

The contributions of lead farmer concept towards women lead farmers' empowerment in agriculture: Case studies from Kasungu district, Malawi.



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Dedication

I dedicate this study to the Almighty God for his mercies and favour that are new to me each day, Prophet T.B. Joshua of SCOAN and my wife Catherine.

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List of Acronyms

ADD	Agriculture Development Division
AEDO	Agriculture Extension Development Officer
ASWAp	Agriculture Sector Wide Approach
CEWA	Community Extension Workers Approach
DAES	Department of Agriculture Extension Services
DFID	Department of International Development
EPA	Agriculture Extension Planning Area
FAO	Food and Agriculture Organisation
FFS	Farmer Field School
GDP	Gross Domestic Product
GoM	Government of Malawi
IGA	Income Generating Activities
NAAD	National Agriculture Advisory Services
NGO	Non-Governmental Organisation
MGDS	Malawi Growth and Development Strategy
PHC	Population Housing and Census

Summary

The song about women empowerment through women lead farmers approach has been in extension department for some time now. There is little documentation on the success stories that the lead farmer concept has contributed to the empowerment women lead farmers themselves. Yet the success and failures of empowering women in agriculture through this approach lies in the documentation of what is on the ground today in order to strategize what needs to be achieved tomorrow.

This study fills this void. It documents the contribution of lead farmers' concept towards women lead farmers own empowerment in agriculture. The study uses case studies of women lead farmers from Extension Planning Areas (EPA) of Kaluluma, Kasungu Chipala and Lisasadzi which are all in Kasungu district in Malawi. The study used qualitative approaches to collect data from the field. An exploratory study was conducted in these EPAs. The semi structured checklists were administered to 30 sampled women lead farmers from these three EPAs. Interviews took place in their homes and sometimes in the field. Personal discussions were also held and opinions from women lead farmers were documented and analysed. In addition, the desk studies were done in order to reflect on the theories of empowerment and to guide the selection of indicators of empowerment to be used in the study.

The study found that the lead farmers' concept has had an enormous contribution to women lead farmers empowerment in agriculture. The concept implementation has greatly influenced their roles at household as well as at community level. In both scenarios, women lead farmers' participation in agriculture, decision making opportunity, access and control over resources and benefits, freedom to make choices and access to information has greatly increased. Women lead farmers have increased interactions with the public and are able to voice out and influence decision making on programmes that affect them. In addition to this, women lead farmers' participate in organisation and network with other service providers apart from the government extension workers. This has positioned them to access other services such as trainings and inputs. The lead farmers also receive extension advice from these service providers. Such advices include nutrition, sanitation, credit facilities, market information and agriculture practises.

The study also found out that women lead farmers face a lot of challenges in implementing their programmes. Some of the challenges include lack of recognition, lack of transport to facilitate their extension services and inadequate incentives to encourage them in this voluntary work. In addition, there are coordination issues between government and NGOs that hinder the performance of women lead farmers. For instance, contradictory messages on technologies between government and non-governmental organisation create misunderstandings between government and NGO lead farmers and eventually confuse the farmers. This affect the accomplishment of such extension programmes at grass-root level.

Based on these documented successes and challenges of the lead farmers' concept, suggestions have been made on how to improve the programme for its effective contribution to lead farmers' empowerment in agriculture. The recommendations have been suggested for consideration in order to improve the current women lead farmers programme and improve the overall women empowerment efforts.

Chapter One

1.0 Introduction

1.1.0 Background to Women empowerment in Agriculture

The gender, HIV and AIDS (GHA) strategy in agriculture sector that was developed in 2003 became the new basis to address women empowerment issues in agriculture in Malawi. Malawi has an estimated population of 13 million people (Population and Housing Census, PHC, 2008), and over 80 per cent of the population depend on farming. Estimates show that agriculture contributes to 39% of the country's Gross Domestic Product, GDP, (Malawi Growth and Development Strategy, MGDS II, 2012). The women constitute 51% of the country's population (PHC, 2008) and provide 70% of the workforce in agriculture (GHA, 2012). Generally, women experience low access to extension services than men. It is estimated that more men access extension services (18%) than women 14% (GHA, 2012).

Previous attempts to empower women farmers began around 1980's. The government through the Ministry of agriculture employed farm home instructresses to train women as care givers for their families (DAES *leaflet*, 2008). This was referred to as the welfare approach; and through this programme, women were trained in child care, cookery and nutrition and sewing. The welfare approach was followed by women in development approach where women were targeted in various projects and programmes. Later on, the women in development approach was replaced by yet another approach known as gender and development approach. During this period, women were considered in planning and implementation of programmes and projects. The gender and development approach is still used in planning and implementation of agricultural programmes.

When women programmes were introduced in the ministry of agriculture, considerable attention was paid to increase participation of women in agriculture extension programme and services. This was after Clark, (1977) in (DAES *leaflet*, 2008) revealed that more women were involved in agriculture (70%) than men. The women programmes were considered as both a structural and functional approach to empowerment. It created positions to help monitor the implementation of activities that promoted women involvement in agriculture activities. It also aimed to optimize adoption of agriculture productivity for women and increase household income through Income Generating Activities (IGA) related to agriculture. In addition to these, the women's programmes aimed to improve home and farm management skills and utilise available resources to improve family health and well-being.

Under this programme, extension workers were encouraged to form women groups or mixed groups with 30 % women as part of the strategy to improve extension services to women. Some challenges that women in agriculture faced during this period in Malawi were very similar to what (Aarnink and Kingma, 1991) documented in Tanzania as assumptions from extension workers on women's lack of participation in agriculture. The challenges like women's work load as a result of the sexual division of labour, restrictions caused by marital status, women lack of access to resources, women's low level of education and literacy and cultural factors allowing men to be first in line, were among the factors that hindered participation of women in agriculture.

1.1.1 The agriculture gender, HIV and AIDS strategy as a women empowerment tool

The first GHA strategy in agriculture aimed to achieve eight pillars amongst which economic empowerment to women and other vulnerable gender categories (GHA 2003-2008) was also prioritised. Women and vulnerable farmers were considered the right owners and were targeted for agriculture interventions. The strategy developed several actions to empower women in agriculture including capital investment to women groups. In the year 2008 during the strategy's evaluation, it was noted that some measurable achievements related to women empowerment had been achieved. The evaluation documented achievements such as reduced vulnerability to women through income generating activities' to women groups, capacity building to staff and farmers on gender mainstreaming in agriculture and increased women participation in agriculture farmer groups. Through this strategy, the new outputs in agriculture were also formulated to address issues of empowerment to women and reduction of gender disparities between men and women farmers.

During the development of the new GHA strategy after 2008, the issue of women empowerment became central and was featured in the goal of the strategy which aims to contribute to sustainable and equitable food, nutrition and income security at national, community and household level through the empowerment of women and other vulnerable gender categories (GHA, 2012). The current GHA strategy very much focuses on empowering women and reducing disparities that exist between men and women. The strategy has three pillars which include quality participation of women and other vulnerable gender categories in agricultural activities. It includes the generation and dissemination of gender responsive technologies that would be friendly and easily adopted by women (GHA, 2012). The GHA strategy acts as a referral points for women empowering efforts in agriculture related interventions. Currently, the Agriculture Sector Wide Approach (ASWAp), which is an agriculture sector priority investment in Malawi that is designed to operationalize the agricultural growth and reduce poverty according to the goals of the MGDS, considers gender equity and empowerment as one of the cross cutting issues that need to be considered in agriculture (ASWAp, 2012). The programmes are also designed to fulfil the GHA strategy efforts in empowerment.

Women empowerment in agriculture is not a single sector effort alone. The GHA strategy is part of the government of Malawi's strategy to empower women. The MGDS, a government overarching medium term strategy, consider women empowerment as a prerequisite to the achievement of sustainable economic and social development (MGDS II, 2012). Agriculture and food security is also a major priority through this overarching medium term strategy (MGDS II 2012). Since women provide more than 70% of the workforce in agriculture, it gives the agriculture sector a reason enough to emphasize on women empowerment in order to achieve miles in sustainable agriculture development through equitable provision of extension services to men and women farmers. Therefore the GHA strategy in agriculture is rightly placed to fulfil women empowerment efforts and contribute to sustainable agriculture development.

1.1.2 Current organisational issues affecting women empowerment in agriculture

There are several issues that hinder women empowerment efforts in agriculture. Even though national policies and strategies that support women empowerment are in place, the ministry of agriculture lacks capacity of staff to deliver the required results (GHA, 2012). There are also high vacancy rates at all levels within the ministry that hinder implementation of strategies that support women empowerment. It is estimated that at field level the ratio of staff to farmers is 1:1500.

In addition, there is lack of coordination among stakeholders on effective strategies for empowering women in agriculture and often leads to duplication of efforts. Further challenges of limited funding opportunities hamper the capacity building of staff at all levels within the ministry affecting the effort to achieve women empowerment aspirations in agriculture. The ministry also experience weak monitoring and evaluation system to measure the progress in its gender equity and empowerment efforts. The weak monitoring and evaluation system narrow chances of feedback and improvement of the strategy empowerment actions.

1.1.3 Women issues in agriculture sector in Malawi

The previous GHA strategy (2003-2007) in agriculture supported by Food and Agriculture Organisation (FAO) aimed to address among others the imbalances in participation between men and women, boys' and girls' in agricultural projects and programmes. It also focused on addressing access and control of agriculture resources and marketing information among the gender categories (GHA, 2003-2007). Currently, the challenges of disparities between men and women farmers still exist in agricultural programmes. The new strategy documents several challenges that needed to be addressed in order to empower women and vulnerable gender categories. The current challenges include among others:

Limited participation of women in agricultural decision making

Male farmers dominate decision making in agriculture related projects at household and community level. This disadvantages women in terms of productivity and affects their income. Men also take most of the decision on production labour for the household.

Income disparity

Women have limited access to income than men and this affects their investment in agriculture. The income difference is partly because men have higher access to credit facilities and can easily invest in cash crop than women who are mostly in food crop production.

Limited access to and control over assets and benefits

There are inequalities in access and control over the assets and benefits between men and women both at household and farming communities. This difference limits women's opportunities to benefit from agriculture production. Women have limited access to and control over agricultural assets like land, credit, extension training and labour.

Limited women access to information and technology

Women are constrained in access to information and technology for production and marketing of their goods and services. They have unequal access to information about inputs and credit facilities.

Unfriendly marketing system

There are unfriendly market structures which hinder women access to market services. The markets are either far from accessibility by women farmers or the marketing structures are also poor. This leaves women with no option than to sell their commodities at cheap prices. Sometimes women spend several hours walking to the market to sell their products which increases their workload and cost of production (GHA 2012). The markets for inputs are also as challenging as the ones for agricultural commodities.

1.1.4 Current implementation structure for women empowerment efforts

The ministry of agriculture in Malawi implements its agricultural activities through 8 agricultural zones known as agricultural development divisions (ADD). The ADDs coordinate districts within an agricultural zone and the district are further subdivided into Extension Planning Areas (EPAs). These are small agricultural units where agricultural extension activities are planned and executed. They exist at area level and are headed by the Agriculture Extension and Development Coordinators (AEDC) who in turn supervise the Agriculture Extension Development officers (AEDOs). The agriculture extension approaches developed and sometimes adapted by the extension department within the ministry are channelled for trials and implementation by extension agents and are implemented by Agriculture Extension Development officers (AEDOs) who interface with the farmers at grass root level.

1.1.5 Extension approaches

There are several approaches to extension services that have been tried and implemented by agriculture extension workers in the past. Most of these approaches were silent on women empowerment and men were mostly their target group. Initially, the department of agriculture extension services (DAES) targeted individual farmers with extension services. This was known as the individual approach to extension services. It was supported by puppet shows. The evaluation of the approach showed that it was not effective and required a lot of time to reach farmers with extension services (Masangano and Mthinda, 2012).

The other approaches used in agriculture extension services included the progressive farmer's approach. In this approach, male farmers in an area were targeted for extension delivery and other farmers learnt from them. The progressive farmers were supported with agricultural inputs loans such as fertilizers, pesticides, ploughs and ox carts. The approach failed to improve extension services partly because progressive farmers had high economic capacity than most farmers that were meant to learn from these farmers. Other approaches in agriculture extension included the block system approach and group approach (Masangano and Mthinda, 2012). There is little literature on the evaluation of each of these approaches even though they contributed considerably to agricultural development in Malawi. These approaches rarely mention women empowerment as part of their central theme; they focused much more on agricultural extension delivery.

1.1.6 Participatory approaches as steps towards women empowerment

Later on, the extension department adopted more participatory approaches in order to reach men and women farmers equally. One such participatory approach is the model village approach where subjects within the village worked together with different service providers to achieve their visions. This ensured men and women participation in interventions. The participatory rural appraisals were conducted at village level and the actions and strategies to address village problems considered the needs of both men and women. This became important in extension service delivery for both government and non-governmental organisations. The model village approach is still useful today and extension workers continue to implement their activities through this approach. Extension agents from different service providers implement harmonised integrated development interventions for improved rural livelihoods.

In addition to the approaches above, the extension department introduced the group approaches such as clusters and greenbelt (*Ulimi wa Mndandanda*) participatory approach in order to improve extension service delivery. In the clusters approach, farmers who work in similar agricultural enterprises and catchment area are grouped and work together to achieve their goals in agriculture. The greenbelt is also known as *Ulimi wa mndandanda*. It is defined as a stretch of well-managed fields of different crops that are more than a kilometre (GAP&NRM, 2012). Through this stretch, extension workers are able to meet farmers as a group and deliver extension messages to them. These approaches were efforts by the extension department to reach farmers of all gender categories with extension information including women empowerment. These approaches are still used today and they are considered important because they also address the issue of low vacancy in agriculture extension.

1.1.7 Strategies for reaching out to farmers: The Lead farmers approach

In addition to several approaches to extension services, the department of agriculture's extension services currently also use the lead farmers' approach to reach farmers with extension services. One of the strategies they use is the lead farmers approach. From the year 2007 onwards, the department introduced the lead farmers approach to help improve its message delivery services. Lead farmers are individuals who are elected by the community to perform technology specific farmer-to-farmer extension and are trained in the technology (DAES, 2010). The lead farmers implement their activities through groups of farmers in clusters and greenbelts.

Lead farmers are prominent reference persons for village farmer to farmer extension services. They play a major role that contributes to improvement of production through technology transfer. Lead farmers are trained to deliver specific technologies to farmers. For instance, there could be several technologies demonstrated by different lead farmers to the farmers belonging to a cluster or greenbelt (*Ulimi wa Mndandanda*). In addition, lead farmers were introduced in extension to increase farmer to farmer extension through which farmers share experiences as well as new challenges. The aim of the lead farmer approach is to assist farmers with appropriate messages for technologies in order to improve the adoption of recommended agricultural technologies that would easily improve food security situation (DAES, 2008).

The lead farmers fulfil an important role in extension delivery through dissemination of agriculture related technologies. They assist frontline in delivering technologies to the farmers. Lead farmers were selected on several criteria amongst which one of them was their record of technology adoption and their capacity to manage their fields. Due to these conditions, the initial lead farmers' criteria favoured men farmers who constantly accessed agriculture related services and had an experience in agriculture technologies.

Later on, the department extended the lead farmers concept to include women in order to improve the delivery of extension services to women farmers. Besides, the agriculture sector in Malawi has more male field extension workers than female, which makes delivery of extension services to women farmers a challenge. The disparities in delivery of extension messages between men and women affect the women's contribution to agriculture development and attainment of food security. The evaluations of the GHA strategy that took place in 2008 also stressed that these gender issues are amongst the major challenges that affected the attainment of food security in Malawi GHA (2012). As part of an affirmative action towards women empowerment in agriculture, women lead farmers were introduced to help reach women with extension services in order to enable them effectively contribute to agriculture production.

1.1.8 The women lead farmers: A focus area of study

Women lead farmers' inclusion in agriculture extension activities became an intervention to help achieve women empowerment in agriculture development. It was envisaged that through this effort, women lead farmers would be able to take their stand and participate actively in agricultural production. This would eventually help to reach other women with extension technologies and improve food security situation. Apart from the food security improvement, the approach intended to improve women to women extension services delivery and improve access to agricultural related information to women farmers such as production and marketing information.

Women lead farmers have been in place for more than five years since the guidelines were formulated. Since the inception of the women lead farmer approach to extension delivery, there has been no follow up study to identify the contribution the concept has made towards women lead farmers own empowerment in agriculture. In addition, there has been no documentation on the impacts this concept has brought to women lead farmers themselves.

This research seeks to bring this to light through documenting the contributions such an intervention strategy has brought towards women lead farmers own empowerment. The studies on women lead farmers would help the extension department of the ministry of agriculture and food security to understand whether the strategy is helpful to empower other women in agriculture. Documenting the contribution of this approach could also help the department to know whether women lead farmers are content with their new job and position in the society. In addition, the study could help us to know whether they themselves feel empowered. If they feel empowered, they have more chance to contribute to empowerment of other women farmers in agriculture.

The study may also assist to inform decision makers in agriculture extension department to make improvements on women lead farmer guidelines in order to create room for their effective contribution to women empowerment in agriculture. The current MGDS II highlights that most of the millennium development goals that lag behind have a very pronounced gender connotation (MGDS, 2012). As such, the women lead farmer concept may help contribute to the reduction of such disparities in agriculture sector if it is well implemented and well monitored.

Since agriculture is the largest sector, addressing these disparities could contribute to sustainable agriculture development, food and nutritional security, and contribute to the achievement of women empowerment efforts enshrined in the Malawi growth and development strategy.

1.2 Research problem

The women lead farmers' concept was introduced by the department of agriculture extension services in order to reduce gender disparities in agriculture service delivery between men and women farmers and contribute to women empowerment. Men have high access to agriculture related extension services like training, extension contacts and access to information than women farmers, yet women make a significant contribution of labour in agriculture production in Malawi.

For example, fewer women 14% access extension services than men 18% (GHA, 2012). Most men farmers are into cash crop farming and high value crops while women mostly grow food crops. Women are reported to have lower access to credit facilities by women 10.7 % as compared to men 14.0%. Despite these challenges, women play a significant role in agriculture particularly in small scale agricultural household enterprises in Malawi with high participation of 70% (GHA, 2012). Since the introduction of the lead farmer concept and since the department advocated for women lead farmers to play their role in agricultural extension delivery, there has been little or no documentation on the contribution of such an effort towards the women lead farmers' own empowerment.

A reflection on the contribution of the concept towards women lead farmer empowerment could provide the necessary justification for essential changes in strategies, plans and allocation of agricultural resources so that they benefit men and women farmers equally. The information could also help to improve the agriculture extension departmental strategies and realign them so that they become more responsive and assist towards women empowerment in agriculture.

Therefore, this research fills this information gap and provides the opportunity to guide the department towards improvements of women empowerment efforts by providing information necessary to make informed decisions that can assist in re-designing and implementation of women empowerment strategies in agriculture.

1.3 Objective of the research

The research objective is to document the contribution of the women lead farmer concept towards women lead farmers' own empowerment in agriculture. The research generated information necessary to provide feedback in extension department of the ministry of agriculture and food security. The feedback provides the guidance that is necessary in the formulation of effective strategies for empowering women farmers in agriculture by learning through the women lead farmers successes and failures in extension service delivery. It is also envisaged that the research results will guide the department towards making necessary improvements for effective women empowerment programmes in agriculture.

1.4 Main Research questions

- What contribution has women lead farmers programme made towards women lead farmers' own empowerment in agriculture?

Sub questions

1. What changes have occurred in women lead farmers in agriculture at household and community level?
2. What influence do women lead farmers have in decision making relating access and control of resources at household and community level?
3. What current influence do women lead farmers have in agriculture programming and services delivery?
4. What changes have taken place in the women lead farmer's individual networking, organisation membership and access to other services?

1.5 Definition of concepts

In this study, the key concepts that have been used include: Empowerment, lead farmers, and women lead farmers. The study has defined these terms according to the definitions below:

Empowerment: empowerment is the capacity of to break through social barriers, regain the voice to demand basic agricultural services, take control of production resources and participate in decision making at household and community which was previously denied while realising their self and collective organisation as women farmers (adapted from Westendorp, 2012). Based on this definition, empowerment includes changes in roles and responsibilities, ability to participate, decision making, access and control, capacity to influence, exercise agency and organisation.

Lead farmers: Lead farmers are individuals who are elected by the community to perform technology specific farmer-to-farmer extension and are trained in the technology (DAES, 2010).

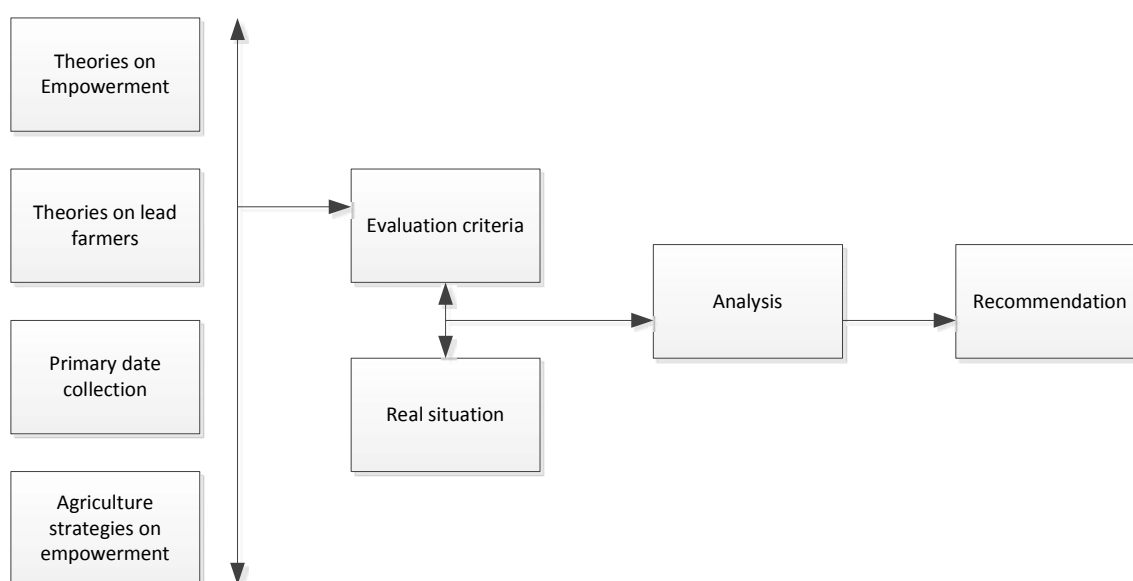
Women lead farmers: women lead farmers in agriculture, are female individuals who are elected by the community to perform technology specific farmer-to-farmer extension and are trained in the technology (adapted DAES, 2010).

1.6 Research framework

The study reviewed several theories on empowerment. In addition, the review included the concept of lead farmers, agricultural strategies on empowerment, empowerment experiences documented in different projects and agriculture strategies and approaches to reach out to the farmers. The conceptual model was done after the review of theories and experiences on empowerment. The model was used to guide the literature review, data collection in the field and reporting on the collected data.

Primary data that was collected from the field interviews unearthed the real situation on the ground regarding women lead farmers empowerment through the lead farmer's concept. This was compared with the theories that were reviewed from the desk study. The data was thoroughly analysed by grouping it according to the key aspects of the research. The data was entered in an excel sheet to generate some valuable statistics for report writing. The analysed data has been used generation of tables and figures to help understand the findings in the write up. Based on the findings, recommendations have been generated for considerations within the department. The figure below is an illustration of the research framework that was followed during the study.

Figure 1: Research framework



Source: Designing projects by Verschuren and Doorewaard, 2010

Chapter Two

2.0 Literature review

2.1 Understanding the term women empowerment

The term empowerment has often been defined by authors differently according to the subject matter that is being addressed and what they would want to see achieved. This is also the difference we notice in the definitions by scholars and development facilitators. According to (Agarwal, 1994:pp 39), empowerment was defined as a process that enhances the ability of the disadvantaged (powerless) individuals or groups to challenge and change (in their favour) existing power relationships that place them in subordinate economic, social and political position.

Empowerment is a term that has often been used to refer to initiatives to support women since most societies are male dominated. The empowerment approach was regarded as a weapon for the weak best wielded through grassroots and participatory activities, Parpart, (2002) in (Momsen, 2004 pp14). Later, the empowerment was adopted by several development agencies even though they saw it as a means of for enhancing efficiency and productivity without changing the status quo (Momsen, 2004). (Agarwal 1994), argues that empowerment and equality concerns women's position in relation to men and should be able to challenge male oppression within the home and wider society. For instance, as argued by her (Agarwal, 1994), when women have land, they are economically empowered and can make decisions over the use of land. In addition, they become politically powerful within the society and they are able to collectively voice their concerns.

Therefore, empowerment in women as argued by Agarwal, should be able to address women's strategic needs as well as practical needs. The practical gender needs (PGN) are immediate needs which assist women' survival in their socially accepted roles and within existing power structures Moser (1993). The examples of such needs include provisions of adequate living conditions, such as health care and food provision, access to safe water and sanitation, but also seek to ensure access to income-earning opportunities. These needs do not directly challenge gender inequalities. On the other hand, strategic gender needs, (SGNs), are the needs identified by women that require strategies for challenging male dominance and privilege. These needs may relate to inequalities in the gender division of labour, control of resources and participation in decision-making (Moser, 1993).

In the latest publication by Westendorp, (2012), she defined empowerment as the interaction between access and control over resource, exercising agency, expanding room to manoeuvre in an institutional setting, leading to transformation of power relations, addressing all the three dimensions of power (Westendorp, 2012). According to the authors (Rowland, 1997) and (Miller, 2007) in (Westendorp 2012) there are four categories of power and they include: *Power over*: the power to make something or somebody or a group of people to do something; *Power to*: enhance an individual or group to do something; *Power with*: the ability due to collective action and *Power within*: self-esteem, self-confidence

The term 'power' in empowerment suggests that the power needs to be bestowed on an individual. Westerndorp, (2012) argued that individuals have power within themselves. Power as such has no gender and yet it has a greater influence in positioning individuals and gaining a definition in a society.

According to (Kabeer, 1999) women empowerment is also associated with their capacity to make choices in a given situation and through this, they change from having no (few) choices to being able to choose among alternatives', (KIT, Agri-ProFocus and IIRR.2012).

Batliwala, 1996 (in Rao and Keheller, 2005), defines empowerment in relation to transformation in power relations regarding control over resources (physical, human, intellectual and intangible); control over ideology (beliefs, values and attitudes); and the changes in institutions and structures that support unequal power relations. In order for empowerment to take place, there must be a transformation of both formal and informal relations (Rao and Keheller, 2005). The institutions being referred to here may be public institutions, traditional ones such as community organisations as well as the family as an institution. According to Rao and Keheller (2005), empowerment steps include: Individual consciousness (personal level-skills, knowledge); political consciousness, commitment; objective condition (rights and resources, access to health services and safety, opportunities for voice; informal norms, such as inequitable ideologies like cultural and religious practices and formal institutions such as laws and policies. The department for international development (DFID) defines it as the capacity of an individual to acquire the power to think and act freely, exercise choice as equal members of the society (Westerndorp, 2012).

From these different schools of thoughts, we can conclude that empowerment process has been understood to start from an individual 'power,' since individuals possess some powers within them. The individual power, if exercised, can only be effective with positive institutional response and transformation that is in favour of the efforts being advocated. The individuals remain powerless if they cannot exercise their power and become or remain disempowered. Since empowerment is not static, different institutions need to constantly provide the required support for effective empowerment to take place.

2.2 Women Lead farmers in Agriculture

The lead farmers' concept has been widely used in agriculture in so many countries. The major emphasis of their function in agriculture is to reach farmers with extension services. The high vacancy rates in agriculture in Malawi are a common phenomenon especially that most people are farmers. The women lead farmers in Malawi serve the same purpose of provision of extension services. Adapting from the definition of lead farmers, the women lead farmers in agriculture, are female individuals who are elected by the community to perform technology specific farmer-to-farmer extension and are trained in the technology (adapted DAES, 2010).

The lead farmers are called by different names in different countries and are commonly used in both public sectors like health and agriculture as well as NGOs. In all these, their role is to provide extension services. Some of the common names used to mean lead farmers include: farmer trainers, farmer technicians, progressive farmers, farmer promoters, indigenous promoters, farmer extension providers, community educators, rural promoters,

village technicians, volunteer extension workers, local facilitators, extension multipliers, farmer technicians, and progressive farmer (DAES, 2010).

In Uganda, the concept of lead farmers is known as Community Extension Workers Approach (CEWA) where the community extension workers are used to promote demand driven agricultural services and empower farmers to provide services. The concept is also used as part of modernisation of agriculture to promote participatory approaches to agricultural services (NAADS, 2003). The CEWA bridges farmers or the community to service providers through demonstrations, campaigns and other required services (NAADS, 2003). In Ghana, a similar approach is being used. The farmer trainers are selected from a group of well-trained farmers and facilitate farmer field schools (FFS) at village level.

The FFS facilitators in Ghana are paid by the villagers themselves unlike the lead farmers in Malawi where their services are offered for free (DAES, 2011). Even though lead farmers in Malawi offer general extension services to farmers, they are neither paid by fellow farmers nor by the government and their work is voluntary. In addition, the lead farmer's concept in Malawi does not its own implementation budgets with a specific concept work plan. Its activities are embedded as outputs in the agriculture sector wide approach work plan.

Women lead farmers as a women empowerment process in agriculture

As earlier cited, women in Malawi provide 70% of the work force in agriculture. The low access to extension services by women in relation to men (GHA, 2012), was one of the major drive towards the introduction of women lead farmers. The low access to extension services alone contribute to the delay in achievement of food security in Malawi. The low access to these services by women is partly attributed to the gender division of labour at household and community level. Women are often tied with domestic work and are also responsible for the community management tasks.

According to Moser, (1993), women have triple roles and these are reproductive, productive and community managing work. Reproductive work includes child bearing and rearing responsibilities while productive work in rural areas takes the form of agriculture work and community Moser, (1993). Women are also involved in community managing tasks. In addition, men do not have clearly defined reproductive roles Moser, (1993). This creates unequal in distribution of resources such as training and extension services because women almost work all the time. Generally this may hinder women effective contribution in agriculture production. The agriculture sector GHA strategy envisages that provision of equitable extension services and women empowerment would easily lead to attainment of food and nutrition security (GHA, 2012). It is worth noting that the MGDS II also emphasize women empowerment as an important aspect for sustainable economic and social development of the country.

In order to promote equality and women empowerment, the GHA strategy in agriculture also aims to achieve quality participation of women and other vulnerable gender categories in agriculture (GHA, 2012). This was included as one of its pillars during the strategy formulation. The strategy also prioritises participation of women in key areas of ASWAp which include: food security, nutrition and risk management, commercial agriculture, agro processing and market development, and sustainable land and water management (ASWAp, 2012).

There are some notable areas that the strategy proposed to achieve in order to register women empowerment in agriculture. These include: strengthening women's access to and control over agriculture resources, opportunities, benefits and decision making processes at household, community and national levels. In addition the issues of food and nutrition security, agribusiness and marketing are highly emphasized. Therefore the women lead farmers provide a yard stick through which women empowerment processes in agriculture could be measured. In order to measure the extent to which these efforts to empower women have yielded, the study used some indicators from Alsop and Heinsohn, (2005) that apply to measurement of agriculture related interventions. Alsop and Heinsohn, (2005) in their world bank policy research working paper 3510, documents several ways of measuring empowerment at different levels. The selected indicators included in this study relate very well with agriculture interventions and include the participation, economic empowerment, access to services and decision making.

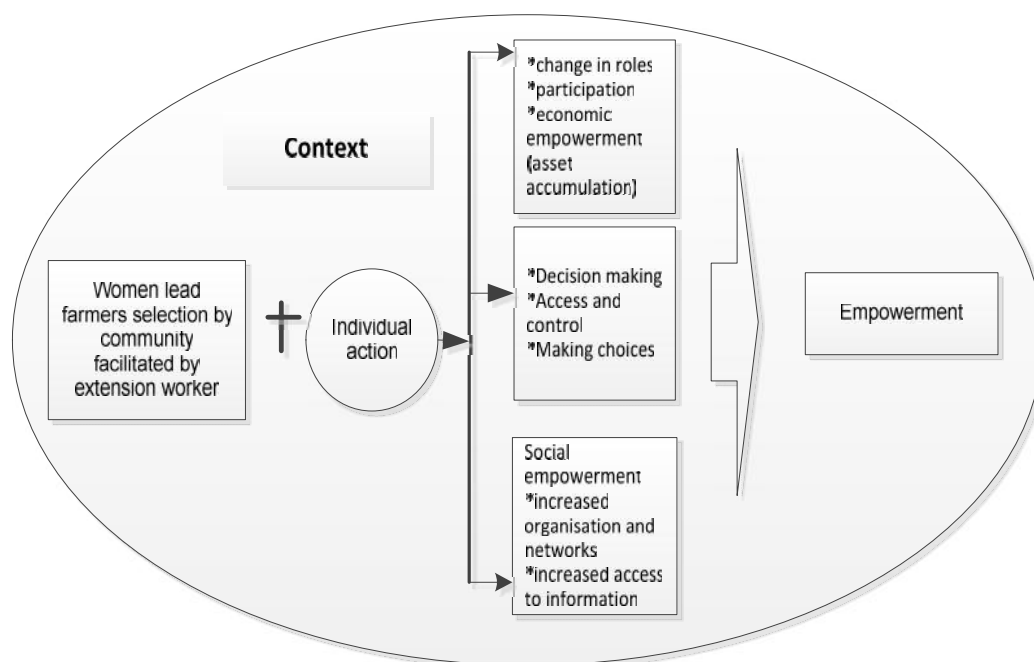
2.3 Women empowerment under study

Based on the definitions provided by several authors above and below, this study has defined women lead farmers empowerment in agriculture as the capacity of women farmers to break through social barriers, regain the voice to demand basic agricultural services, take control of production resources and gain an opportunity to participate in decision making at household and community which was previously denied while realising their self and collective organisation as women farmers (*adapted from* Westendorp, 2012). In Malawi, empowerment in agriculture is very much linked to economic aspects such as income generating activities, rural support programs for women and the marginalised as illustrated in the Gender and HIV and AIDS strategy (GHA, 2012).

Although the strategy seeks to address decision making, access and control among others, the actions are mainly on economic empowerment. It is thought that economic empowerment may help reduce the disparities that exist between men and women. This study on women lead farmers included other aspects apart from the economic aspects. These aspects included women's lead farmers new opportunities that have arisen since the inception of the women lead farmers' concept.

For instance, this women lead farmers empowerment study included the changes in their roles and responsibilities of women lead farmers in agriculture, ability to participate in agriculture activities, decision making at home and community, access and control of production resources and benefits within the house and community; influence agriculture extension programming, increased access to information relating production (service delivery) and marketing, exercise agency, gain the capacity to organise themselves in order to bargain for changes and the ability to form independent networks with other service providers. Based on the working definition of this study, women empowerment in this study was conceptualised as follows:

Figure 2: Women empowerment conceptual model



Source: author

The model illustrates the fact that empowerment starts as an individual process as written by (Rao and Keheller, 2005). In this case, empowerment must begin by women lead farmers themselves. The positive response from institutions within their context creates an opportunity that enables them to participate in activities, make decision making, create an access and control over resources, increase access to information, exercise agency and be able to organise and network with other service providers. The qualities of a lead farmer as set by the agriculture office include someone who is willing to share information with others, able to lead other, early adopter of technology, a communicator with good facilitation skills and an honest, trustworthy and humble individual. In addition, a lead farmer should be development conscious, should be tolerant, a member of the village and socially accepted by the community, should be able to sacrifice for others, should be cooperative and approachable.

In case of this model, the positive institutional response included the selection of individual women by the community and assigning them with the community role of lead farmer. The institution in question considered here is the community through which women lead farmers were chosen. These new tasks plus and individual effort creates an opportunity for change in roles and other aspects as indicated in the figure 2 above. This change of women's role in the society with the continuous support of the institutions both formal and informal leads to empowerment. The examples of informal institutions that exist at grass root include farmer groups, associations, village agriculture committees and cooperatives. While the formal ones included the public office representatives which includes the agriculture extension staff

Using the model, changes in the aspects in the model were studied. The institutions depicted in the conceptual model include public offices, villages, farmers groups and associations that exist at grass-root level where these women lead farmers operate. The study did not collect data from the community level institutions or the community representatives. The context in which the empowerment process takes place includes political, economic, social, technological, environmental and cultural settings. Using the model in figure 2 above, some aspects were reviewed to create an understanding on empowerment and these include the following:

2.3.1 Economic empowerment

Marginalisation of women in every development activities is a single significant indicator of unsustainable development (Steady, 1993). Development related projects in South Asia have shown that empowerment approaches that promote economic interventions to women increases their economic status and strengthens them (Karl, 1995). This leads to transformation of unequal power relations that existed between men and women. For instance, the change in land ownership as indicated by (Agarwal, 1994) created a difference of women's relationship to men. The land acquisition is an example of economic empowerment that provides an opportunity to change women's role as well as status in the society. For instance, women's access to economic resources such as land in Asia gave them recognition in the society and they were able to bargain over things that affect their lives (Agarwal, 1994). Economic empowerment to women farmers may also mean the accumulation of production resources or the capacity to control such resources.

Economic empowerment may also be viewed as the opportunity women have on their access to market and marketing structures which influence the income. The economic autonomy as Touwen, (1996) defines it also refers to equal access to and control over the means of production such as knowledge, power, capital and labour. Economic empowerment therefore also makes an individual gain exercise control over the resources accumulated and it may indicate that an empowerment process is taking place. When women become economically empowered, they become more independent and take control of their lives. They can also easily make informed decisions that affect their lives. The economic empowerment also makes them gain recognition in society and they can easily participate in different developmental endeavours.

2.3.2 Participation as a form of empowerment

Participation is defined as enabling people to realise their rights to participate in, access information relating to, decision making process which affect their lives (DFID, 2000). Karl, (1995) also defines it as being closely involved in the economic, social cultural and political processes that affect your life. For Women lead farmers participation is key since it is meant to influence decision making, improve access to production and marketing information.

The definition of participation as defined by Oakley (1991), in (Chambers, 2010) means organising and empowering. Therefore the degree of participation could help to help measure the extent of empowerment. Most NGOs believe that participation in capacity building, awareness can help to transform unequal power relations, increase decision making power in the home and community (Karl, 1995). This may increase women's

empowerment by creating confidence, self-esteem, access to financial resources, capacity for leadership and self-organisation.

Participation also increases the women's social interaction and they can easily mobilise to form collective actions which lead to greater control. Group membership can be an effective medium for personal development (Touwen, 1996). We can therefore conclude that participation itself is equally empowering in its own right.

2.3.3 Social cultural empowerment

The social aspect of empowerment refers to women's ability to occupy and influence the public space. At community level, social empowerment also influences the ability to form and access groups, form networks and also the access to public infrastructure. At family level, this may refer to the women's freedom of movement (Touwen, 1996).

Thus when looking at empowerment, a lot of aspects that were depicted in the model are interwoven and do not necessarily operate in solitude. For instance, economic transformation of an individual, may lead to effective participation in different decision making platforms within the society. It may also lead to the change in roles and labour issues within the home and community. At the same, economic empowerment may also contribute to access to certain public resources that were previously not available to an individual such as the capacity to network, the capacity to negotiate at household and community level. The capacity to network with organisations at grass-root level may also provide an opportunity for an individual access to resources such as information, inputs and training which are necessities in agricultural production and may lead to accumulation of assets.

Chapter Three

3.1.0 Research methodology and strategy

3.1.1 Research methodology

The researcher used case studies to collect data from women lead farmers in three different extension planning areas. In addition, the study used secondary data to collect data in order to answer the research objectives. Secondary data involved a desk study through which different theories on empowerment were reviewed. A conceptual model that was developed after the review of literature was useful in the checklist designing that was used for data collection. The model also provided the guidance during reporting.

Primary data was collected through interviews with women lead farmers in extension planning areas. The qualitative data was collected using a semi structured interview checklist. The checklist was designed to collect data in the aspects of the model highlighted in figure 2 above. The aspects in the model included change in roles of women lead farmers, economic empowerment, making choices, decision making and access and control.

As for social empowerment, the developed semi structured interview checklist covered aspects on access to information and access to organisations. The semi structured interview checklist was pre-tested prior to the main data collection process. Six lead farmers in Chipala EPA were involved in pre-testing the semi structured checklist after which the refinements were made and then it became ready for data collection.

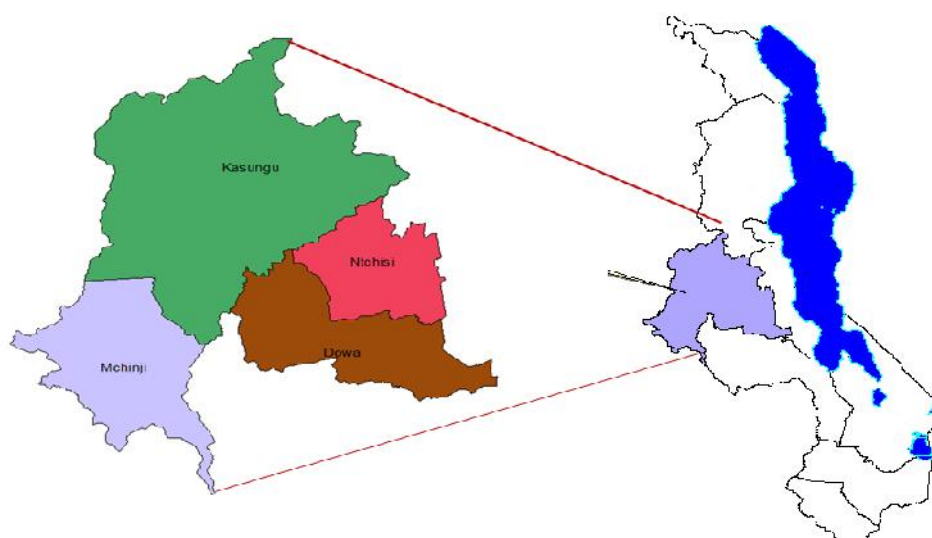
The woman lead farmer interview in process



3.1.2 Study Area

Kasungu agricultural development division in Malawi has four districts namely: Kasungu, Mchinji, Dowa and Ntchisi. This study took place in Kasungu district. The district has 7 EPAs out of which, three EPA were included in the study. These EPA were Kasungu Chipala, Kaluluma and Lisasadzi. The map below gives a location of Kasungu ADD and the districts within the ADD.

Figure 3: Map of Malawi showing the geographical location of Kasungu ADD and Kasungu district



Source: Kasungu ADD Annual progress report, 2012-2013

3.1.3 Sampling selection

The research was conducted in three EPAs of Chipala, Kaluluma and Lisasadzi. Chipala EPA was purposively chosen because of its convenience. The two additional EPAs were randomly selected after it was realised that Chipala EPA had less number of women lead farmers than the proposed sample size of the study. The study only included a strategic sample of women lead farmers per EPA who were the focus respondents of the study.

The AEDCs provided the list of women lead farmers from the three EPAs with the help of AEDOs. The women lead farmers were sampled using the 4th sampling interval, a number that was selected at random. In total 10 women lead farmers were strategically sampled from each EPA list making a total of 30 lead farmers in three EPAs. The dates for the interviews were arranged by a representative of the field office (AEDO) and the researcher.

The women lead farmers were given dates for the interviews in advance in order to be assured for their presence and to make proper schedules for the interviews. Data collection took place at women lead farmers own homes or garden for their convenience as well as to allow room for observations during the study. The study also included observation as a way of triangulating of the information gathered. In addition to these methods, individual gardens and kraals were also visited to verify their involvement in crop or livestock production. The pictures below show some women lead farmers in the garden and a home.



Woman lead farmer, Towera Moyo from Lisasadzi in her vegetable garden



Woman lead farmer for Kaluluma EPA, Cathy Ngoma, with her bull

3.1.4 Data analysis

The responses from the respondents were grouped according to the key aspects of the study highlighted in figure 2 above. These areas include: changes in the roles of women at household and community level, changes in participation of women in agriculture, economic empowerment, decision making process at household and community level, access and control, social empowerment which included increased organisation and networking and access to information by women lead farmers. Some responses were explained and included in the findings while others were entered into an excel sheet and the graphs were generated to explain the findings more clear. The coded data were also generated into percentages and numbers for clear explanation of the findings.

3.1.5 Ethical Issues

The respondents were all informed about the purpose of the research. They were also informed about the possible areas where the information they provided during the research could be used. They all agreed to participate in the research on voluntary basis. The informed consent was read to them as indicated in the appendix 1. For those who knew how to read and write, were given an opportunity to write their names or sign on the informed consent to verify their voluntary participation in the research. The women lead farmers were also informed that they had been selected at random and even though the selection had been done, they had the freedom to quit at any point during the research if they felt that it was no longer necessary to participate.

3.1.6 Study Limitations

This study solely dependent on the data collected from sampled women lead farmers from three EPAs. The study did not compare the findings with other women farmers to see whether the changes that had occurred to women lead farmers reflected the changes in other women farmers who participate in agriculture activities. The study did not include the collection of information from institutional representatives such as extension workers from government, traditional leaders, farmer organisation representatives and family members.

Even though the researcher recognises that such information would be significant to this study, the action could have stretched the study beyond the time limits set for the study. It is important to note that men lead farmers were also not part of this study. The inclusion of men lead farmers would have brought out valuable information and formed the basis for comparison between men and women lead farmers. However, due to the time limits for the study and considering that their inclusion also meant extra logistics it was not possible to include them in the research.

The analysis of the data collected during the field work did not categorise the responses according to EPAs. Instead, the women lead farmers were treated as a uniform sample that was analysed without EPA distinctions. The researcher acknowledges that extension workers from different EPAs may differ in their capacity to implement activities and hence there could be EPA variations. However, the assumption that underlies this study is that EPAs are just administrative arrangements and agricultural strategies for empowering women are the same in all the EPAs. Furthermore, the purpose of the study hinges much more on the generation of information from women lead farmers as a collective group and therefore nullifies EPA differences.

Chapter 4: Findings

4.0 Characteristics of the Interviewed Lead farmers

Out of the 30 women lead farmers interviewed, 22 were married, 6 were widows while 2 were single. Almost all the lead farmers interviewed solely depended on growing crops and rearing animals for their income. They grew different crops such as ground nuts, soy beans, maize, tobacco, cow peas, vegetables, potatoes, Irish potatoes, beans, peas and sunflower just to mention a few. They also kept animals such cows, goats, pigs, chicken and pigeons. In addition to these enterprises, they also generated income through small businesses such as selling cookeries and tomatoes.

The women lead farmers interviewed were all selected through participatory meetings facilitated by extension workers and attended by traditional leaders as well as farmers from within the area. Prior to their lead farmer's role, 28 lead farmers were mere farmers and participated in community agricultural programmes such as meetings, joint garden cultivation, manure making, field days and were members of agriculture groups sometimes known as farmer clubs. One woman lead farmer used to participate in legume research trials conducted by Chitedze research institution while another used to be a community advisor for village saving loans.

All women lead farmers played a key role in carrying out household chores which included among others food preparation, taking care of the children, fetching firewood, fetching water, cleaning the homestead and taking the children to the hospital. These roles were traditionally acceptable as women roles. They were also involved in agriculture related activities such as cultivating the field, preparing land for crop production. They were involved in growing both food crops and cash crops for the family. When the lead farmers were asked to define empowerment, they came up with different ideas.

Perceptions of women lead farmers on empowerment

Out of 30 lead farmers, 29 said they heard the word empowerment from the radio before the interview. These 29 respondents have had no lessons on empowerment but they still understood the word and interpreted it in their own way. One lead farmer defined empowerment as the 'ability to be independent but also to be able to deal with oppression'.

Another indicated that empowerment meant 'women must be able to stand on their own without looking up to a husband' Chipala EPA, interview, woman lead farmer, 2013).

The responses towards the understanding of empowerment attracted various answers from women lead farmers. Most answers centred on independence (standing alone), power to decide and power to the people. The responses on the perception of women lead farmers towards empowerment have been grouped as shown in the table 1 below:

Table 1: Definitions of empowerment from women lead farmers

Definitions	Number	Percentage
Power to work and improve oneself	3	11
Power to decide what is better for a person's life	6	21
Being independent, making individual accomplishments/able to deal with oppression	9	32
I don't know the meaning	1	4
Freedom to talk and participate in activities	2	7
Power to the people	5	18
Encourage people towards development initiatives/take charge of their lives	2	7

Source: data from interviews July, 2013

4.1 Changes in roles as perceived by women lead farmers

Women lead farmers had varying ideas on the perception of whether their household and community roles had changed since they assumed the lead farmers' role. In total, 17 women lead farmers indicated that their roles had changed since they became women lead farmers; 11 indicated that the roles had not changed while 2 did not precisely differentiate whether roles had changed or not. Out of 17 women lead farmers who accepted that roles had changed, the perception of what really changed differed. For instance amongst them, 5 women lead farmers perceived the changes in roles in relation to domestic tasks; the other 4 perceived the change in roles relating to new community responsibilities, 2 perceived these changes relating to personal gains or fulfilments while 6 women lead farmers agreed that the roles had changed without specifying what really changed.

One lead farmer who perceived it in relation to domestic tasks said, 'I am not able to do a lot of tasks at home since I started this programme and I always work to realign my time to accommodate this new task', (Kaluluma EPA, interview, woman lead farmer, 2013). This is because women are always engaged in domestic work and the new roles seem to be in conflict with the usual domestic roles. On a positive note, 4 lead farmers saw this opportunity as a way to engage men to help in household chores. For instance they indicated that since they became lead farmers, they no longer worried about household tasks whenever they went out for extension services since their husband understood them and took over some tasks such as fetching water on bicycles, caring for the children and sometimes cooking as one remarked, 'when I am busy, my husband takes care of the children, draws water and bathes the children'. (Kaluluma EPA, interview, woman lead farmer, 2013).

The other 4 women lead farmers that perceived changes in terms of new community responsibilities indicated that they were now involved in agriculture technologies such as 1-1 planting, sanitation programmes, nutrition programmes, kitchen gardens and engaging as woman lead farmer for the farmer field school. There were still 2 other women lead farmers who perceived the changes in roles as an opportunity to do their personal exploits. For instance, one woman lead farmer saw this as an opportunity to graduate from farmer clubs and work as an individual which has made farming to be more profitable.

While the other one said, 'working as a lead farmer made me realise new connections with research institutions that came to this area to conduct vegetable trials.' Lisasadzi EP, interview, woman lead farmer, 2013. The new roles of working with the research came in because research institutions usually require skilled and committed farmers to implement trials.

In contrast to the above findings, 11 women lead farmers perceived that their roles had not changed. Out of these women lead farmers, 2 indicated that they only learnt how to manage and divide their time properly since their new roles competed with the domestic roles. When probed further, they indicated that in order not to create friction at household level, they adapted by working extra time like waking up earlier to do household work before going out for the lead farmers' roles. The table 2 below shows the perception on the changes in roles.

Table 2: Summary of responses from changes in roles since women lead farmers assumed their roles

Category of perceptions of change	Responses on whether roles have changed					
	Yes	n=17	No	n=11	Not sure	n=2
Domestic role changes	Husband able to help, cook provided relish is available, draws water, cares for the children Yes(unspecified)	4 6	Taught me to divide time for my tasks because I'm involved in both household and community tasks	2		
Community tasks	Engaged in 1-1 planting for community, sanitation programmes, kitchen gardens, nutrition programmes, manure making and application	5	Nothing has changed	9		
Individual gains	Graduated from farmer clubs Linked to research institutions	1 1				

Source: Data from interview. July, 2013

4.2 Participation of women lead farmer in agricultural activities

The women participation in agriculture activities organised by extension worker such as meetings, training and other planning activities was also documented. The women lead farmers indicated that there were no restrictions on participation in activities organised by government or communities. The study revealed that 70% of the interviewed women lead farmers participated in agriculture meetings. They were invited to attend agriculture meetings by extension workers. These meetings were usually organised at an area or section level.

Women lead farmers also indicated that prior to assuming their new roles; they did not receive invitations from extension workers. They indicated that in the past, often times they received information about the meetings after days for the meetings had passed. These new invitations were due to the fact that they extension workers recognised their importance in activities implementation since they had assumed the lead farmers roles.

In addition, they had no access to training opportunities prior to becoming lead farmers. In rare cases, the women lead farmers were also invited to an EPA to attend meetings organised by the AEDC. About 90% of all the interviewed women lead farmers participated in agriculture related trainings organised by extension workers from agriculture or non-government organisations. Only 10% indicated that they had not fully participated in trainings. The list of trainings attended by women lead farmers has been categorised in table 3 below:

Table 3 : Trainings attended by women lead farmers

Category of training	Type of training
Agribusiness	<ul style="list-style-type: none">Gross margin, market research, values chain, revolving fund management, cash flow.
Agriculture	<ul style="list-style-type: none">1-1 planting, manure making , fertiliser application, Conservation agriculture, ridge alignment, post-harvest handling, research trials on maize, biological control of pests, basin irrigation, Irish potato planting, recommended practices for different crops, soil and water conservation, agro forestry,
Nutrition	<ul style="list-style-type: none">Nutrition, kitchen gardens, exclusive breast feeding, sanitation, food preparations, energy saving stoves, juice extraction,
Livestock	<ul style="list-style-type: none">Dairy cow training on livestock management(diseases, housing, feeding and medication, practical on livestock diseases,

Source: Data from interviews, July, 2013.

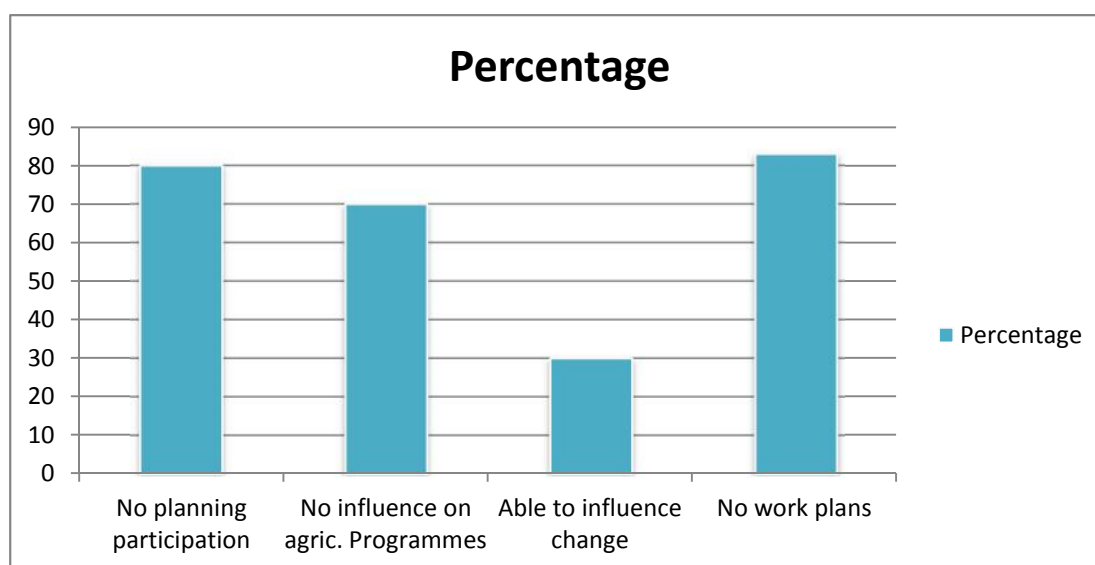
Participation: Influence of lead farmers on agricultural programmes

Even though the lead farmers had an opportunity to participate in these training, 70 % of them mentioned that they did not have an influence on the way activities were planned and implemented by extension workers. They only had an opportunity to suggest future trainings to be considered although they never came along. Activities were mostly implemented as planned by an extension worker as one lead farmer remarked, 'Each time I suggest changes in implementation of an activity, our new extension officer says, 'let us just follow the office plans' Woman lead farmer, Lisasadzi EPA, interview, 2013.

The study also found that only 30% of the women lead farmers had an opportunity to make slight changes in the implementation of planned activities. These were minor changes in implementation. For instance, making suggestions on the day the activity should take place because of other village engagements, changing the village which should start the pass programme on livestock and making changes on the type of seed to receive in an area depending on the performance of a particular seed crop within an area.

Apart from having a low influence in implementation, 80% women lead farmers also responded that they had not participated in any planning of agriculture activities for their community. In the end, it was not surprising that 83% did not have any work plan or action plan that they followed during activity implementation. This was due to the fact that the women lead farmers understood that they were mere implementers and all the plans came with the frontline staff. The study also documented aspects of economic empowerment. The figure below presents the summary of lead farmer's responses in relation to their capacity to influence agriculture programmes.

Figure 4: Women lead farmer's participation in planning and influence in agriculture programmes



Source: Data from the field interviews July, 2013

4.3 Economic empowerment

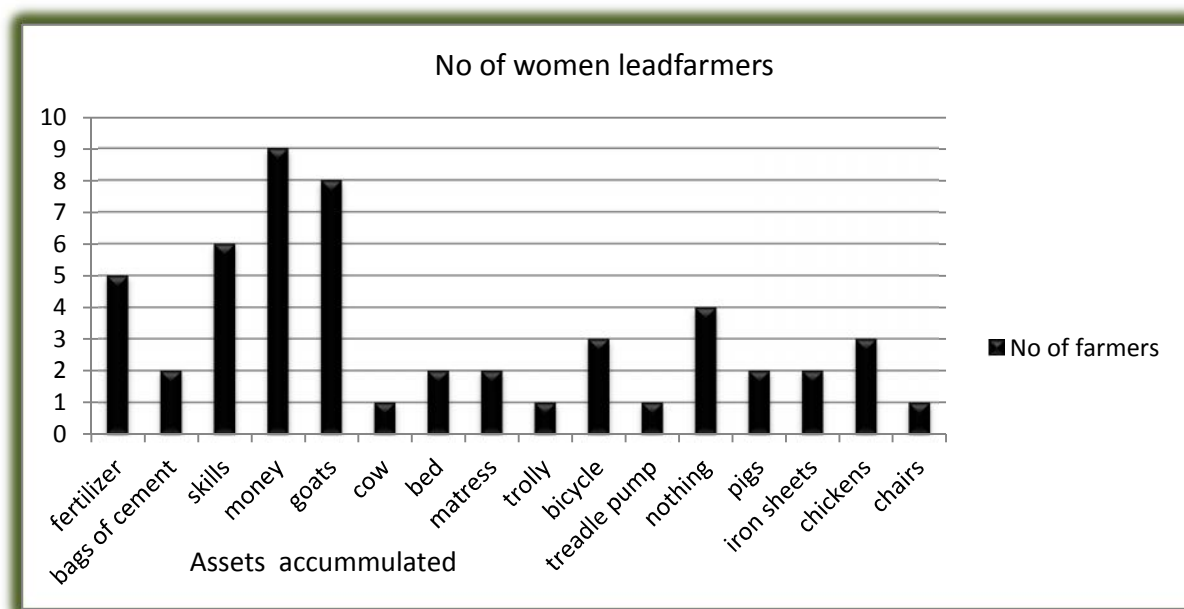
The term economic empowerment in this research meant the assets the lead farmers accumulated over the period they assumed their responsibilities as women lead farmer. There was no limitation on the specific type of assets. It solely depended on the individual perception on what is thought to have been gained through their new societal role.

The study documented the contribution women lead farmers had made towards the asset accumulation for the household. They were two types of assets that the study looked at namely tangible and intangible assets. Out of the interviewed women lead farmers, 87 % indicated that they had accumulated some assets which were either tangible or intangible. The study also found that 13% of women lead farmers perceived not to have gained anything from the lead farmer role. These women considered benefits in being lead farmers only in relation to accumulation of material things that they could easily show and not the benefit in terms of knowledge or skills they attained while performing the lead farmer's role.

Tangible assets: These assets included money, fertiliser, iron sheets, chicken, clothes, food, goats, beds, mattresses, pay school fees such as money and high yields. The money was mostly used to buy inputs, buy food and pay school fees. Some lead farmers accumulated their money in the village banks which was sometimes used at household level to sort out family needs.

Intangible assets: These included the skills they obtained through training and practising the technology they imparted to other lead farmers. The skills included one- one planting, market research, livestock management, manure making and application, conservation agriculture, village loan savings, sanitation and nutrition among others. The figure below shows the change in asset accumulation among women lead farmers.

Figure 5: Assets accumulations among women lead farmers



Source: Data from the field interviews July, 2013

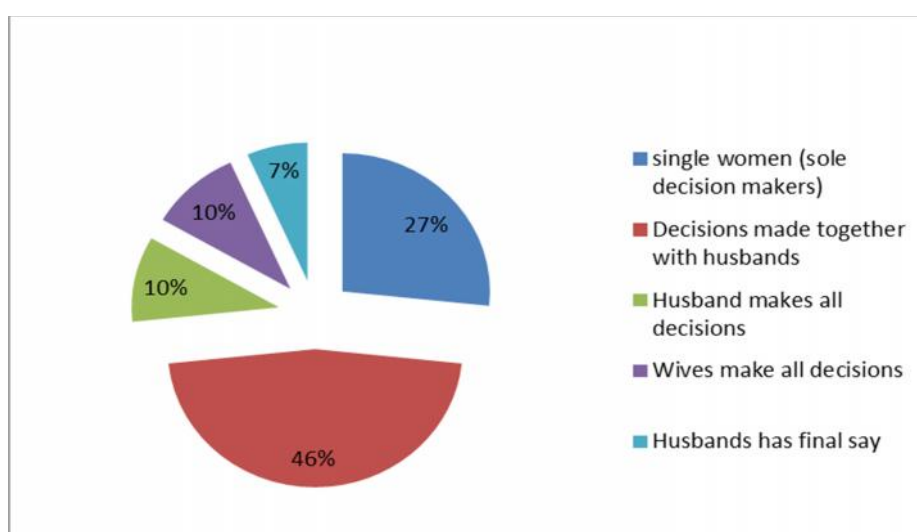
4.4 Decision making

4.4.1 Decision making at household level

Women lead farmers who were either singles or widows made independent decisions regarding their household resources and their uses just as they used to do before they become lead farmers. They had their own land where they grew crops and some raised animals like pigs, goats, chicken and other small stock livestock. They had the opportunity to decide what to grow on a piece of land and what to sell. Out of the 22 married women, 14 women lead farmers indicated that they made decisions with their husbands and would agree on how to use resources, while 3 said husbands make all decisions and 3 women lead farmers were decision makers in their homes relating resources. Only 2 were involved in decision making where the husband had a last say.

Almost all married women had an influence on allocation of household resources. Decision making on commodities for sale and prices were done jointly by the husband and wife within the household. The prices were also determined by the available market like vendors. Women also took a greater role in making decisions on sales because husbands often consulted them before selling the items to see if they had any market information. Women were consulted because husbands knew of their new roles which gave them access to information. One women indicated that since she assumed the role of women lead farmer, the husband always consulted her and encouraged her to take part in decision making regarding farming and farm produce. The field data indicate that decision making in the home had been influenced by the new roles of women lead farmers. The table below presents decision making in the homes.

Figure 6: Women lead farmers decision making at household level



Source: Data from the field interviews July, 2013

4.4.2 Decision making on household tasks

Domestic tasks included all the tasks that women performed at household level such as cooking, drawing water, fetching for firewood, caring for the children, taking the children to the hospital and all other domestic tasks that are usually assigned to women. Out of the 30 interviewed women lead farmers, 20 women lead farmers acknowledged that there were changes in domestic roles as a result of their new women lead farmer responsibilities assigned to them. Amongst these 20 women lead farmers, 8 women lead farmers left their tasks to their children especially daughters whenever they were busy with their field work and 2 left the tasks to their mothers or wife's brother. Out of the 22 married women lead farmers, only 7 women lead farmers reported that their roles of household tasks would be taken over by husbands in their absence. This represented 32% of married women lead farmers.

Even though the husbands acknowledged their busy schedule and exempted them from other agricultural related work, they would not take over some household tasks in their absence. The study also found that married women lead farmers were not ready to discuss or share these changes in roles at household level. They were not comfortable to explain the new roles their husbands assumed in their absence. For instance out of 7 women whose husbands assisted them with the household task, only 28 % (2 women) were free to share their experience on changes in household tasks with other fellow women. Women attributed the lack of sharing to unfriendly traditional norms which interpret men's involvement in household tasks as a form of downplaying them.

Women lead farmers kept their husbands assistance as a 'secret' for the house and were 'afraid' to share these experiences to others. The household tasks that men were involved included cooking, bathing the children, taking the children to the hospital and using a bicycle to fetch water for the household. All these roles were culturally women's tasks as such they were only performed when the women lead farmers were busy and they were not sustained as routine roles for their husbands. The society perceived men as *weaker* if they accepted to perform these tasks in their wives presence.

Surprisingly, 10 women lead farmers indicated that there were no changes in household tasks but only the change in responsibilities assigned to them by the community. The lead farmers responded to this change in responsibilities by managing their time, waking up earlier to do all tasks before they left for lead farmer's role, divide and plan their time to fit additional tasks and even assigning other tasks to children. One lead farmer indicated that the new role disturbed the order of household tasks. One widow lead farmers remarked, 'everything waits for me nowadays since my children are mostly in school.'

4.4.3 Decision making at community level

The women lead farmers greatly influenced decision making at community level. The data findings indicate 20 out of 30 women lead farmers had more than a reasonable influence on community level decision making. One woman lead farmer indicated that since she became a lead farmer, the traditional leader always consulted her on agriculture related work that needed to be implemented within the community.

For instance, when women were asked on whether they influenced community plans on agricultural activities, 19 women lead farmers indicated that they were able to influence changes within the community agriculture plans while other 6 said it was 'fairly easily' to influence changes within the community. Only 5 women lead farmers had a feeling that influencing change within the community was possible but often difficult to them. Besides, the interviewed women lead farmers also indicated that their attitude towards speaking in public had changed. At first, they used to be shy but now they were able to stand and talk to the group. The boxes below indicate some interesting quotes from women lead farmers interviews regarding their new roles.

Box 1: women lead farmers quote on the lead farming role as an instructor

'Because of this new responsibility, I am now used to talk in public. Now I can easily take charge and speak out in a group of farmers. For instance, I have my father in-law in one of the groups (in Malawi, traditional women rarely stand before their father in-laws or face them as a sign of respect) but he is my 'student' in as far as my roles are concerned and he needs to learn from me, so I put everything aside and attend to him just as I do with other farmers.' women lead farmer, Kaluluma EPA, interview, 2013.

Box 2: woman lead farmer views on lead farmers role in influencing other women

Being a lead farmer has helped me to be independent. With the current high divorce rate, I encourage women to stand on their own and avoid re-marrying several times. My roles have encouraged several women to discuss their issues openly and to avoid unscrupulous credit facilities which exploit them. Woman lead farmer, Lisasadzi EPA, interview, 2013.

Box 3: Views about speaking in the public

You know, I am not a lead farmer for women only. I teach both men and women farmers. At first, I used to be very shy. But nowadays, No, I do not feel shy any more. Woman lead farmer, Chipala EPA, interview, 2013

4.5 Access and control of the resources and benefits

As it regarded the access and control of household resources and benefit, the study wanted to find whether the new roles assisted women lead farmers to gain mileage in this aspect. The findings indicated that in eight households who lived alone (2 were single and 6 widows), women lead farmers accessed and controlled all the household assets. Apart from the household assets and garden assets, they also had land where they independently decided what to grow and sell.

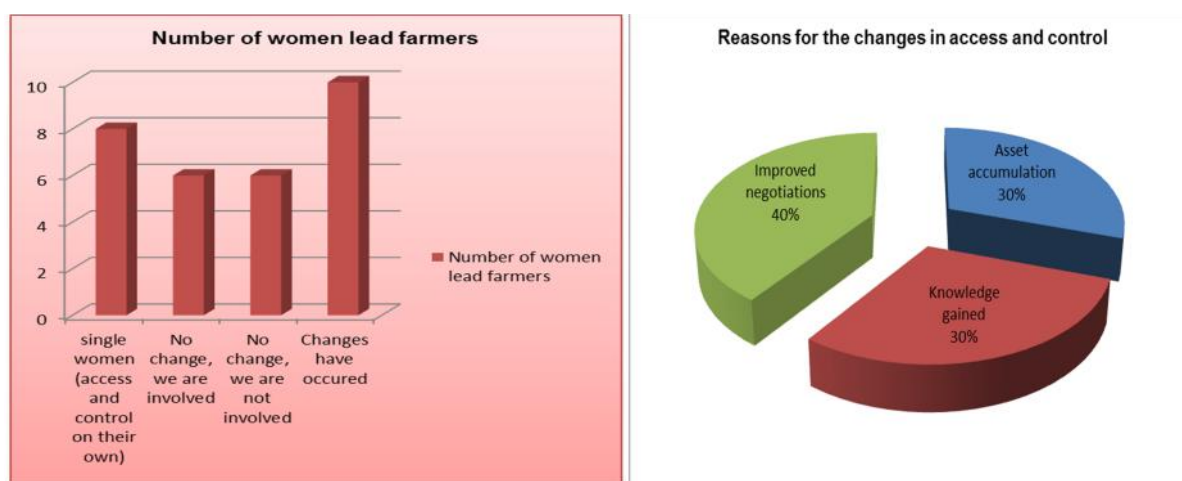
The situation amongst married women lead farmers was different, 27 % responded to have control over their resources and all responded to have access to the assets at home and other 27 % explained that their husbands had control over the assets while 46% showed that they all (husband and wife) had access and control over the resources and benefits and made decisions together regarding the use of resources.

The researcher also investigated whether access and control over the resources and benefits had changed amongst married women lead farmers since they took up their roles as women lead farmers. In total 10 women lead farmers responded that their access and control had changed since they became lead farmers. This represented 45 % of the married women lead farmers. Out of these 10 women lead farmers, 4 indicated that working with groups improved their negotiation skills, decision making, and courage to talk about group resources that has in turn helped them to negotiate control of resources at household level.

Other 3 women lead farmers explained that the changes were due to their new knowledge in farming that helped them to own their assets at home and exercise control over them. For instance one lead farmer said, 'Being a lead farmer has helped me with new knowledge of farming and I have managed to own pigs and goats that I also control' Interview, woman lead farmer, (Kaluluma EPA, 2013). The other 3 women lead farmers remarked that the knowledge they acquired from the new role either made them free to talk about resources at home, gain good direction on resource use or made their husbands consult them since husbands acknowledged their advisory roles they had in the society. For instance, one woman lead farmer said, 'Since I became a lead farmer, I am always encouraged by my husband to take part in decision making because he thinks I learn a lot which is also necessary for our family development and this puts me in a position to influence some decisions and control household resources' woman lead farmer, Kaluluma EPA, 2013.

On the other hand 54% (12) of the married women lead farmers indicated that the issues of access and control had not changed in their households. Amongst these, 6 used to control resources ever since they got married because they felt it was their roles in the house as well while other 6 left the control to the husbands since they got married and it has remained the same. The figures 7 (a and b) below indicate changes in access and control for women lead farmers households and the reasons for the changes.

Figure 7(a): changes in access and control of household resources and (b) reasons for the changes



Source: Data from the field interviews, 2013

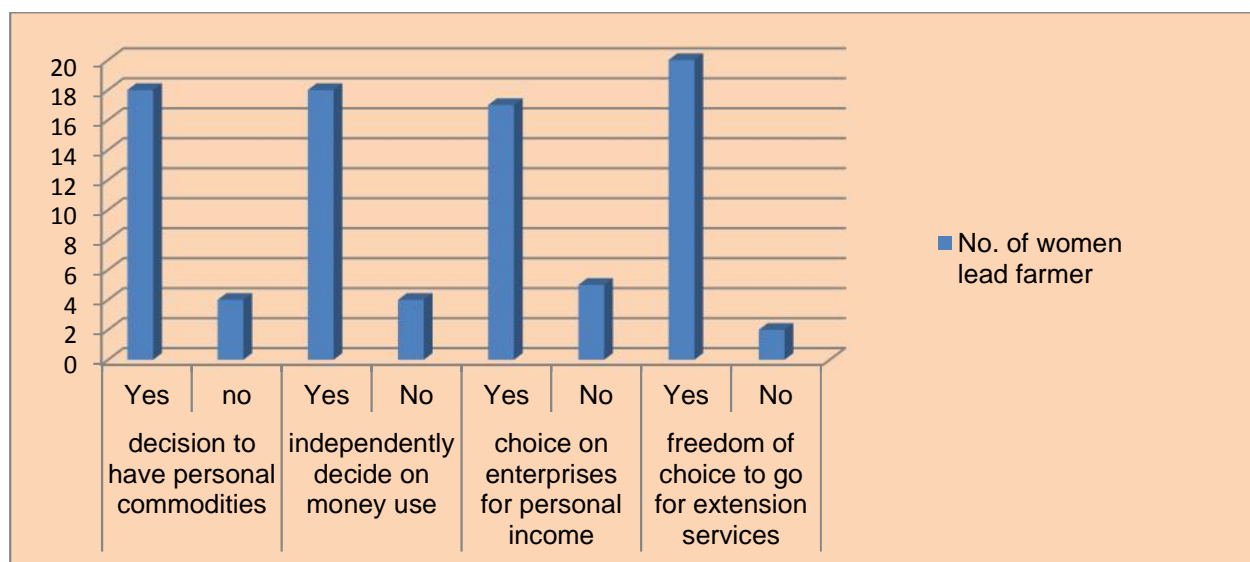
4.6 Making choices at household level

Concerning making choices at household level, single and widowed women lead farmers freely made decisions concerning enterprises or crops they needed to grow or sell since they controlled everything regarding agriculture within their households. Amongst the 22 married women, 18 had an opportunity to have personal commodities they sold as individuals. These commodities were crops such as soybean, maize, Irish potatoes, vegetables, tomatoes and sometimes products such as cookeries prepared in the home. In addition to this, they also had freedom to spend the money they made through these sales.

Out of 22 married women lead farmers, 20 had the freedom to go for extension services without restrictions. These women explained that since husbands knew of their selection, they always allowed them to go out for extension services. Sometimes women took an initiative to communicate the programmes in advance to their husbands. Only 2 had problems to go out for extension services, one of which indicated that she was new in the system and still did not know a lot of things to teach fellow farmers and that restricted her trips while the other indicated that the husband controlled her time.

From the married women, 2 of them explained that husbands usually encouraged them to go for the extension services. The women meeting time with other farmers ranged from 2-3 times a week during the wet season to 1-2 times a month during the dry season. The figure below shows the married women lead farmer responses on their capacity to make choices.

Figure 8: Married women lead farmers' capacity to make choices



Source: field data July, 2013

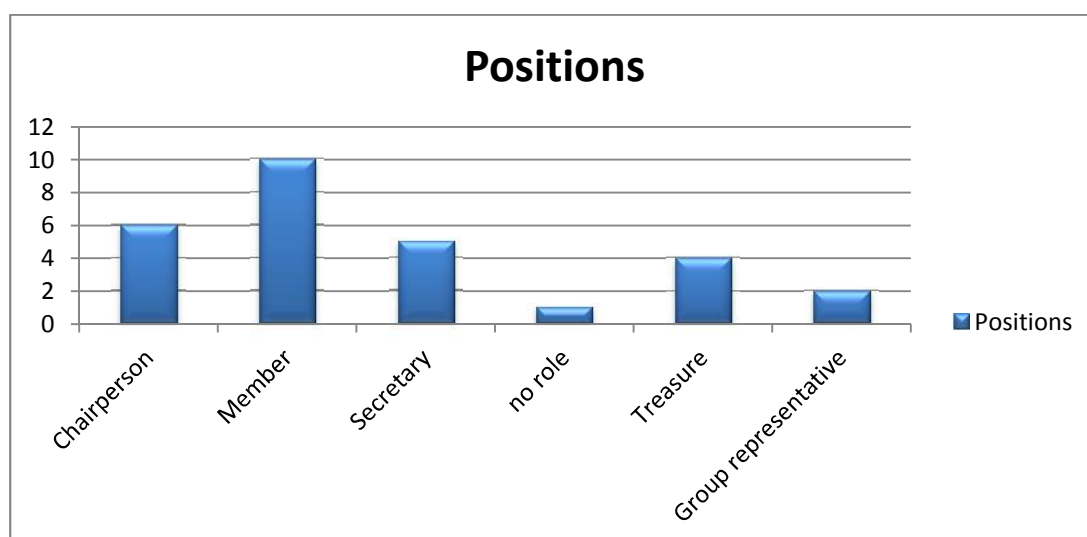
4.7 Social empowerment

4.7.1 Women organisation and networking

Women lead farmers had an opportunity to network with other service providers that implemented agriculture related activities in their area of operation. The women benefitted from inputs, trainings in manure, nutrition, sanitation, market information and loans from these networks. About 80 % of these women lead farmers managed to network with these organisations that existed within their area and benefitted from such networks. These independent networks also prompted women lead farmers to join other women organisations.

The study found that 93% of women lead farmers belonged to women organisation where they accessed different services such as services regarding input provision, credit facilities and trainings. During the time of this study, the women lead farmers had stayed in the organisation for 1-5 years. They had also occupied different positions in these organisations just as several women also had prominent positions in the organisations. The figure below shows some lead farmers positions within the organisations they belonged to:

Figure 9: Women's lead farmers' positions in organisations within their community



Source: field data from interviews. July, 2013

Through these organisations, about 28 out of 30 women lead farmers had an access to credit facilities through self-organised local women loan system known as 'care' which women say had flexible loan conditions than other credit facilities. The 'care' loan system was originally an intervention by one of the non-governmental organisation to women farmers. When the programme expired, women organised themselves to form care groups which according to them had flexible loan facilities. Findings show that 14 women lead farmers also accessed credit information through the service providers' extension agents, 11 accessed credit information through beneficiaries of a credit facility, 3 women lead farmers accessed through groups and 2 of the women lead farmers accessed the information through the radio.

4.7.2 Access to market information

There were different ideas on whether the access to market information had changed to the individuals' women lead farmers. During the study, 60 % of the respondents indicated that the market information had not changed. They indicated that the market was still flooded with vendors who exploited them by offering the lower prices for their commodities. These farmers responded that so long the prices for agricultural commodities remained lower, they did not notice any change.

In contrast to this finding, 40 % indicated that their access to market information had changed. The difference between the two categories of respondents was mainly due to their personal engagements in markets. Even though prices of commodities were lower than last three years, 40% of women lead farmers engaged themselves through among others, receiving information about markets from extension workers, negotiating with several buyers in order to find who is offering a better price, forming organisations to search for markets and working with non-governmental organisation that assist in market research.

All the women lead farmers had access to markets and patronised the markets quite often. One woman lead farmer wanted to know the reason their commodities were bought at lower prices than the one announced by government on the national and private radios. The access to production information had changed since women lead farmers assumed their roles. This is due to the fact that since they became lead farmers, women were in constant contacts with agriculture extension worker. For instance, 70% of the women indicated that since they became lead farmers, they got agricultural related information from extension workers. Still more, 80% had access to trainings that they never had before they became lead farmers.

4.8.0 The women lead farmer needs

Women lead farmers needs are numerous. They have been classified into three namely: those that relate their recognition, programme implementation and incentives.

Recognition The women lead farmers mentioned that they had no identity to distinguish them from the rest of the farmers in the village. The women lead farmers suggested that a proper working attire and working materials would differentiate them from other farmers within the community. They indicated that they needed a proper uniform to be easily identified by the community. In trying to explain the need for such an identity, one woman lead farmers asked me a question, 'how can you identify me from the rest of the farmers within the group?' woman lead farmer, Kaluluma EPA, interview, 2013.

The suggested list of what would make a proper identity includes, but not exhaustive, gum boots, bag for carrying teaching materials, and uniform for easily identification, hand gloves, rain coats, and umbrellas. Apart from identity issues the protective wear would address, women lead farmers also believed that the attire would make the community farmers take their messages more serious. The attire would signify their role of representing the government extension worker in extension delivery.

Programme implementation: The study also found that women lead farmers needed inputs for demonstration. In order to disseminate extension messages properly, women lead farmers expressed the need to be more practical by having all necessary inputs for demonstrating a particular technology.

The inputs for demonstration were said to have a bearing on adoption of technologies because in most cases, lead farmer explanation without a practical aspect was not enough to convince farmers to adopt technologies. The suggested inputs for field demonstration included: fertilisers, herbicides, wheel barrows, watering cans, treadle pumps, rakes, hoes, seed, pesticides, measuring tapes and drug boxes among others. In addition to these, the women lead farmers also had no stationery to write programmes or their reports. This made reporting a challenge.

Incentives: Men and women lead farmers work on voluntary basis and are not paid for their work. Women lead farmers mentioned the need to consider some incentives to in order to inspire them. One woman lead farmers said, 'For sure we lack of incentives to make us work better; it is difficult to continuously work on a volunteer basis' woman lead farmer, Chipala EPA, interview, 2013. Incentives were therefore suggested as one way out. These included material and non- material. For example tours to learn some new technologies, allowance (money), cell phones and agriculture loans.

4.9.0 Constraints faced by women lead farmers in extension work

The constraints identified by the women lead farmers during the interview are to do with coordination issues, wrong perceptions on the benefits accrued to lead farmers as a result of inadequate sensitisation, and political influences. These aspects are explained below:

4.9.1 Coordination issues

Currently both government and non-governmental organisations use lead farmer in their extension work. NGOs sometimes use government lead farmers but sometimes they have their own lead farmers. The study found that there are conflicting messages from government and NGOs on recommended agricultural practises delivered to their respective lead farmers for field implementation. For instance, government and NGOs delivered different procedures on manure making and procedures for establishing a conservation agriculture field. The women lead farmers indicated that they had disagreed several times with other lead farmers on these different procedures. Women lead farmers further expressed that technologies implemented by NGO in conservation agriculture were unable to control weeds.

These differences in message delivery sent confusions to the farmers on implementation of these important agricultural practices. This finally confused farmers because they did not know what exactly they needed to follow. The study also found out that there was lack of supervision of women lead farmer activities by traditional leaders and extension workers. The lack of supervision made women lead farmers feel their roles were less significant. Women lead farmers also revealed that they lacked coordination amongst lead farmers themselves and this hindered the process of learning from each other.

In addition to this, they also highlighted poor proper planning mechanisms as one of the challenges they faced between themselves and extension workers which made most programmes look like ad-hoc. The lack of exposure to other farming practices through yearly agriculture shows was also revealed to derail opportunities for farmer to farmer learning.

Political interference was mentioned as another coordination issue that affected women lead farmers in their work. The women lead farmers revealed that they faced challenges to coordinate pass-on programmes in crops or livestock that were influenced by politicians. They faced challenges because of conflicting information given by politicians on agriculture interventions. For instance, in one dairy pass on programme, a member of parliament told farmers that they owned the dairy cows when in actual sense, they were supposed to be passed on to other farmers after they calved.

This made it difficult for women lead farmers to follow up on the dairy cows because they were viewed as having dissenting views. This finally resulted into most farmers selling the dairy cows because they thought they had owned them and finally the programme failed. The village politics between women lead farmers and traditional leaders also affected the work of lead farmers especially in interventions where traditional leaders perceived that women lead farmers benefitted more than them.

Coordination challenges from the agriculture office included the lack of information on inputs such as herbicides and improved varieties. While from other sectors, women lead farmers pointed out the lack of cooperation to end livestock theft and dubious credit facilities that exploited women farmers.

4.9.2 Inadequate sensitization

Even though the lead farmer role has existed for some time, most farmers do not know the exact benefits accrued to lead farmers' role. The women lead farmers expressed that most farmers had the idea that they were paid. This made some farmers to deliberately frustrate lead farmers programmes. The inadequate information regarding the lead farmer's benefits in some cases led to farmers lack of farmers commitment (because they thought lead farmers deliver technologies because they are paid), sometimes scorning them, deliberately frustrating their programmes and avoiding their meetings.

4.9.3 Inadequate trainings and brochures

The other constraint is lack of training and orientation opportunities that made lead farmers less updated on the latest technologies. Training opportunities as mentioned by lead farmers were also part of incentives that would encourage them in their work since they worked without pay. In addition to inadequate trainings, the women lead farmers also lacked brochures messages to deliver to their fellow farmers.

4.9.4 Transport

The women lead farmers are constrained by transport. Some cover a very large area to deliver their extension services and this posed a big challenge to them. In addition the lack of transport also created difficulties to do extension services in wet season. Out of the 30 women lead farmers interviewed, only 2 had bicycles they received through the programme. Even the ones that received bicycles indicated that they were not given bicycle spare parts that were promised during the initial start of the programme.

4.9.5 Marketing issues

The study also found that the market for agriculture products was a challenge for all women lead farmers. For instance, the lack of proper and stable markets made women lead farmers' advice to farmers on profitable agriculture enterprises look invalid. In addition, women lead farmers expressed the concern on trends of agricultural commodity prices. They indicated that prices were always lower after harvest and always higher during the purchase of inputs.

The lack of proper markets as indicated by women lead farmers was due to lack of government commitment to sort out the market and marketing problems. For instance, the women lead farmers mentioned that they were no representatives to monitor the vendor activities in the villages. The vendors were the only customers readily available in the villages to buy agricultural commodities at cheaper prices. According to women lead farmers, vendors were representatives for greedy politicians who traded in agricultural commodities and had readily available external markets. In addition, the lack of markets made farmers to lose control on their own produce because they had nowhere to sell at better prices in order to remain productive in their farming business.

Chapter Five

5.0 DISCUSSION AND ANALYSIS

The following sections in this chapter will look at the contributions of women lead farmers concept towards women lead farmers' own empowerment in agriculture. The sections will discuss and analyse the changes that have happened to women lead farmers since they took their responsibility as lead farmers in agriculture. These changes include the change in roles of women lead farmers, participation in decision making at household and community level, changes in access and control of resources and access to information. The changes in asset accumulation, access to farmer organisations and ability to form networks will also be discussed.

5.1 Changes in roles for women lead farmers

The roles of women lead farmers changed as evidenced from the field data that indicate that 57 % of the respondents community and household roles are different than before they assumed this responsibility. Women lead farmers are exempted from some household task such as cooking, bathing children and taking them to hospitals whenever they are busy with their extension work. These tasks are performed by husbands despite the fact that they were traditionally women's roles. Men came in to assist after the recognition that women lead farmers were tied with extension work that came after the community chose them.

The findings for the study are in line with the findings of Imran, (2002) in (Natural resource management, 2002) who stated that projects that changed the roles and skills of women had the capacity to improve the condition of women despite inflexible traditional attitudes and behavioural norms. The author further argues that the increased appreciation among men of women's work load is helpful to re-orient their perspectives and redress gender inequalities. Also in Malawi, the study found that men were willing to do domestic tasks even though it is against their tradition. They understood the busy schedules their wives had as a result of being lead farmers.

It is important to learn that even though women lead farmers were chosen by the community, in most cases, traditional leaders formalised their choice by informing husbands on the involvement of their wives as lead farmers. This was also partly the reason husbands to women lead farmers valued the work of their spouses since they were not only recognised by the society but also by traditional leaders. Men's flexibility could also be attributed to the recognition they get from the traditional leaders and the society. Generally, the women lead farmers role had the capacity to flex traditional norms which exempt men from most household chores.

The change brought new patterns of household roles that includes the change of tasks at household level. The continued roles may create an opportunity to negotiate for these household chores so that women gain control over their time. Although we may not conclude that the temporal change in men's household roles was empowering women to have control over time, the study agree with findings by Aarnick and Kingma, (1991) who indicated that the ability of women to delegate some responsibilities to others in the home enables them to increase their mobility.

The change of women lead farmers roles also gave them the freedom to move and deliver extension services. The freedom of movement is also determined by women freedom to decide whether to become a member of a group, to be engaged in income generating activities and work freely with extension workers (Aarnick and Koos, 1991). The findings from the study reveal that there were no restrictions to hinder women lead farmers' movement especially in case of 20 married women lead farmers. This suggests that women lead farmers were free to perform community tasks with the support of husbands who did not only permit their movement but also assumed household roles in their absence.

The women lead farmers also engaged in community agriculture roles such as training farmers in agricultural technologies, agribusiness, nutrition and livestock lessons according to the trainings indicated in table 3. The community responsibility enhanced women capacity to speak in public without fear. This was change was so empowering to women lead farmers since they were able to make viable contributions to the programmes at community level. Their involvement meant that the goal of lead farmers concept to women engagement in extension work was partly achieved. However, women themselves revealed that despite these changes, they lacked recognition as lead farmers within the society. They had no uniform or any attire to symbolise that they performed important agriculture extension tasks and this made them less confident of their roles. They explained that as women lead farmers, their desire was to be recognised just as extension workers were easy to recognise.

According to Rowland, (1997), lack of self- confidence and self-esteem are understood to be lack of empowerment. For instance, if women lead farmers lacked self-confidence and self-esteem because of lack of uniforms, they were not empowered. In contrast to this, Karl (1995) reports on NGOs view that capacity building creates empowerment since it creates confidence and self-esteem. The findings of this study very much agree with (Karl 1995) in that when women were asked of how they had changed since they started their new roles, they responded that their roles changed them and that they were confident to enough to stand before the public and explain things out as in *Box1*. Therefore, women lead farmer's role, contributed positively towards women's empowerment even though empowerment here has been seen to have steps such as role change and identity. In case of these women lead farmers, they have gained self-confidence due to their change in roles but the lack of identity still disempowers them and hinders their performance to some extent.

The field data also indicate that 11 women perceived that their roles had not changed. According to these respondents, the lead farmers' responsibility made them learn to efficiently manage their time in order to accomplish household and community tasks. These women lead farmers were more likely not to ask help for domestic chores from their husbands and this could lead to over burdening themselves. (Momsen, 2010) indicated that women who are mostly held by triple roles are less likely to have an effectively participation in development work. The women lead farmers responses showed that they viewed their time as very important rather than counting the roles they had at household and community. For instance, the respondents did not view anything to have changed rather than the time allocation for their activities.

Generally, it can be concluded that the new roles of women in the society helped to change their image and women representation in extension programmes. It made them change household and community roles. The striking lesson is that it also improved their capacity to voice out which was mostly lacking. The new roles are therefore seen to be have contributed positively towards women empowerment.

5.2 Participation of women lead farmers in agriculture

A high participation of women lead farmers in agriculture meeting and trainings organised by extension workers of about 70 to 90% respectively was recorded during this study. Women participation in such activities is a step towards empowerment as cited by Oakley 1991 (in Chambers, 2010) who says participation itself is organising and empowering. Sustainable development may not be possible without the central and beneficial participation of women which according to (Steady, 1993) includes incorporating their needs, aspirations and perspectives in different programmes they are involved. According to the findings of this study, women lead farmers were able to train others more confidently after the training. The training opportunities for women lead farmers enhanced their capacity, developed their confidence and made them more knowledgeable in their respective technologies. In addition the trainings also gave them an opportunity to stand before the public and explain things out.

Nevertheless, there were grey areas in participation that hindered the level of women lead farmer's contribution towards the implemented programmes. For instance, the study found that 70 % of the women lead farmers had no capacity to influence agriculture programmes and were always asked to follow office plans as remarked in findings 4.2 paragraph 3. Worse still, 80% had not participated in planning for agricultural programmes' activities to be implemented within their community. The activities were solely planned by extension workers in their offices and delivered to women lead farmers to implement.

According to Kabeer, (1999), the women lead farmers were disempowered in this area if they had no control over the programmes. Women did not have control over the programmes even though they participated in the trainings. The findings here very much relate to Chambers' (2005) argument in which he defined empowerment to imply power to those who are subordinate and weak; but the usual practice between levels of hierarchy is control from above. Since the programmes were controlled by extension workers and less influenced by women lead farmers, they lacked ownership and therefore it was not surprising that 83% of the lead farmers did not have work plans or action plan for the activities within their area.

The continued lack of involvement of women in planning stages of activities reduces chances for women to effectively address their issues through the agricultural programmes. Inclusive planning may help address women issues in agricultural programmes as evidenced by Imran in (NRM,2002) where she found that the project in Baluchistan, Pakistan was able to break through the barriers that confront women by adopting a gender outlook and involving them at the planning stages. The planning aspect is a missing link in the implementation of lead farmer concept and negatively affects women lead farmers contribution. Therefore necessary changes are required in this area to make the lead farmer concept more empowering.

5.3. Economic empowerment

Data findings indicate that women had accumulated some assets both tangible and intangible in the household as a result of their lead farming role which the society entrusted to them. The figure 5 above gives a list of assets accumulated by women lead farmers as a result of opportunities they got from this community task. Women lead farmers, accumulated assets that were used at household level. For instance, in addition to the purchase of household assets such as bags of cement, mattresses and other materials as shown in figure 5, women lead farmers also used their money to pay for school fees for the children.

Studies in Cameroon by Guyer,(1988) as cited in (Blumberg 1991) found similar spending patterns for women. In his study, women in Cameroon spend most of their income on family provisioning. In his study, women spent 74% of their income on household supplements. Men spent 22% of their income for buying food for the house. Interestingly, finding in this study also reveal that women lead farmers income was spent on construction items (cement, iron sheets), agriculture related inputs, supporting the children with fees (which are traditionally men's responsibilities) as well as food for the house.

The accumulation of assets by women lead farmers also influenced the women to control the resources at home and decide over them. In this scenario, the assets helped to further the women's decision making and control within the household. Therefore asset accumulation on its own is viewed as an important step towards women empowerment since it goes with control and decision making. Eventually, women may start to control and make decisions beyond the assets they own within the household. Since the study interviewed women lead farmers only, did not draw comparisons with male lead farmers as it regards spending patterns. Further research is required in this area to establish the male and female lead farmer differences on their income spending patterns. This would also help to know the extent to which male lead farmers spending patterns contribute to women empowerment and food security at household level.

5.4 Women lead farmers decision making

5.4.1 Decision making at household level

The study also collected information on decision making regarding the use of resources at home, sell of crops and price determination for agricultural commodities. The findings indicate that single women were more independent in decision making at household than married ones. Within the married women lead farmers, 14 out of 22 indicated that they made decisions together regarding the resources use at household level as shown in figure 6.

Women lead farmers roles with groups taught them decision making and negotiation skills and they used such skills to negotiate decision making in their homes.

A related study on *Impact of microfinance on decision making agency* done by (Holvoet, 2005) found that group membership seriously shifted overall decision-making patterns from norm-guided behaviour and male decision-making to more joint and female decision making in the home. He further found that longer group membership and more intensive training and group meetings strengthened the decision making patterns in women (Holvoet, 2005). Even though these studies slightly differ, in both scenarios women decision making in the home was the subject of study and in both cases women were trained and worked with groups.

In this study, the women group interactions taught them negotiations skills which they used to influence household decision making. The decision making was also influenced by women personal assets. The study did not establish whether the women lead farmers had improved to bargain for decisions that regarded other household resources they did not own like land and other assets. Therefore further studies in this area are required to identify how the asset accumulation by women lead farmers has influenced other decisions within the household.

5.4.2 Decision making on household tasks

Women lead farmers were not keen to negotiate for changes in their household roles due to their new tasks. Traditionally, the household tasks belong to women and men knew it. Men who engaged to perform household task did so to their own willingness. The study found that out of 22 married women lead farmers, only 7 men performed household tasks whenever the their wives were busy with the lead farming role. There was secrecy among those that their husbands performed household tasks. Only 2 were eager to share their experience with other women farmers regarding their husbands change of roles within the house. The rest kept it as a secret and indicated that it would result in household conflicts if their husbands heard it from other community members.

The resistance in changing of household roles is directly attributed to the weakness of the lead farmers concept in addressing household workload to women despite their requirement in extension work. The programme did not train the husbands to women lead farmer in order to prepare them for their wives changing roles. Such trainings could easily address issues regarding household tasks. Men could be more responsive to the household tasks if the programmes involved them from the beginning through sensitization and addressing their expectations. The lack of addressing these household tasks may end up overburdening women instead of empowering them.

5.4.3 Decision making at community level

The study looked at the roles of women lead farmers in decision making regarding community programmes and their capacity to influence change at community level. Women lead farmers responded that they had the capacity (67%) to influence change at community level. Since they attained their lead farmers' role, women lead farmers were sometimes consulted by traditional leaders on agricultural related programmes and they also got an opportunity (80%) to make changes in the programmes.

The study findings agree with the writings from Batliwala, 1996 in (Rao and Keheller, 2005) where the author states that empowerment leads to transformation of power relations regarding control over resources. In this study, women lead farmers were given an opportunity because of their position in society to decide over resources distribution at community level such as training opportunities, pass on programmes and the time to implement activities within the community. The involvement of women in such important community level decision making may help to include women needs and aspirations in the community programmes.

5.5 Access and control of resources and benefits

The findings on access and control in this study focused on the resources within the household such as garden produce, household income and household assets that the household used within the home and in the garden. Single and widowed women lead farmers' exercised control over resources and benefits of their own. Out of the married women lead farmers, 45% indicated that access and control over household resources had changed significantly since they became lead farmers. The women attributed this change to working with groups which sharpened their negotiation skills that assisted them at household level.

Apart from these, 3 women lead farmers also indicated that since they owned their own assets after they became lead farmers, it was easy to control them. The women attained some levels of economic autonomy by accumulating their own assets. According to (Townen, 1995) women exercise control over resources when they are economically autonomous. Even though in this study women lead farmers were not solely dependent on themselves, they registered a significant amount of control over household assets which they had lacked before they became lead farmers and before they had their own assets. The access and control of resources and benefits is directly linked to economic empowerment as well as decision making and these aspects continually influence each other.

5.6 Making choices at household level

Regarding the freedom to make choices, women lead farmers had increased opportunities to make choices regarding what to grow, sell and where to go for extension services. For instance, the finding 18 out of 22 married lead farmers had the freedom to go for extension services without restrictions. In traditional setting where women were supposed to be glued home for domestic and garden work, husbands even reminded them of their agriculture related schedules. This, to some, created an understanding on sharing of household tasks which apart from reducing household tasks for women, makes them to gain control over their time.

The freedoms created by women's public role also created an opportunity for making choices an important aspect in women empowerment. Choices regarding going for extension services were previously not available before they had assumed the lead farmers role. The definition of empowerment by (Westendorp 2012) includes the aspect of making choices that individuals were previously denied. Conclusively, the new roles assisted women lead farmers gain a mile in making choices that are reflected in table 8. This new role significantly to women lead farmers empowerment.

5.7. Social empowerment

5.7.1 Organisation and networking

Since the women lead farmers mostly worked in groups, 28 out of 30 belonged to women organisations during the time of the interviews. Even though the study did not find out whether they became group members after the new role was given to them, the range of years they stayed in organisation was 1-5 years. Since the lead farmer concept has existed for 7 years since its inception, it may be suggested that it greatly contributed to their belonging to the women organisations. In addition, the roles women lead farmers are assigned in organisations as indicated in figure 9, signify that they are well known in their communities due to their extension roles.

Women survival strategies often depend on building up networks of women within the community (Momsen, 2004). Apart from the networks related to agriculture, women lead farmers also organised themselves to form traditional loan systems known as 'care'. The small loans from these groups were used to buy inputs and support their households. The women organisations provided them time to discuss issues affecting their homes. According to (Momsen, 2004), women organisations also help to free women from their domestic roles and provide a locus for broader community action.

The study further established that through these networks, women lead farmers were sometimes called to assist non-governmental organisations in their interventions. Women lead farmers together with other women within women's organisations benefitted inputs, energy saving technologies, trainings and market research from non-governmental organisations. Therefore, based on these findings, it can be concluded that lead farmers role has contributed to the creation of new networks between women lead farmers and organisations working within the community. Through these networks, women lead farmers benefitted through community interventions these organisations implemented.

5.7.2 Access to market information

Agriculture related information on production and marketing were some aspects that changed in 40 per cent of the interviewed women lead farmers since they assumed their position. The women lead farmers considered that their responsibility increased access to messages from an extension worker, market information and forming groups for market research.

Marketing of agriculture produce was found to be a challenge due to lower prices even though these women lead farmers still indicated a change in market information. The other 60% of the women lead farmer indicated that their access to market did not necessarily mean buyers were not available, but that the price offered for their commodities were low hence it made them to feel there is no change in market information. The findings suggest few women lead farmers had an access to viable market information as they would require. More studies need to be done to establish how the women could improve bargaining of prices for their commodities in order to realise profits from the commodities.

6.0 Conclusions and Recommendations

6.1 Conclusion

In this section, the contributions of women lead farmers programme towards women lead farmers empowerment in agriculture are documented. The women lead farmers programme has made significant contributions towards women empowerment in the several aspects as highlighted in the paragraphs below.

The programme has contributed to significant change in roles of women in the society and temporal change in men's role at household level. Men's willingness to assist with domestic roles which are traditionally women's role is an opportunity that could be capitalized to bargain for equal distribution of household tasks in women. Although the change in men's role in the home is minor and temporary, it is significant in reducing the triple roles' burden of women and is an opportunity to reduce time poverty among women. At community level, the programme has broken through the traditions that views women as passive recipients of agriculture technologies to that of not only rendering the services but also in constant communication with extension workers from government and NGOs. This has increased women lead farmer's access to production and market information.

Women participation in agriculture programmes has also changed. The women lead farmers' roles have increased their participation in agriculture both at household level and community level. For instance, women are able to participate in programmes run by government but their roles also put them in the limelight for NGOs. This has made them easily access inputs, production market and marketing information. Their participation in these programmes has resulted also into increased capacity building which in turn has assisted them to accumulate personal assets as shown in figure 5. Interestingly, the access to these assets do not only change women lead farmers economic status but also influence their decision making and control over the accumulated assets at household level.

The capacity to make decisions by women lead farmers within the household is two-fold. It has partly been due to the assets they have accumulated which give them an opportunity to decide over them. The decision making may also be due to the increased access to information which is a key resource especially for married women lead farmers. Husbands consult them whenever they make choices about enterprises to grow and marketing information. The frequent consultations make them influence decision making at household level on how resources are spent in the home. At community level, women have gained public space since they assumed their roles as lead farmers. The recognitions they gain from traditional leaders has made women get the opportunity to influence decisions making regarding agricultural programmes at community level. This has provided an opportunity for women to bargain for their needs in community led agricultural interventions.

Women lead farmers are important in delivering agricultural services at community level and offer different trainings to the community as highlighted in the table 3. Women lead farmers have also been able to control resources at community level such as trainings, agriculture information, inputs from NGO and marketing information due to their constant communications with extension workers from organisations and government.

The research findings also indicate key changes in organisation and networking. Although the research did not establish clearly of the period of their belonging to community organisations, 28 out of 30 women lead farmers belonged to organisations within their area of operation and have been members for the range of 1-6 years. The organisations have made them gain access to tradition loan and saving schemes known as 'care'. Apart from the loans, women lead farmers have gained an opportunity to link with several organisations that provide services such as input distribution, sanitation programmes, nutrition programmes, human rights and manure making among others. Women lead farmers role has registered their increased interactions with the community which has instilled in the sense of self-confidence and self-esteem that allow them to speak at the public.

The research finding has also established that women lead farmers concept greatly contributed to the empowerment of women in the following areas: asset accumulation, access and control decision making; access to information, service delivery and increased participation. Generally, the change in women roles in agriculture extension services has changed several aspects in their lives at community and household regarding decision making level, participation, access and control, making choices and access to information.

However, even though the women lead farmers concept has some positive things that the research has documented, they were several shortfalls the programmes failed to achieve. There is still a top down approach to extension services that made women lead farmers have less influence to change the programmes. Women lead farmers did not fully participate in the planning of activities within their areas of operation. Therefore most activities were implemented with the plans from the extension office. This on its own is disempowering. In addition, women lacked identity within the community as village extension workers. The findings indicate that women lead farmers needed to be differentiated from the rest of the community as extension agents. Since they lack recognition, the women lead farmers felt that the community still looked at them as less knowledgeable as they were before.

The lead farmer's concept as an approach also has several weaknesses as noted from this study. It does not provide grass root networks for lead farmer-lead farmer learning. Lead farmers meet when extension workers organise meetings and whenever extension workers feel it necessary. The lead farmer's concept as an extension approach has no independent budget to improve its operation despite valuable achievements it has made in extension services and empowering women. The independent budget line could help address the issues of logistics such as transport for women lead farmers and protective wear in addition to several challenges and women's needs highlighted in this report. There are also inadequate and inefficient monitoring mechanism for the approach and this discourages improvements in the implementation of the concept and consequently derails the women empowerment efforts.

6.2 Recommendations

There is an enormous enthusiasm of lead farmers' role amongst the women lead farmers that alone has the great capacity to improve extension services if shortfalls are addressed. The shortfalls do not only call for resources injection but also the presence of extension workers which in itself is helpful to women lead farmers. Women lead farmers need ears that can listen to their complaints even though others may not have immediate answers.

Profound considerations should be made to improve this most valuable and free service they provide to the community. If time is money, the women lead farmers time is food, income, school fees, inputs and their time also everything they need but offer to public services for free. Several recommendations are made for the improvement of the lead farmers approach in order to improve women lead farmers empowerment efforts. Government and NGOs may jointly address these challenges for an improved women lead farmers service:

- Ministry of agriculture through the department of extension should seriously consider to addressing transport problem for women lead farmers.
- The department of extension should consider providing the inputs for lead farmers demonstration plots to make sure their work of service delivery goes with practical demonstrations
- The extension department should also consider organising events to award lead farmers for the contribution they make in society. Incentives such as, protective gear for field work, cell phones, wheel barrows may be offered to them as a matter of appreciation. This may be considered when organising other functions such as agriculture shows.
- It is also suggested that extension department considers the development of standard training plans that should be followed after lead farmers selection. This would make sure that lead farmers are aware of their training procedures within the season and are able to prepare for them. This would also guarantee departments commitment in trainings lead farmers according to their technologies they are meant to implement.
- The department should consider integration of lead farmers into planning and review activities for lead farmers in an areas so that they own agricultural programmes and make necessary contributions and decisions prior to programme implementation.
- There are recognizable workloads for women lead farmers created due to their new community roles. The extension department should consider the inclusion of husbands in the selection and training process of women lead farmers so that they are aware of their roles in assisting their spouses with the new extension work assigned to them by the community. This may help to negotiate for household tasks division.

- There are coordination issues that affect the message delivery of lead farmers from NGOs and government and eventually the quality of services provided to the farmers. The extension department need to resolve this anomaly with other stakeholders that provide extension services at area level.

6.3 Recommendations for further research

The research was unable to document whether the lead farmers empowerment in the areas highlighted above has also influenced other women within the community. It further did not establish whether extension services to women farmers and production has improved since the establishment of women lead farmers concept. Therefore further research needs to be done in these areas in order to effectively make informed decisions about the overall programme performance.

The research did not establish whether the challenges faced by women lead farmers relating to lead farmers programme implementation are similar to those of men lead farmers. In addition, the research did not document whether the contribution that men lead farmers have towards the women empowerment efforts in agriculture. Therefore further research is needed in these areas.

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Annex 1: Informed consent

The contribution of lead farmer concept towards women empowerment in Agriculture-A case study of Chipala, Lisasadzi and Kaluma Extension planning area.

Informed Consent

My name is Kenan Gladson Kalagho. I am a postgraduate student at the Vanhall Larenstein University of Applied science in the Netherlands. I am conducting this research as part of my studies in the field of rural development and gender. The findings of this research will be used for academic purposes and may be used by the Ministry of Agriculture in designing programs related to gender mainstreaming and women empowerment.

If you take part in this interview, you will be interviewed for more than one day. But the visits to you may not exceed 4 days. Each visit will take an hour to make sure that you have time for other things as well. Participation in this research is entirely voluntary and you may withdraw from the interview without giving a reason if at any point you feel uncomfortable or unwilling to participate. If at any point after the interview you wish to make additions to your contribution or you have remembered something that relates this research and is worthy sharing, you may contact me through the numbers given below by calling or texting. I will be available until 23 of August, 2013.

By taking part in the research, you are acknowledging that you understand the terms of participation and that you consent to these terms.

Name.....

Farmer's signature.....

Contact Details

Student name:Kenan Kalagho

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Thesis supervisor

Dr. Annemarie Westendorp

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Annex 2: Semi structured checklist

Question number _____ EPA _____

Part One: Agricultural and non-agricultural roles at household and community level

1. What do you understand by empowerment?

2. What are the previous domestic you used to do alone at household level before you became lead farmer?

3. What were the previous activities you used to do in agriculture at household level?

4. What were the previous activities you used to do at community level regarding agriculture?

—

5. Have these roles changed? Explain:

.....
.....
.....
.....

Part two: This time, we will discuss the changes in economic empowerment, access and control, decision making/making choices that has happened since you became a lead farmer

1. What is the major source of income for your household?

2. What resources/ assets do you have at household?

2b What household assets have you accumulated since you became a lead farmer?

3. Who accesses and who controls these resources?

4. Has this access and control changed since you became a lead farmer? Explain

5. How are decisions made regarding the use of these resources?

- a) Husbands makes decisions on the use of resources
- b) Wife makes a decision on the use resources
- c) We all discuss and the final decision is made by the husband
- d) We all agree on what should be done

6. Do you have any influence to change the way resources are spent at household level?

7. To what extent do you feel you have control over decisions at household level since you became a lead farmer?

- a) To a very high degree
- b) Fairly high degree
- c) To a small degree
- d) Not at all

8. Do you have access to the market?

- a) Yes (b) No

9. Who decides what to sell and at what price?

- a) Husband
- b) Wife
- c) Decisions are made together

10. Has your access to market information changed since you became a lead farmer?

a) Yes _____

b) No _____

11. Are you allowed to freely go to the market? a) Yes b) No

12. Do you have personal commodities that you sell as an individual?

- a) Yes (list) _____ b) No

13. Do you decide on what to use the money on your own?

- a) Yes b) No

14. Do you make choices on what to grow for your personal income?

- a) Yes b) No

15. Do you have the choice to decide where to go for extension services?

- a) Yes (explain) _____
- b) No (explain) _____

16. How often do you meet and talk to people about agriculture related issues within and outside this community? _____

17. Are there activities organised by the community or government that you are not allowed to participate? If yes, list them _____

—

Part three: Now I will ask you about changes in participation, decision making (community), access to information, domestic role division that has happened since you became a lead farmer

1. Are you invited to meetings? a) Yes b) No. If yes, how often do you visit the office?

2. What trainings have you participated in as lead farmer? _____

3. Do you suggest the kind of training you need? a) Yes b) No

4. To what extent are you involved in planning agriculture activities for the community (participation)?

- a) Very much involved
- b) Fairly involved
- c) Rarely involved
- d) Not involved at all

5. What are your current roles in agriculture related to activity implementation?

6. Do you have a work plan or an action plan relating activities?

- a) Yes b) No

7. Do you in any way influence the way activities are planned or implemented?

- a) Yes (explain)
- b) No (explain)

8. What changes have you ever suggested in agriculture activities? What happened?

9. What household tasks have changed as a result of your new role of woman lead farmer?
Explain, if
any. _____

10. Do you discuss these changes with other women in your group?

a) Yes b) no

11. Do you have access to agricultural related information on production and marketing?

a) Yes a) No

12. For the past month, how many times have you received or read any agriculture related information?

13. What communication channels do you use to reach other women with the information?

14. What are your common sources of information?

- a) Radio
- b) Television
- c) Extension worker
- d) Phone text messages

15. How has your access to information changed since you became a lead farmer?

Part four: Now i will ask about changes in women organisation and networking within the community since you became a lead farmer

1. Do you have women organisation? a) Yes (b) No

2. If yes, for how long has it existed? _____

4. What role do you play in those organisations? _____

5. Do you or any women hold any leadership positions? _____

6. Do you have access to financial credit facilities? a) Yes b) No

7. How do you access information regarding financial credit facilities?

8. Do you have any networks with other service providers?

9. What services do they offer to you?

—

10. How much influence do you feel you have in community level decision making?

- a) A great deal of influence
- b) Reasonable level of influence
- c) A low level influence
- d) No influence at all

11. Do you feel that you can influence changes in your community if you want to?

- a) Yes, very easily
- b) Yes, fairly easily
- c) Yes, but it's difficult
- d) No, I cannot

12. What do you need to function better as a lead farmer? _____

13. What are the constraints? _____

Annex 3: Some pictures from the field



Woman lead farmer from Chipala EPA in her woodlot



A woman lead farmer from Kaluluma EPA posing on her post-harvest technology



Woman lead farmers posing outside the house where she is assisting to build



A woman lead farmer from Kaluluma EPA with her husband poses at the cattle Kraal with a bull she benefitted from CREMPA

