected).

a) Questionnaires

The questionnaire constituted both open and closed questions. The former that allow the respondent to provide information without any format and latter that require the respondents to choose between a set of alternatives provided. Self administered questionnaires were availed to literate respondents, illiterate and semi illiterate respondent were assisted.

b) Interview guides

Koul (1972, 171), maintains that interview is the process or interaction in which the subject or interviewee give the needed information verbally in face to face situations. The

researcher administered interviews to the key informants who included the County Director for Agriculture, chief, two Agricultural officers, and a successful farmer.

c) Observation guides

Gall & Borg (1996:344) noted that observation techniques provide more complete description of phenomenon than would be possible by just referring to interview statements. Observation guide was used to verify the data and provide more insights about the situation on the ground. Among things to be observed were the group documents and records such as registration certificates, constitution, and financial records.

d) Focused group discussions

Focused Group Discussions (FGDs) were used as an exploratory tool to discover people's thoughts, perception and feelings in relation to farmers and FGs characteristic. FGD guide were comprised of open ended question and the participants were guided by a moderator who introduced the topics and questions for discussion. Three FGDs were carried out in Kisa Central, Kisa North and Kisa South.

3.5.1 Pilot testing

Mugenda and Mugenda (2003) argue that a pre-testing or pilot testing sample should be between 1% and 10 % of the sample size. In this case questionnaires were administered to 20 farmers in neighboring Kakamega Central one month before data collection exercise. This was adequate representation of the 351 farmers sampled. Pilot testing sought to establish the validity, reliability and ethical appropriateness of the research tools. The data gathered was analyzed and results discussed with the supervisor. Ambiguous and unclear questions were amended for the purpose of generating accurate response.

3.5.2 Validity of the instruments

Validity is the degree to which an instrument measures what the researcher intends to measure (Nachmias and Nachimias, 1996). It is the extent to which the results obtained from analysis of data, actually represents the phenomenon under study. Validity of

instruments is critical in all forms of researches and the acceptable level depends on logical reasoning, experience and professionalism of the researcher (UNESCO, 2004).

A pilot test was conducted before the actual data collection commences to ensure validity of the research tools. To achieve Face and content validity the research instrument were reviewed by the university supervisors to verify their appropriateness to address the objectives of the study. Content validity was attained by selecting a representative sample from the target population as explained earlier and ensuring all the study variables are investigated.

3.5.3 Reliability of the instruments

Reliability is the degree of consistency and stability that the instrument or procedure demonstrates. It also refers to the ability of a research instrument to yield the same results after trial or on other occasions even when used by other researchers (Sekaran, 2006). Poor reliability degrades the precision of a single measurement and reduces the ability to track changes in measurements in experimental studies. In order to be valid, a test must be reliable but reliability does not guarantee validity.

Stability of the instrument was determined through a test-re-test reliability. A questionnaire was administered to 20 farmers during pilot testing in Kakamega central and the procedure repeated after one month. The correlation between the scores obtained at the two different times were calculated and analyzed. The higher the correlation, the better the test re test reliability and so is the stability of the measure across time. Split-Half reliability was used to examine the consistency of the instruments. The respondents were divided into two halves and correlation between the two halves was determined by calculating the Karl Pearson's coefficient of variation using the formula below.

$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 - \sum (y_i - \bar{y})^2}}$$

where r = Pearson's coefficient of correlation

x_i = inth value of x variable

\bar{x} = mean of x

Y_i = inth value of y variable

\bar{y} = Mean of y

r lies between + or - 1. Positive values of r indicates a positive correlation between two halves while negative values will indicate negative correlation. A zero value of r indicates that no association between the two halves. Value of $r=0.989$ was obtained meaning the instruments were consistent and reliable,

Pearson correlation is suitable for two tests and it is not affected by shift in mean on retest.

3.6 Data collection procedures

The researcher obtained an introduction letter from University of Nairobi to the National Council for Science and Technology (NCST) for a research permit to collect primary data. The study utilized both qualitative and quantitative data from primary and secondary sources. An extensive literature review was carried out to obtain the secondary data, demographic and institutional aspects of the study area. Primary data was collected by the researcher and the research assistants. Four research assistants were recruited locally and trained on data collection procedures. A sensitization brief with all relevant leaders in the area was conducted before the commencement of the study.

The respondents were indentified, sensitized on need to participate and their consent sought. The research assistants booked appointments with the FGs planed visits during their groups meetings or at their farms since it was a planting season. Questionnaires were administered to the respondents to fill and illiterate ones assisted by the research assistants. FGDs were conducted by the researcher assisted by the research assistants at the sampled group meeting place. The government key informant interviews were also conducted by the researcher. The data was collected within seven days.

3.7 Data analysis techniques

The data collected was analyzed using computer software known as SPSS version 22. Both qualitative and quantitative data was scored, edited, coded, categorized and entered into a computer. Descriptive analysis was done to produce frequencies, percentages, mean, and standard deviation to provide statistics that described the basic features of the data of the study. The data collected using 5-pointer rikert scale to measure the group

cohesion and group conflict resolution was analyzed by calculating the mean and standard deviation. The arithmetic means of all group aspects rated were computed to determine the level of group cohesion and conflict resolution. Further statistical analyses were carried out using Chi square (X^2) at 95% confidence level and multiple regressions to determine the relationship between the variables under study. The results were presented using tables where possible, discussed and recommendations and conclusion drawn in line with the research findings.

Content analysis was used for open ended questions in questionnaires for interviews and FGDs. Thematic analysis which involved counting instances of particular occurrences, of anything of interest and assigning of codes to form as a basis to quantitative analysis was used. Using this method the researcher systematically worked through each transcript assigning codes to words specific to characteristics within the variables. The researcher looked at instances where the data mentioned indicators (which were used as codes) under the variables of the study. It also helped the researcher quantify the answers, since it was possible to count the frequency of specific codes. This technique was also used to extract quantitative data from qualitative data through the quasi-statistics which basically looked at the number of times something or category came up. Codes were based on themes, topics, ideas, concepts, terms, phrases or key words found in the data gathered during the study.

3.8 Ethical considerations

Ethical considerations such as voluntary participation and privacy were upheld during this study. The respondent consent was sought and an explanation about the objectives of the study provided by the research assistants and the researcher. All the data provided was confidential and used for the right purpose only.

3.9 Operationalization of Variables

Table 3.2 shows the operationalization of variables. The independent variables namely rules size of the group, Type of farmer organization, farmer group financial status and the level of farmer empowerment, indicator and the measurement scale that will be used to measure the variables and data analysis techniques.

Table 3.2: operationalization of variables

Research Objectives	Variables	Indicators	Measure	Measur ement scale	Data analysis technique
To determine how size and status of farmer groups influence their ability to advocate for government agricultural services in Khwisero Sub County	Independent variable -Size and status of the group	-Number of group members - Number of years since FGs formation -Bank account	-Number of farmers in a group -Number of years since group was formed -presence of bank account	Nominal Ratio Interval	Descriptive Thematic analysis
Examine the extent to which the farmer group management skills influence their ability to advocate for government agricultural services in Khwisero Sub County	Independent variable -Group management	-Type of Leadership style -presence of roles and norms -Group activities -Level of cohesion -Conflict resolution	- type of leadership adopted -leadership skills -number and kind of activities done by a group -group cohesion index -conflicts resolution index	Nominal Ordinal scale	Descriptive Thematic analysis
Investigate whether the financial status of famer groups influence their ability to advocate for government agricultural services in Khwisero Sub County	Independent variable -Financial status of a group	-Asset ownership -Source of income - group savings -financial mobilization skills -Monthly member contribution	- Different kind of assets owned by the group - group savings - different sources of group income -Number of farmers with proposal writing skills	ordinal Interval Nominal	Descriptive Thematic analysis
Establish the level at	Independent		-Number of	Nominal	Descriptive

which farmer empowerment influence their ability to advocate for government agricultural services in Khwisero Sub County	t variable -Level of farmer empowerment	-Number of farmer with agricultural training -number of farmers trained on Advocacy skills	farmers trainings with agric training -Number of farmers with Advocacy training		Thematic analysis
	dependent variable Advocated government agricultural services -extension services -Marketing - Agricultural inputs -Technology	-Number of farmers seeking government agricultural services -Number of services sought -Availability -timeliness -adequacy -Affordability -usefulness	Number/percentage of farmers seeking for government agric services	Ratio nominal	Chi square Correlation analysis Use of frequency tables and percentages regression

CHAPTER FOUR
DATA ANALYSIS, PRESENTATION, INTERPRETATION AND
DISCUSSION

4.1 Introduction

This chapter presents the research findings that were revealed after data analysis, interpretations, presentation and discussion. The chapter is organized into research objectives guided by research questions. The purpose of data analysis and interpretation was to determine how the presupposed FGs characteristics such as size and status of the group, Group management, financial status of the farmer group and the level of farmer empowerment influence their ability to advocate for government agricultural services in Khwisero Sub County.

4.2 Questionnaire Return Rate

The study targeted 351 farmers drawn from 31 FGs in Khwisero Sub County. A total of 351 questionnaires were filled by the sampled farmers but only 328 were completely and adequately filled to be analyzed. The questionnaire rate of return (QRR) was calculated by dividing the number of farmers who adequately completed a questionnaire with the total number of participants who were asked to participate.

$$\begin{array}{l} \text{Questionnaire Return} \\ \text{Rate (QRR)} = \end{array} \quad \frac{\text{Number of valid responses}}{\text{Total number approached}} = \frac{328}{351} = 93.5\%$$

This QRR was achieved by training the research assistants, providing additional questionnaires and reviewing all the completed questionnaires with the respondent. Groups sampled were also mobilized at central places and given adequate notice for the members to adjust their schedules and attend the meetings. The data collection team set specific dates to visit each location as a group and this hastened the exercise. The researcher introduced the agenda of the meeting and assigned each assistant a role such as distributing the questionnaires, conducting interviews for illiterate respondents, attending to respondents questions and reviewing of completed questionnaires.

4.3 Background information of the respondents

This section gives a summary of the demographic characteristics of individual respondents, such as age, gender, marital status, education level and monthly income. These factors were deemed important in this study because they play a vital role in determining the likelihood of a respondent joining a group, and accessing government agricultural services.

4.3.1 Distribution of the respondents by gender

The gender of the respondent was identified as an important intervening variable able to influence the farmers choice of group .To establish if such relationship existed, all respondents were asked to indicate their gender and their responses were presented in table 4.1.

Table 4.1 Gender of the respondents

Gender category	Frequency	percentage
Female	268	81.7
Male	60	18.3
Total	328	100

Over 268 (80%) of the respondents were females and 60(18%) males. This implies that majority of FGs are composed of females than men. Many studies in Kenya have shown that about 80% of farmers are women who practice small scale farming and majority belong to SHG compared to men (Vision, 2030; AAIK, 2012). These findings tallies with those of Mbuki (2013) which established that only 15% of men were members of SHGs. Similar studies carried out by (Gugerty & Kremer, 2000) indicated that only 20% of SHGs members are men. Gender of a participant in some cases determined the group to belong to. Some groups were comprised of purely youthful males and majority purely women although some FGs had members of either gender. This was interpreted to mean that gender has an intervening effect on a farmer's choice of group.

4.3.2 Distribution of the respondents by age

In this study it was necessary to investigate the composition of the sampled farmers as per age. Although the minimum age limit of joining a SHG in Kenya is 18 years, the age of a person may determine the kind of group to join and whether to seek for government agricultural services or not. To do this, respondents were asked to indicate their age and their responses were presented in table 4.2.

Table 4.2: Distribution of the respondents by age

Age bracket	Frequency	Percentage%
18-25	20	6.1
26-30	48	14.6
31-35	44	13.6
36-40	65	19.8
41-50	85	25.9
Above 51	66	20.1
Total	328	100

The age of the respondents ranged between 18 and 51 years and above. About 112 (34.1%) of the respondents were aged between 18-35 years. Majority of the respondents 151 (46%) were above 41 years of age. These results indicate that about 34.1 % of farmers are youthful with majority in their middle age and above. These findings are consistent with similar studied on beekeeping and performance of CIGs that showed that the average age of a farmers in Mwingi District and Gilgil was 48.5 years and 40 years and above respectively (Musyoka, 2008; Machuki, 2013).

Further data analysis that involved a cross tabulation of gender and age of the respondents revealed that out of 60 male respondents 34 were above 36 years and above. Out of 34 males about 15 were aged between 41-50 years. These findings do not agree with those of Mbuki (2013) in her study on factors influencing participation of men in anti-poverty self-help groups in Dagoretti, Nairobi that found out that no men aged above 31 years and above belonged to welfare group and concluded that age has an intervening

effect on men participation in SHG. However, the researcher recognizes the fact that age of a farmer influenced the choice of a group to belong to. Most of the groups were comprised of people of the same age for example the youth even if married tended to belong to youth groups.

4.3.3 Distribution of the respondents by marital status

For this study, marital status was identified as a factor that could influence a respondent's choice of group. To investigate this, all the respondents were asked to indicate their marital status and the results were shown in table 4.3.

Table 4.3: Distribution of the respondents by marital status

Marital status	Frequency	Percentage%
Single	13	4
Married	291	88.7
Widowed	24	7.3
Total	328	100

Majority of the respondents 291 (88.7%) were married, singles were 13 (4 %) and the widowed formed 24(7.3 %). These findings are comparable to those of Mbuki(2013) that found out that 90% of the respondents in SHGs were married and 10% widowed implying that single respondents did not belong to SHGs. It was inferred that family life which comes with increased responsibilities and expectations influence farmers to join FGs. The findings are further consistent with those of Davis *et al* (2010) found that married individuals were more likely to be members of a farmer group as compared to unmarried individuals.

4.3.4 Distribution of the respondents' education level

The researcher found it necessary to establish the education level of all the sampled farmers to determine whether they had any impact on farmer's choice of a group. The respondents indicated their education level as shown in table 4.4

Table 4.4: Respondents' education level

Education level	Frequency	Percentage %
None	19	5.8
Primary	188	57.3
Secondary	101	30.8
College	20	6.1
Total	328	100

The data analyzed revealed that majority of the farmers 188(57.3%) had only primary school education. Those who had attained secondary education were 101 (30.8%). The respondents with college education were 20(6.1%) while those with no education at all were the minority at 19(5.8%). These findings are comparable to those of beekeeping studies in Mwingi where 54.5% of farmers had primary education. The results are further consistent with a study on CIG performance in Gilgil Naivasha that showed that 3.3% of farmers had post secondary school education. From these findings it can be deduced that an increase in education level increases the likelihood of a farmer to join a group. Education is important in advocating for policy reforms and accessing agricultural services such as training, agricultural inputs, access to information and technology. The mix of farmers with different level of education is crucial in group management since different roles require certain knowledge and skills.

4.3.5 Distribution of respondents' monthly income

To know the amount of money the farmers earn in a month, the researcher asked them to indicate their monthly income from all sources such as farming activities, businesses and remittances from spouses, children and gifts. The results are presented in table 4.5

Table 4.5: Respondents monthly income

Income level	Frequency	percentage
Less than 1000	0	0
1001-2000	61	18.6
2001-4000	89	27.1
4001-6000	86	26.2
6001- 8000	43	13.1
8000- 10,000	15	4.6
10000-15,000	18	5.5
Above15, 000	16	4.9
Total	328	100

Table 4.5 shows that 267 (81.4 %) of the farmers get a monthly income of above Khs 2000. Those earning above Khs10, 000 were 34(10.4 %) and only 61(18.6%) farmers earned an income in the range of Khs 1001- Khs 2000. There were no farmers earning less than Khs 1000 per month. This result implies that farmers earning an income of less than Khs 1000 per month do not join FGS due to inability to meet the requirements such as group contribution. It can also be inferred that an increase in income increases the likelihood of a farmer joining a FG. Income level determines the level of poverty in a household and access to services and factors of production.

The research findings emanating from the background information of the respondents are consistent to those of Adongo et al (2012) on what factors determine membership to farmer groups in Uganda which identified education levels of the household head, marital status, age, gender, household size, farm size and regulations as some of the potential factors that would influence the decision of households or individual to participate in farmer groups.

4.4 Influence of size and status of farmer group on their ability to advocate for government agricultural services

The purpose of this study was to determine whether farmer groups capacity influence their ability to advocate for government agricultural services. For this to be achieved, the farmer group capacity was broken down into four variables namely- size and status of farmer group, group management skills, financial status of a farmer group and the level of farmer empowerment. The respondents were presented with questions addressing the entire variables.

4.4.1: Number of years the farmer groups have been in existence

All the respondents indicated that their groups were registered with MGCSS. They had a constitution that stipulated the roles of group leaders such as the chairperson, treasurer, secretary and the members. The respondents indicated the age of their groups and the results were cross tabulated with advocated agricultural and presented in table 4.6.

Table 4.6: Number of years the FGs have been in existence

Years	Advocated government agricultural services				Total	%
	Yes	%	No	%		
< Than 2 years	9	2.8	92	28	101	30.8
2-4 years	11	3.4	29	8.8	40	12.2
5-7 years	21	6.4	52	15.9	73	22.3
8-10 years	5	1.5	41	12.5	46	14
11-12 years	6	1.8	8	2.5	14	4.3
13-15 years	5	1.5	20	6.1	25	7.6
Over15 years	9	2.7	20	6.1	29	8.8
Total	66	20.1	262	79.9	328	100

R=0.338 R2=0.114 P=0.063 α =0.01

According to the finding 101 (30.8%) of the group were less than 2 years old. About 10(34.7%) of groups had been in existence for more than seven years. The result further reveals that only 66(20.1%) farmers had sought for agricultural services and 262(79.9%) had not. This means that only six groups out of 31 sampled had sought for agricultural services. The value of R=0.338, p=0.063 means that the FGs that have been in existence

for longer had sought more services compared to those at formative stages. $R^2 = 0.114$ means group age (years) accounts for 11.4% variations in advocated agricultural services. These results were also noted by Machuki(2013) in his study on performance of CIGs in Gilgil Naivasha that established that 56.3% of the group had been in existence for less than 6 years and about 19.4% of groups were above 10 years of age.

4.4.2 Group size

For researcher to determine the size of the respondents group all the sampled farmers were requested to indicate the total number of their group members. The group membership ranged between 10-30 people. The results were cross tabulated with number of farmers who had sought agricultural services as shown in table 4.7.

Table 4.7 cross tabulation of group size and advocated government agricultural services

Group members	Advocated government agricultural services				Total	%
	yes	%	No	%		
10-12	12	3.7	29	8.8	41	12.5
13-15	17	5.2	92	28	109	33.2
16-18	10	3.1	45	13.7	55	16.8
19-20	15	4.6	23	7	38	11.6
21-25	11	3.4	54	16.4	65	19.8
26-30	1	0.3	19	5.8	20	6.1
Total	66	20.3	262	79.7	328	100

R=0.43 R² = 0.1849 p=0.442 α =0.01

Group with between 10-12 members were 5(12.3%) and only 12 farmers had sought agricultural services. About 11(33.2%) FGs had between 13-15 members constituting of 109 respondents. In this category, only 17 farmers had sought for agricultural services and 92 had not. About 8 groups had members ranging between 16-20 accounting for 93(28.4%) of the sampled farmers. In this category, only 25 farmers had sought for agricultural services and 68 had not. About 7 groups had a membership between 21-30 farmers making a total of 85(25.9%) respondents. In this membership bracket only 12 farmers had sought for agricultural services while 73 had not.

The Pearson correlation (R) of these two variables was 0.43 at $\alpha = 0.01$. This means that the group size and number of services sought are fairly related. The value of $R^2 = 0.1859$ means that the group membership accounts for 18.5% of variations in all advocated agricultural services. Therefore an increase in group size, leads to an increase in advocated government agricultural services.

4.4.3 Bank accounts

Respondents indicated their FGs bank account availability as shown in table 4.8

Table 4.8: cross tabulation of group bank account and agricultural services sought

	Number of farmers who sought agric services					
	Yes	%	No	%	Total	%
Bank account	62	18.9	188	57.3	250	76.2
No bank account	4	1.2	74	22.6	78	23.8
Total	66	20.1	262	79.9	328	100

R=0.310 R²= 0.96 P=0.89

Majority of the respondent 250 (76.2%) indicated that their groups had bank accounts and those without were 78(23.8 %). Out of 250(76.2%) of farmers whose groups had bank account, only 62 had sought for agricultural services and 188 had not. Also out of 78(23.8%) farmers whose groups did not have bank account about 4(1.2%) had sought for agricultural services and 74(22.6%) had not. There was a weaker $R=0.310$, $P=0.89$ between the two variables. Therefore presence of bank account increases the likelihood for FGs to advocate for agricultural services.

4.5 Influence of farmer groups management on their ability to advocate for government agricultural services.

To answer the second research question that sought to determine the extent to which farmer group management influences its ability to advocate for government agricultural services, the sampled farmers were asked to indicate their group leadership style, how the leaders are chosen, group activities and rate their group cohesion and conflict resolution in a 5 -point likert rater scale.

4.5.1 Group leadership style

All the respondents indicated that their group adopted democratic kind of leadership. This implied that leadership style did not have any influence on farmers' ability to seek for government agricultural services. The procedure of choosing leadership varied from one group to another as shown in table 4.9.

Table 4.9: FGs procedure of choosing leaders

Leadership procedure	Frequency	percentage %
Elected	266	81.1
Nominated by the group	62	18.9
Total	328	100.0

The results in table 4.9 shows that 266(81.1 %) of all respondents elect their leaders while 62(18.9%) nominate them. This was interpreted to mean that 266(81.1%) of FGs do elections and 62(18.9%) choose their leaders by discussing and reaching consensus on members to take up various leadership position. There was no evidence at $\alpha = 0.01$ to suggest that the procedure of choosing leadership influence FGs ability to seek for agricultural services

4.5.2 Group leadership skills

The sampled farmers were asked to indicate whether their group leaders had the necessary skills to execute their mandates. The results are shown in table 4.10.

Table 4.10: cross tabulation group leadership skills and advocated agriculture services

Response	Advocated government agric services					
	Yes	%	No	%	Total	%
Groups with leadership skills	63	19.2	254	77.4	317	96.6
Groups with no leadership skills	3	0.9	8	2.5	11	3.4

$$R = -0.33 \quad R^2 = 0.1089 \quad \alpha = 0.01$$

About 317 (96.6%) of respondents were confident that their group leaders had the necessary leadership skills while 11(3.4 %) indicated their leaders needed to be trained.

The value of $R = -0.33$ shows that groups with leadership skills had advocated for more services compared to those groups without leadership skills. This implies that leadership skills influence the likelihood of a group to advocate for agricultural services. The more skilled a group is the more the advocated services and the less skilled a group is the less the advocated services. $R^2 = 0.1089$ means leadership skills accounts for 11% of variations in government advocated services.

This question was succeeded by an open ended question that required respondent to explain why they thought their leaders lacked management skills. A range of reasons were provided such as poor record keeping, lack of group management training and poor or lack of accountability and transparency mechanism. The FGDs respondents recommended training such as leaderships, proposal writing, agricultural technologies, financial management and governance.

About 257 (78.4%) respondents indicated that their group membership was open to all community members as long as they met all the groups requirements whereas 71(21.6 %) had closed membership. The respondent attributed their closed membership to the need to have shared goals, commitment in group activities, easy and effectiveness of managing small groups and the purpose of establishing the group such as business, and gender. Most of the groups were composed of purely women and men were not allowed to join. Others were purely young men although some had members of either gender. The findings further revealed that 94.8 % of the FGs had mission and vision and only 5.2 % did not have.

The entire respondents indicated that their groups had norms and roles which have been agreed upon by all members and written in their constitution. According to one female member of Wikhonye women group, they have group rules such as respecting other people's opinions, no disclosure of group secrets, not attending or going late for group meetings late attracts a fine and in case of group separation the membership fee is not refunded. During the FGDs a chairlady of a group explained that 'in our group a member has to apply for separation from the group after which a meeting is convened to discuss

the matter. Once a decision has been reached, the separating member is refunded a percentage of group contribution''. These findings are comparable to those of Muasya (2013) that revealed the same rules applied to women SHGs in Pumwani, Nairobi. About 308(93.9%) of respondents indicated that they had benefitted from their groups and 6.1 % had not.

4.5.3 Group activities

To know the kind of activities performed by the various groups, all the respondents were requested to write them down and the results were presented in a table. Different groups were engaged in more than two activities

Table 4.11: List of group activities

Activities	Frequency	Percentage %
Merry go round	280	85.4
Table banking	228	69.5
Business	168	51.2
Poultry farming	141	43.0
Crop farming	55	16.8
Vegetable farming	54	16.5
Livestock	48	14.6
Dairy farming	36	11
Apiculture	20	6.1
Aquaculture	11	3.4

R=0.202 R2=0.041 P=0 α =0.01

Table 4.11 show that 280(85%) of the respondents were engaged in merry go round. The group members usually agree on amount to be contributed by each member and the money is given to members on rotational basis. Majority of the farmers use the money to meet their basic needs such as buying food. About 228(69.5%) indicated they do table banking, 168(51.2%) business, 141(43%) poultry farming, 54(16.5 %) vegetable growing and 55(16.8%)crop farming. The crops grown by the farmers were soya, ground nuts, Irish potatoes, sweat potatoes, and tissue culture bananas. A further 14.6%% of the respondents were practicing small livestock keeping such a goats (5.8%), sheep (5.5%) and pig (3.4%). Only 11% of the farmers were doing dairy farming. Apiculture and

aquaculture was being done by 6.1 % and 3.4% of the respondents respectively. Across tabulation of group activities and advocated services revealed that there was a weak $R=0.202$ and $R^2=0.041$ relationship between this variables and the predictor (group activities) accounted for only 4.1% of variations in advocated agric services.

About 168(52.1%) of respondents indicated they were practicing different kinds of small businesses as shown in table 4.12.

Table 4.12: kinds of business done by FGs

Business Type	Frequency	Percentages %
Fodder	40	12.2
Chairs/tents for hire	37	11.3
Cereal trading	26	7.9
Catering	22	6.7
Vegetable	13	4.0
Utensils for hiring	10	3.0
Beadwork	11	3.4
Selling of chicks	9	2.7
Total	168	51.2

Fodder planting and selling was the most popular business at 12.2%. About 11.3% of the respondents were doing Chairs /tents hire. Others were doing catering 6.7%, utensils for hire 3%, beadwork 3.4 and selling of chicks 2.7%.The FG selling chicks had a hatchery and a generator that enabled them to supply local and hybrid chicks to the market throughout the year. The FGDs revealed that the choice of group activities is determined by market and demand of different goods, customers taste and preferences, availability of income, returns on investment, nutritional requirements, season and climatic changes.

4.5.4 Group cohesion:

To establish the level of cohesion among farmer group members, all the sampled respondents were asked to rate their group aspects shown in table 4.12 in a 1-5 point likert rater scale. The numerical values in ascending order ranged from 1-to-5 with decreasing strength of their level of agreement as follows:-

Very high-1; High -2; Fair -3; Low-4 and very low -5. Group cohesion index (GCI) was the arithmetic or average mean of cohesion indices of the all farmer aspects rated as shown in table 4.11. The mean and the standard deviations were computed using SPSS version 22.

Table 4.13: Group cohesion

Group aspects	Mean(\bar{x})	Standard deviation
Meetings attendance	2.07	0.742
Level of participation in decision making	2.03	0.755
Level of openness in sharing ideas	2.12	0.787
Farmer commitment in group activities	2.19	0.813
Level of personal relationship	1.98	0.746
Level of sharing ideas	1.95	0.777
Members group contribution	1.98	0.897

The fact that the mean values of meeting attendance was 2.07 and a SD of 0.742 ; the level of participation in decision making 2.03, level of openness in sharing ideas 2.12 and farmer commitment in group activities 2.19, it was interpreted as to denote that most of the respondents agreed all these group aspects were high. The mean values of level of participation, level of sharing ideas and member contribution ranged between 1.95 and 1.98. Since this range is close to 2 this meant the respondents had agreed that those group aspects were high. The standard deviation result reveals that there was no significant variability in respondents' responses.

$$GCI = \frac{2.07 + 2.03 + 2.12 + 2.19 + 1.98 + 1.95 + 1.98}{7} = 2.08$$

The arithmetic mean of 2.08 indicates that the group cohesion was high. Spearman correlation value of $\rho = 0.86$ shows a strong relationship between GCI and advocated agricultural services.

4.5.5 Conflict resolution

The respondents were requested to rate some group aspects in relation to conflict resolution as shown in table 4. 13. A 5-point likert scale was used whose numerical

values in ascending order ranged from 1-to-5 with increasing strength of their level of agreement as indicated by strongly disagree-1; agreed-2; neither agree nor disagree -3; agree-4 and strongly disagree-5. The groups conflict resolution index (GCRI) was the average mean of all the rated group aspects. The mean and SD were calculated using SPSS version.

Table 4.14: Group conflict resolution

Group aspects	Mean (\bar{x})	Standard deviation (SD)
Group members talk easily about conflict	3.96	0.607
Laid down procedures to solve conflict	4.06	0.628
Members respect decisions reached out of conflicts	4.16	0.579
Elections conflicts are solved as per constitution	4.15	0.718

The mean value of 3.96 denotes that most of the respondents agreed that their group member talk easily about conflict in their group. The mean values of between 4.06 and 4.15 indicates that most of the sampled farmers strongly agreed their groups had a laid down procedure of solving conflicts, the members respect decision reached out of conflict resolution and elections conflicts are solved as per constitution.

$$GCRI = \frac{3.96 + 4.04 + 4.16 + 4.15}{4} = 4.08$$

The average mean of 4.08 indicates that the conflict resolution in the groups was very high. This method of determining GCRI and GCI was also used by Machuki,(2012) to determine the same aspect among CIGs in Gilgil, Naivasha . Pearson correlation of conflict resolution and advocated agricultural services revealed that $R = -1.56$. This was interpreted to mean the level of group conflict resolution had a negative effect on advocated agricultural services.

4.6 Influence of financial status of farmer groups on their ability to advocate for government agricultural services

To answer the third research question that sought to establish whether financial status of FGs influence their ability to advocate for government agricultural services. All the

sampled farmers were asked to respond to questions in relation to their group financial status such as ownership of assets, source of money and financial mobilization capacity.

4.6.1 Assets ownership

Table 4.15: Cross tabulation of assets ownership and advocated agricultural services

Assets	Advocated government agric Services					
	Yes	%	No	%	Total	%
Own assets	43	13.1	92	28.1	135	42.2
Don't own assets	23	7.0	170	51.8	193	58.8
Phi =0.245		R= 0.245	p=0	α =0.01		

Out of 328 respondents, about 135 (42.2%) indicated they owned assets valued above KShs 2000. Out of 135 respondents who indicated they own assets, 43(13.1%) had sought for agricultural services and 92(28.1%) had not. About 23(7%) of farmers without assets had sought for agricultural services. Although the findings shows a weaker Phi=0.245 relationship between ownership of assets and the number of advocated agricultural services. Asset ownership accounted for 24.5% of advocated services. The results imply that an increase in FGs asset ownership increases their ability to seek for government agricultural services.

Table 4.16: FGS assets

Kind of assets	Frequency	Percentage %
Catering utensils	44	13.4
Dairy cows	27	8.2
Goats	20	6.1
Beehives	11	3.4
Tents and chairs	10	3.0
Hatchery and generator	9	2.7
Sheep	8	2.4
Knapsack sprayer	6	1.8
Total	135	41.2

Majority of the respondents (13.4%) indicated that they have catering utensils for hiring out during events. A further 8.2% had dairy cows, 3.4% goats, 6.1% beehives, 3.4% tents and chairs, 3% hatchery and a generator, 2.7% sheep and 1.8%knapsack sprayer. Based

on the different kinds of the assets the FGDs revealed that they are allowed to use the dairy cows as collateral to access loans.

4.6.2 SHGs sources of Income

The respondents were asked to indicate all their sources of group income from a list and the results were presented in a table 4.17.

Table 4.17: FGs sources of Income

Source of group income	Advocated government agricultural services		
	Yes	no	Total
Group members	29	172	201
Group members and enterprises	15	57	72
Group members, enterprises and donors	10	13	23
Group members and donors	4	2	6
Group members and government	7	2	9
Group members, donors and government	1	16	17
Total	66	262	328

R=0.183 R²=0.033 α =0.01 P=0

About 201 (61.3%) of the respondents indicated they derive their incomes from only member contribution. Only 38.7 % of the respondents groups had diversified their sources of funding to include group enterprises, donors (NGOs) and government. The value of R=0.183 indicates a weaker relationship between the FGs sources of income and dependent variable. The result shows that FGs sources of income accounts for only 3.3% of all variations in advocated services. Based on the findings, it was concluded that groups with many sources of funding tend to seek agric services than those with one source. However the groups funded by donor and government tend to seek fewer services. This may be attributed to the fact that donor and government fund comes with training packages that reduces the need to seek for the services.

4.6.3 Frequency of FGS contribution

All the sampled farmers indicated they do contribute towards their group activities. The frequency of contribution differs from group to group.

Table 4.18: Frequency of FGS contributions

Response	Frequency	Percentage (%)
Weekly	7	2.1
Twice per month	10	3.0
Monthly	295	89.9
Whenever the group decides	16	4.9
Total	328	100

The results revealed that 89.9% of respondents were doing their contribution on monthly basis. Those contributing twice per week were 2.1% and weekly 2.1%. About 4.9% of the respondents indicated that they contribute whenever the group decides.

4.6.4 Group contributions

The amount of money contributed differed from one respondent to another and one group to another .The result are presented in a table.

Table 4.19: Amount of money contributed by the group members

Response	Frequency	Percentage
Less than 100	164	50.0
Between 100-500	153	46.6
Between 501-1000	0	0
More than 1000	11	3.4
Total	328	100.0

According to the findings,160(50%) of the farmers were contributing less than Khs 100 per month,153(46.6%) between Khs 100-500 and 11(3.4 %) more than Khs 1000.

4.6.5 Group savings

All the sampled farmers had group saving irrespective of whether they had a bank account or not. The results are shown in table 4.20.

Table 4.20: Cross tabulation of FGs savings and advocated agricultural services.

Group savings	Advocated government agric services					
	Yes	%	No	%	Total	%
Less than 10,000	40	12.2	214	65.2	254	77.4
10,000-20,000	10	3	27	8.2	37	11.3
20001-50000	5	1.6	7	2.1	12	3.7
500001-100000	4	1.2	12	3.7	16	4.9
Above 150,000	7	2.1	2	0.6	9	2.7
Total	66	20.1	262	79.9	328	100

R=0.389 R2=0.151 P=0.031 α =0.01

Most of the respondents 254 (77.4%) indicated that their group savings was less than Khs 10,000. A further 37(11.3%) indicated their saving was between Khs 10,000-Khs 20,000 and 12(3.7%) had between Khs 20,000-Khs 50,000. The farmers with savings between Khs 50,001- Khs 100,000 were 16(4.9%) and only 9 (2.7%) of the farmers had saving above Khs 150,000. The R=0.389 indicates a relationship between the income level of FGs and the number of advocated agricultural services. An increase in income level translates to an increase in farmers seeking government agricultural services this may be attributed to the fact that farmers have to pay for agricultural services.

All the 328 farmers indicated that they keep financial records that are either in custody of the treasurer (34.8%) or secretary (65.2%). The FGDs, 32 respondents revealed the groups kept records such as minute book, cash book, loan book and list of meeting attendance. About 92% of the farmers indicated they are allowed to inspect the group financial records while 8% were not. Record keeping was sighted as a challenge by 3.4% of respondents who indicated that their leaders did not have adequate skill to perform their group roles.

4.6.7 Proposal writing skills

Financial mobilization skills are crucial because they determine whether a farmer group can access external funding such as from the donors and government institutions. Table 4.21 shows the number of respondents with and without proposal writing skills.

Table 4.21: Respondents with Proposal writing skills

Proposal writing skills	Advocated government services					
	Yes	%	No	%	Total	%
Farmers with skills	44	13.4	129	39.3	173	52.7
Farmers without skills	22	6.7	133	40.5	155	47.3
Total	66	20.1	262	78.8	328	100

R=0.140 R²=0.019 P= 0.011 α =0.01

According to the findings, 173(52.7%) of the farmers had proposal writing skills and 155(47.5%) did not have. Out of 173, respondents with proposal skills 44 had advocated for government agricultural services while 129 had not. Only 22 of farmers without proposal training had accessed agricultural services. The value of R=0.140 indicates almost zero relationship between the two variables. The value of R²=0.019 denotes that proposal writing skills accounts for only 1.9% variations in advocated agricultural services. Across tabulation of income sources and proposal writing skills reviewed that all the respondents who indicated to have accessed funding from donors and government had proposal writing skills. This means that an increase in proposal writing skills increases the likelihood of FGs to seek for external funding.

4.7 Influence of farmer empowerment on their ability to advocate for government agricultural services

The fourth research question sought to establish the level at which farmer empowerment influence their ability to advocate for government agricultural services. The sampled farmers were presented with a set of questions to indicate whether they had received agricultural and advocacy training.

4.7.1 Agricultural training

The responses of the sampled farmers on whether they had attended agricultural training were presented in Table 4.22

Table 4.22: Cross tabulation of access of agricultural training and advocated government agricultural services

Response	advocated government agricultural services					
	Yes	%	no	%	Total	%
Agric training	55	16.8	92	28	147	44.8
No agric training	11	3.4	170	51.8	181	55.2
Total	66	20.2	262	79.8	328	100
R=0.389 R2=0.151 α =0.01 P= 0.038						

Out of the 328 respondents, 147(44.8%) had received agricultural training of which 55 had sought for agricultural services while 92 had not. Majority of the sampled farmers 180(55.2%) had no agricultural training .Only 11(3.4) out of 181(55.2%) farmers with no agricultural training had sought for agricultural services. R2=0.151 was interpreted to mean that agricultural training accounts for 15.1% for all variations in advocated government agric services. It was concluded that the more the farmers are trained the more the agricultural services sought. These results do not agrees with those of Muasya (2013) that found out that trainings provided to the women did not influence the success of Women SHGs

Table 4.23: Organizations offering agric training to FGs

Training agency	Frequency	Percentage (%)
Ngo	108	32.9
Ministry of agriculture	20	6.1
Both ministry and NGOs	12	3.7
Neighbor	10	3.0
Total	150	45.7

Most of the farmers 32.9% had been trained by the NGOs. Those trained by the ministry of agriculture were 6.1%. About 3.7% of the farmers received training from both MOA and NGOs and only 3% were trained by their neighbors. The NGOs offering agricultural training were AAIK and One acre fund.

4.7.2 Advocacy training

The respondents indicated whether they had been trained on advocacy and the results were presented in table 4.24.

Table 4.24- cross tabulation of advocacy training and advocated agricultural services

Response	Advocated Agric Services				Total	
	Yes	%	No			
Advocacy training	38	11.7	33	10.1	71	21.8
No advocacy training	28	8.6	226	69.6	254	78.2
Total	66	20.3	259	79.7	325	100

R= 0.437 R²=0.19 α =0.01 p=0

About 71(21.8%) of the sampled farmers had received advocacy training and 254(78.2%) had not. Out of 71 respondents, 38 had advocated for agricultural services and 33 had not. About 28 farmers without advocacy training had advocated for government agric services. According to these results, an increase in number of farmers trained on advocacy leads to an increase in advocated government agricultural services. The value of R² =0.19 implies that 19% of advocated services can be attributed to advocacy training. Advocacy trainings were offered by AAIK. This training is important in creating awareness on right to access services and building capacity of FGs to engage in policy reviews and participate in devolution.

4.8 Advocated government agricultural services

The advocated government agricultural service was the dependent variable of the study. All the respondents were asked to indicate whether they had sought for agricultural services and how many from the government officers in their sub county and the results were presented in table.

Table: 4.25: Number of services sought by the farmers

Response	Frequency	Percentage (%)
0	262	79.9
1	36	11.0
2	8	2.4
3	6	1.8
4	4	1.2
5	12	3.7
Total	328	100.0

According to the findings, majority 262 (79.9%) of the sampled farmers had not sought any agricultural services from the government officers. Only 66 (20.1%) of the respondents had sought agricultural services. Out of the 20.1 % respondents about 11 % had sought only one service and 2.4% two services. The results further reveals that 1.8% and 1.2% of respondents had sought three and four services respectively. It is only 3.7% of sampled farmers who indicated to have sought five agricultural services from the government. The FGDs revealed that farmer do not seek agricultural services due to long distances to the government offices, lack of money to pay for the services and failure to find the officers in their offices. A key informant noted that demand driven policy was not working in the villages and more officers were needed. Key informant interviews revealed that government officers work only with active and successful groups funded by the government and other donors. However the agricultural officers' interviews revealed that most of FGs are project oriented even before they start engaging with them.

The sampled farmer were asked to indicate the kind of agricultural services they had sought from the government officers by choosing from a list that comprised of extension, marketing, training, agricultural inputs and technology. The respondents were further requested to indicate the availability, timeliness, adequacy, affordability and usefulness of the services sought on a nominal scale and the results were presented in

Table 4.26

Table 4.26: Respondents responses on Indicators of agricultural services delivery

Indicator	Extension services		Marketing		Training		Agric inputs		Technology	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Available	25	7.6	15	4.6	24	7.3	52	15.9	13	4
Not available	5	1.5	3	0.9	4	1.2	6	1.8	4	1.2
Timely	17	5.2	12	3.7	17	5.2	45	13.5	12	3.7
Not timely	13	4	6	1.8	11	3.4	13	4	5	1.5
Adequate	15	4.6	12	3.7	21	5.2	45	13.7	11	3.4
Not adequate	15	4.6	6	1.8	6	3.4	13	4	6	1.8
Affordable	16	4.9	13	4	22	6.7	47	14.3	10	3
Not affordable	14	4	5	1.5	6	1.8	11	3.4	7	2.1
Useful	18	5.5	13	4	24	7.3	51	15.5	13	4
Not useful	12	3.7	5	5.5	4	1.2	7	2.1	4	1.2

These results show that 30 farmers advocated for extension services, 15 marketing, 28 training, 58 agricultural inputs and 17 technologies. It is apparent that the agricultural inputs mainly fertilizer was the most sought services. This can be attributed to the government subsidized fertilizer programme in the area. From the results it can be deduced that, availability and provision of a service does not always translate to its usefulness/applicability. The usefulness of an agricultural service is determined by its timeliness, adequacy and affordability.

About 117(35.8%) respondents indicated that they were confident they could advocate for government agricultural services and 210(64.2%) they couldn't. Those who could not advocate for the services cited a need for massive awareness creation to inform the public on the demand driven extension policy and community training on how to engage the government in provision of the services.

According to Key informant interviews, the ability of FGs to advocate for agricultural services depends on factors such as their level of group development/ organization, financing (ability to pay for the services) , farmer empowerment especially education level, attitude, age, crop damage and proximity to government officers. The government officers interviewed noted their major constraints to provision of services to farmer as:- Immobility due to inadequate facilitation, lack of money for recurring costs, and inadequate staff. These problems were said to have been worsened by devolution since the system has taken too long to settle.

4.8 Hypothesis testing

This study had four null hypotheses which were tested using inferential statistics computed such as regression, Pearson correlation computed using SPSS version 22 at confidence level of 99% as provided by the software. Regression and Pearson correlation were used to determine the significance of the hypothesis. The first hypothesis stated that the size and status of farmer groups does not significantly influence their ability to advocate government agricultural services. This hypothesis was tested using a regression analysis of size and the status of the farmer group indicators on dependent variable.

Figure 4.1 regression summary model of size and status of FGS on advocated agricultural services

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.431 ^a	.186	.095	1.482

a. Predictors: (Constant), does your group have ban account, group size, age of group in years

The regression analysis model shows that R (correlation coefficient) was 0.431 and R² (Predictor variation or coefficient of determination) was 0.186. The value of R² =0.186 means that the size and status of FGs can only account for 18.6% of the variation in advocated government agricultural services. Therefore, there must be other variables that accounts for 81.4% of variations in advocated government agricultural services.

Figure 4.2: ANOVA^a of size and status of FGS and dependent variable

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.516	3	4.505	2.051	.130 ^b
	Residual	59.322	27	2.197		
	Total	72.839	30			

a. Dependent Variable: agricultural service

b. Predictors: (Constant), does your group have ban account, group size, age of group in years

From the ANOVA table the value of $P=0.130$ is significant at $p<0.01$. Since the p value of 0.130 is greater than the given level of significance 0.01 the null hypothesis was rejected hence it was concluded that there was evidence at $\alpha =0.01$ to suggest that the size and status of farmer group does influence its ability to advocate for government agricultural services in Khwisero Sub County.

The second study hypothesis stated that the farmer group management does not significantly influence its ability to advocate for government agricultural services. A Chi-square test was used in which Pearson correlation(R) was computed to determine whether there was a significant association between the group cohesion and advocated agricultural services. This gave the magnitude, direction and significance of the postulated influence of $R=0.021$, $R^2= 0$, $P=0.911$ indicating a weaker and significant link between the variables. This hypothesis was further tested using regression analysis of group management and dependent variable as shown in figure 4.3

Figure 4.3 Regression summary of group management on advocated agricultural services

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.392 ^a	.154	.093	1.484

a. Predictors: (Constant), group cohesion index, group activities

A regression of group activities, group cohesion on dependent variable returned a value of $R=0.392$ and $R^2=0.154$ implying that these two predictor factors accounted for 15.4% of all variations in advocated government agricultural services and were significantly related $P=0.097$ as shown by Anova results in figure 4.4

Figure 4.4: ANOVA^a of group management on advocated agricultural services

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.190	2	5.595	2.541	.097 ^b
	Residual	61.649	28	2.202		
	Total	72.839	30			

a. Dependent Variable: agricultural service

b. Predictors: (Constant), group cohesion index, group activities

Since the value of $P=0.97$, the null hypothesis was rejected and it was concluded that there was evidence at $\alpha= 0.01$ from the sampled data to suggest that group management does significantly influence its ability to advocate for agricultural services. The group leadership style did not have any impact on dependent variable.

The third hypothesis stated that financial status of a farmer group does not influence its ability to advocate for government agricultural services in Khwiso Sub County.

Figure 4.5: Model Summary of financial status of FGs on advocated agricultural services

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.516 ^a	.266	.185	1.407

a. Predictors: (Constant), group income, proposal, group assets

From the regression model the value of $R^2=0.266$, was interpreted to mean that the financial status of FGs accounts for only 26.6% of the variations in advocated government agricultural services and there must be other variables that have influence on dependent variable.

Figure 4.6: ANOVA^a of financial status of FGs on advocated agricultural services

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19.395	3	6.465	3.266	.037 ^b
	Residual	53.444	27	1.979		
	Total	72.839	30			

a. Dependent Variable: agricultural service

b. Predictors: (Constant), group income, proposal, group assets

The ANOVA results shows that financial status was significant at $p=0.31$ which is greater than $p<0.01$, so the null hypothesis was rejected and it was conclude that the financial status of FGs influence its ability to advocate for government agricultural services in Khwisero sub county.

The fourth hypothesis stated that the level of farmer empowerment does not significantly influence their ability to advocate for government agricultural services in Khwisero. This hypothesis was tested at 99% confidence level and measured based on whether farmers had attendance advocacy and agric training.

Figure 4.7: Model Summary of farmer empowerment on advocated agricultural services

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.733 ^a	.537	.504	1.097

a. Predictors: (Constant), group empowerment (advocacy and agricultural training)

From the summary model the value of $R=0.733$ indicates a strong relationship between the predictors and dependent variable. The value of $R^2=0.537$, shows that the level of farmer empowerment accounts for only 54% of all variations in advocated services however this factor was not statistically significant as shown in table 4.32.

Figure 4.8: ANOVA^a of farmer empowerment on advocated agricultural services

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	39.148	2	19.574	16.268	.000 ^b
	Residual	33.691	28	1.203		
	Total	72.839	30			

a. Dependent Variable: agricultural service

b. Predictors: (Constant), group empowerment(agricultural and advocacy training)

From the anova table this factor had a $p=0$ which is less than 0.01. Hence the null hypothesis was accepted and it was concluded that the level of farmer empowerment does not influence the farmers ability to advocate for agricultural services. However, it should be noted that a simple regression of agric training and advocated services indicates a significant relationship between the two variables at $p=0.038$ $\alpha =0.01$. It was concluded that advocacy had either negative or no influence on farmers ability to seek for agricultural services hence it needs further analysis. These results are consistent with those Muasya (2013) that found out that trainings provided to the women did not influence the success Of WSHGS.

CHAPTER FIVE

SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summary of the findings, discussions, conclusions and recommendations made as a result of the data analyzed.

5.2 Summary of findings

The group membership ranged between 10-30 people. Majority of the groups (51.6%) had between 10-15 farmers. About 22.6% of FGS had members between 16-20 farmers. About 257 (78.4%) respondents indicated that their group membership was open to all community members as long as they met all the groups conditions whereas 71(21.6 %) had closed membership. The entire respondent indicated their groups have norms and roles that have been agreed upon by the group members. From Regression analysis, the size and the status of farmer groups can only account for 18.6% of the variation in advocated government agriculture services. This means there must be other variables that account for 81.4% of variations in advocated services. There was a statistical significance value of $p=0.130$ which suggested that group size does influence the ability of FGs to advocate for government agricultural services in Khwisero Sub County.

All the FGs had adopted democratic kind of leadership and the leaders were either elected or nominated by the members. The Group cohesion index was rated as high with an arithmetic mean value of 2.08. Group Conflict resolution index was rated high with an arithmetic mean value of 4.08 on a rikert scale with increasing degree of agreement. Group cohesion was significant at $p=0.948$ $\alpha =0.01$ showing there was a relationship between the group cohesion and advocated government agricultural services. Since the $R=0.021$, $R^2 = 0.014$. This means that group cohesion can account for only 1.4% of variations in advocated government services. Hence it was an important factor in determining the ability of FGs to advocate for agricultural services.

Majority 61.3% of the sampled farmers derive their incomes from member contribution and only 38.7 % of the respondent had diversified their sources of funding to include

group enterprises, donors (NGOs) and government. The research findings further revealed that most of the respondents 77.4% FGS had savings of less than Khs 10,000. Across tabulation of income sources and proposal writing skills reviewed that all the respondents who indicated to have accessed funding from donors and government had proposal writing skills. This means that there is a relationship between proposal writing skills and the FGs sources of funding. Moreover, this implies that an increase in proposal writing skills increases the likelihood of FGs to seek for external funding. Regression results showed that financial status of farmer groups accounted for 26.6% of all variations in advocated services and was significant at $P=0.037$.

Out of the 328 respondents, 44.8% had received agricultural training and 22.1% advocacy. The level of farmer empowerment had a value of $R^2 = 0.537$ and accounted for 54% of variations in advocated agricultural services although it did not since $P=0$ at $\alpha = 0.01$. Therefore this factor had no influence on farmers' ability to advocate for government services. It should be noted that a simple regression of agric training on advocated services indicated a significant relationship between the two variables at $p=0.502$. It was concluded that advocacy had either negative or no influence on farmers ability to seek for agric service hence it needs further analysis.

5.3 Conclusion

The study explored four factors in relation to the advocated government agricultural services. According to the findings, the study concludes that size of group influences the level at which the farmers advocates for government agric services to a great extent. As a result, most of the FGs had open membership, rules and norms to ensure that the aspiring new members share their goals, aspiration and commitment in group activities.

The group management was measured in terms of group cohesion, leadership and conflict resolution and group activities. All FGs had democratic kind of leadership and leaders are either chosen or nominated by the farmers. Group cohesion influenced the farmers' ability to advocate for agricultural services in a great extent and was rated as high among the FGs. This can be attributed to effective group conflict resolution mechanisms that ensure the group problems are resolved amicably and the members channel their strength

toward their shared goals. This aspect was rated high among the FGs. Therefore it can be concluded that the group management influence its ability to advocate for agricultural services.

The financial status of the FG had a great influence on advocated agric services. Most of the groups had saving of less than Khs10, 000 and contributed less than Khs 100 per month. The level of Farmer empowerment influenced their ability to advocate for agricultural services to a great extent. The groups with many trained farmers had sought more services compared to those who were not trained.

5.4 Recommendations

In view of the findings from the study, the author offers the following recommendations: The government should facilitate the FGs to transform their organizations into cooperatives in order to gain legal identify to transact business, increase their bargaining power and amplify their collective voices in policy engagement. This is because there is a weak legal framework for small FGs to transact business under MGSSS since they cannot sue or be sued. Besides, cooperatives can help the farmers do contract farming and get market for their produce.

The study recommends that the government officers should consider working with all FGs instead of concentrating only on active groups that have benefited from the government funds such as Njaa Marufuku. There is need to capacity build all groups on management and coalition building to enable them make informed decisions on whether embrace cooperatives.

The study recommends that the FGs should be trained on financial mobilization especially writing of proposal to enable them seek for external funding such as from the donors and government institutions. The FGs should diversify their sources of incomes at both household and group level by engaging on nonfarm enterprises to caution them from uncertainties associated with vulgarizes of weather. The FGs should be linked to microfinance institutions to access loans, invest in technology and transform their small

scale farming into viable enterprises that can help them earn more income and reduce poverty instead of relying on table banking only.

The government should consider reviewing its extension policy that requires the farmers to seek for agric services from the government officers at a pay. From the study findings it is clear that the farmers are not accessing these services and political goodwill is lacking. The county government should employ more agric staff and empower them economically and technically to deliver on their mandates.

The study recommends the following areas for further research;

1. This study should be replicated in other areas in Kenya to find out whether the access of agricultural services is the same. Such evidence is important for Kenyan farmers and those civil society organization championing agricultural policy reforms.
2. A study to investigate whether farmer training influence their ability to engage with government officers in provision of agricultural services.
3. A study to establish whether the devolved governments have the capacity to provide agricultural services to farmers.
4. A study to establish the level of farmer participation in policy reforms at county and national level
5. challenges facing farmers in advocating for government agricultural services
6. A Study to investigate whether the extension policy in Kenya is benefiting smallholder farmers

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Appendix 1: Table for determining sample size from a given population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note.—N is population size.
S is sample size.

Source: Krejcie, Robert. V; & Morgan, Daryle, W. (1970). *Determining Samples Size For Research Activities: Educational And Psychological Measurement*

Appendix 2: Transmittal letter

Thank you for accepting to be part of this research project. My name is Jessica Mwanzia a postgraduate (M.A)student at the University of Nairobi. I am collecting survey data to enable me compile a research thesis on " Influence of farmer groups capacity on their ability to advocate for government agricultural services in Khwisero sub county. The results of this research will be used to make policy recommendations on how to enhance the farmer groups' capacity to enable them engage with the government officers in delivery services especially those related with agriculture.

Please complete the questionnaire to the best of your ability. In case you do not understand any question feel free to ask for clarifications. There is no right or wrong answers and your expert about what is happening in your group. The information provided will be treated with utmost confidentiality. At the end of the study, I will write a report on the findings and the research will made available to all stakeholders. I take this opportunity to thank you for your cooperation in advance.

Appendix 2: **Questionnaire for farmers**

SECTION A: FARMER CHARACTERISTICS

Please indicate the following information by selecting the most appropriate choice (ticking in the box () or fill in the blanks accordingly)

A1: GENERAL INFORMATION

Name (Optional) ----- Date-----

Location-----Village-----

Group name-----

Gender: (indicate your gender where appropriate)

Male Female

i) Age: (Tick where appropriate)

Age	18-25	26-30	31-35	36-40	40-50	50& above

ii) Marital status (tick appropriately)

Single () Married () Divorced () Widowed ()

ii) What is your Level of education? (Tick appropriately)

iii)

None	Primary	Secondary	College	University

4) Indicate your level of Income level per month

< 1000	1001-2000	1001-2000	2001-4000	4001-6000	6001-8000	8001 - 10,000	10,001-15,000	Above 15,000

SECTION B: SIZE AND STATUS OF THE GROUP

B1) Is your group registered?

Yes No

2) How old is your group?

< 2 years	2-4 Years	5-7 Years	8-10 years	11-12 years	13-15 years	>15 years

3) How many members does your group have?

Less than <
 10-12..... 13-15..... 16-18..... 19-20.....
 21-25.....26-30..... 31-35 > 35....

B2 1) Is the membership of your group open to all community members?

Yes ()
 No ()

2) If No above why? -----

B3 1) Does your group have written mission and vision?

Yes () No ()

2) If No above why? -----

B4 1) Does your group have a bank account? Yes () No ()

2) if no why.....

B6 Does your group have a written constitution? Yes () No ()

SECTION C: TYPE OF FARMER ORGANIZATION

C1 1) Indicate the kind of leadership your group has adopted?

Dictatorship	Democratic	Both dictatorship and democratic	Others(specify)

2) How are the leaders chosen in your group?

Elected () Nominated by group members ()
 Self imposed () Others (specify) -----

C3 Are the leaders roles stated in the constitution? Yes () No ()

C4 1) Do you think the group leaders have the necessary skills to perform their duties?
 Yes () No ()

2) If no above why? -----

2) Do you think you have benefitted from joining a group? Yes () No ()

If yes please list the benefits in order of importance-----

C5 What are the main activities of your group? (Rank them)-----

C6 Group cohesion: Please indicate the suitable level for the following set of questions as they relate to your FGs

Aspects	Very high	High	Fair	Low	Very low
Meeting attendance					
farmers' commitment in the group activities					
Group members participation in decision making					
Level of personal relationship					
Sharing of ideas					
Level of openness in expressing ideas					
Members group contribution					

C7 Conflict resolution within the group. How could you rate the following aspects of your FGs? Please tick the most appropriate box.

Topic	Strongly disagree	disagree	Neither agree Nor disagree	Agree	Strongly agree
Group members easily talk about any conflict within the group					
Group has laid down procedures to solve conflicts					
Members respect the decisions reached out of conflicts					
Conflicts arising from elections are solved as per constitution					

SECTION E: FARMER EMPOWERMENT

- E2.** 1) Have you attended any agricultural training? Yes () No ()
- 2) Who provided the training?
 Neighbor () NGO () Ministry () Others (Specify) -----
- 3) Have you ever attended any advocacy training? Yes () No ()
- 4) If yes above, how did you utilize the knowledge gained-----

SECTION F: ADVOCATED AGRICULTURAL SERVICES

- F1)** Have you ever visited government offices in your sub county to ask for agricultural services?
 Yes () No ()
- 2.** If yes above how many agricultural services have you sought from the government? Provide ticking the appropriate
 Zero..... 1..... 2..... 3..... 4----- 5-----

Type of agricultural service	Agricultural service sought	For each of the service sought indicate below if it was:				
		Available 1=yes 2= No	Timely 1=yes 2= No	Adequate 1=yes 2= No	Affordable 1=yes 2= No	Useful 1=yes 2= No
Extension						
Marketing						
Training						
Agricultural inputs						
Technology						

- F3)** Do you think you have the necessary knowledge to seek for agricultural services from the government? Yes () No ()
- F4)** If yes how did you get the knowledge? -----
- F5)** If no what do you think can be done? -----

THANK YOU

Appendix 4: Interview guide for key Informants

1. Name -----**Date**-----
2. Occupation/title-----
3. What are the most crucial agricultural services for the farmers in Khwisero district
4. How often do farmers visit the government officers to request for agricultural services?
5. Do you think the farmer groups have the capacity to engage the government officers in provision of agricultural services?
6. In your opinion, what factors determine whether a farmer will visit a government office for agricultural services?
7. What farmer groups' characteristics do you consider in offering agricultural services?
8. What are the challenges facing the government officers in provision of agricultural services in Khwisero district?
9. What is the government doing to address the challenges above?
10. Do you think the current government policy on provision of agricultural services is favorable to farmers?

Appendix 5: Interview guide for FGDs

1. Name of the group----- Date-----
Location -----
2. a)How many group members are : Females ----- Males-----
b) Tell us more about your group membership?
3. Tell me about your group rules?
4. a)What are your group activities?
b) How to you determine the group activities?
c) How do you raise money for your activities?
5. what kind of records does your group keep
6. What skills do you think you require managing your group effectively?
7. a) Do you think you have the necessary knowledge and skill to seek agricultural services from the government?
b) if No above, what skill do you need ?(list in order of importance)
8. What are some of the factors that determine whether a farmer will seek agricultural services from the government?
9. what are some of the challenges do you face in accessing the agricultural services from the government
10. In your opinion what do you think can be done to address the challenges above?

Appendix 6: Observation guide/checklist

Name of the group.....

Item	Observation	Mark
1. Office	a) Available	1-----
	b) Not available	2-----
2. Registration certificate	a) Available	1-----
	b) Not available	2-----
3. Group members register	a) Available	2-----
	b) Not available	1-----
4. Group organizational charts	a) Available	1-----
	b) Not available	2-----
5. Group mission / vision/ objectives	a) Available	1-----
	b) Not available	2-----
6. Constitution	a) Available	1-----
	b) Not available	2-----
7. Records kept(minutes, books, Receipt etc	a) Available and updated	1-----
	b) Available and not updated)	2-----
	c) Not available	3-----



**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,
2241349, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No.

Date:

24th July, 2014

NACOSTI/P/14/5245/2263

Jessica K Mwanzia
University of Nairobi
P.O.Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Influence of farmer groups capacity on their ability to advocate for Government Agricultural Services in Khwisero Sub County,”* I am pleased to inform you that you have been authorized to undertake research in **Kakamega County** for a period ending **21st August, 2014.**

You are advised to report to **the County Commissioner and the County Director of Education, Kakamega County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.


**DR. S. K. LANGAT, OGW
FOR: SECRETARY/CEO**

Copy to:

The County Commissioner
The County Director of Education
Kakamega County.

