

**THE IMPACT OF VERNACULAR RADIO FARMING PROGRAMMES ON
SMALL SCALE FARMERS IN MANYONYI VILLAGE, KAKAMEGA
COUNTY: A CASE OF ONE ACRE FUND**

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**A Thesis submitted in partial fulfillment of the requirements of Master of Arts
Degree in Communication Studies, School of Journalism and Mass communications,
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November 2016

DECLARATION

This thesis is my own original work and has not been presented for Award of Degree in any other University or anywhere else for academic purposes.

Sign Date.....

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This thesis has been submitted for the award of a Master of Degree in Journalism and Mass Communication Studies with my approval as the University Supervisor.

Signature..... Date.....

Mr. Polycap Omolo Ochilo

ACKNOWLEDGEMENT

I would like to appreciate my supervisor Mr Ochilo for his intellectual input in this work which enabled me to understand the broader scope of the topic and for his critical analysis of issues that had to be interpreted to create synergy, depth and understanding.

I am also grateful to my research assistants for their hard work and patience during the period of the study.

Lastly, I thank my family for their continuous encouragement and moral support.

DEDICATION

This thesis is dedicated to my loving husband Mr Mutiga and our two lovely daughters

Faith and Joy.

DEFINITIONS OF TERMS

AFRRI - Africa Farm Radio Research Initiative

BMGF - Bill and Melinda Gates Foundation

FRI – Farm Radio International

FRT - Farm Radio Trust

FVR - Farmer Voice Radio

PRC - Participatory Radio Campaigns

ABSTRACT

This study sought to investigate the impact of vernacular radio farming programs on small scale farmers in Manyoni village. For the purpose of this study, effectiveness is measured by the popularity of the program, the influence of radio farming programs on diversity, and implementation of new agricultural ideas. The literature review demonstrated that radio is a powerful medium of communication especially for reaching the grass root areas. In Kenya and Africa in general, where infrastructure is still underdeveloped and electricity has not reached remote areas, radio is a vital tool of communicating important information. In Africa, agriculture is the back bone of our economy. Since most of the farmers live in the rural areas, there is need to educate and inform them about the new developments in the world and the new farming techniques so that they can cope with the changes of climate and new market needs. From the Literature review, it is clear that there is great concern by stakeholders to ensure that the agricultural sector is flourishing. Agriculture provides food for consumption and raw materials for many industries. Therefore, the availability of farming radio programs in local languages is essential for communicating agricultural information to the farmers in a language they fully understand. This study was carried out in Manyoni Village in Lugari County, targeting small scale farmers in the area, who listen to one acre fund on Mulembe FM. The research was carried out through questionnaires administered to 198 respondents chosen through purposive sampling, agricultural officers in Lugari county and producers of one acre fund. Through the findings and data analysis, it was evident that the program is popular in the village, it has influenced farming activities and that through implementation of the new ideas farmers in Manyoni village are being economically empowered. For example, the farmers said that the program had influenced them to venture into various types of farming like bee keeping, tree planting, fish farming or rabbit rearing and they knew where to get the best market for their products

TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENT.....	iii
DEDICATION	iv
DEFINITIONS OF TERMS	v
ABSTRACT.....	vi
LIST OF FIGURES	x
CHAPTER ONE	1
1.0 INTRODUCTION	1
1.1 An overview.....	1
1.2 Introduction.....	1
1.3 Background to the study	4
1.3.1 Manyoni Village in Lugari district.....	4
1.3.2 Radio as a source of knowledge.....	6
1.4 Statement of the problem.....	8
1.5 Objective of the Study	9
1.6 Specific objectives	10
1.7 Research questions.....	10
1.8 Justification of the study	10
1.9 Limitation of the study.....	12
CHAPTER TWO	14
2.0 LITERATURE REVIEW	14
2.1 An Overview.....	14
2.2 Problems facing farmers in western Kenya	14
2.3 Radio Listenership in Africa.....	16
2.4 Radio listenership in Kenya.....	17
2.5 Communicating agricultural information through radio.....	20
2.6 Previous studies on the effect of agricultural programs aired on radio	22

2.7 Theoretical framework.....	26
2.7.1 Diffusion of innovations theory	26
2.7.2 Agenda setting.....	28
CHAPTER THREE	33
3.0 RESEARCH DESIGN AND METHODOLOGY	33
3.1 Overview	33
3.2 Research design	33
3.3 Sample size and sample procedures.....	34
3.4 Data collection methods.....	36
3.5 Scope of the study	37
CHAPTER FOUR.....	38
4.0 DATA ANALYSIS, PRESENTATION AND INTERPRETATION	38
4.1 An overview.....	38
4.2 Response Rate	39
4.3 Characteristics of Respondents	39
4.4 Length of service of Agricultural extension officers	42
4.5 Most effective method of communicating with farmers according to the	43
4.6 Popularity of ‘One Acre Fund’ program aired on Mulembe F.M	43
4.7 Popularity of One Acre Fund program in relation to other programs on Mulembe FM	52
4.8 Influence of One Acre Fund on the diversity of Farming among farmers	52
4.9 Improvement of farming standards in the area	61
4.10 Promotion of Farming by One Acre Fund	61
CHAPTER FIVE	66
5.0 CONCLUSIONS, POLICY IMPLICATIONS AND RECOMMENDATION... ..	66
5.1 An Overview	66
5.2 Conclusions.....	66
5.3 Policy Implications	67

5.4 Recommendation	70
BIBLIOGRAPHY	72
APPENDICES	76
Appendix I: Questionnaire for the Sample Population	76
Appendix II: Questionnaire for the Producers Of One Acre Fund Programme.....	81
Appendix III: Questionnaire for the Agricultural Extension Officers	85
Appendix IV: Field Work Certificate	90
Appendix V: Certificate of Corrections.....	91
Appendix VI: Declaration of Originality Form	92
Appendix VII: Plagiarism Test Results	93

LIST OF TABLES

Table 4.1: The Age of respondents	39
Table 4.2: Type of Farming	40
Table 4.3: Size of Land	41
Table 4.4: Listeners of the One Acre Fund.....	46
Table 4.5: Reasons for not listening to One Acre Fund.....	47
Table 4.6: The level of Influence of One Acre Fund on the diversity of Farming	53
among farmers	53
Table 4.7: Ideas learnt from One Acre Fund	54
Table 4.8: Ways to improve the program	63

LIST OF FIGURES

Figure 4.1: Popularity of Mulembe FM	44
Figure 4.2: Knowledge about One Acre Fund.	45
Figure 4.3: Frequency of listening to One Acre Fund.....	48
Figure 4.4: Recommend Program	50
Figure 4.5: More programs like One Acre Fund to be created	51
Figure 4.6: Putting ideas learnt into practice.....	56
Figure 4.7: Helpfulness of the program	57
Figure 4.8: How One Acre Fund Program is helpful	58
Figure 4.9: Why One Acre Fund is not helpful	59
Figure 4.10: Opportunity to give feedback	61

CHAPTER ONE

1.0 INTRODUCTION

1.1 An overview

This chapter lays the background to the study. It comprises of the introduction, background to the study, statement of the problem, the objectives, and research questions, justification of the study and limitations of the study.

1.2 Introduction

Mass media tools are vital in communication; they have been instrumental in informing the masses about developments taking place in the world, influenced changes, aided democratization at their home fronts and revolutionized humanity. Traditional mass media channels that include radio, television and newspapers continue to be relevant particularly in most of Africa where new technology has been slow in taking root. New developments in technology have not obliterated traditional forms of mass media.

Radio in particular has consistently been in the lead over all other forms of media as the most utilized medium, it has continued to provide real time news about events unfolding around the world and educated audiences about diverse subjects such as climate change, health issues, nutrition, and governance. The influence of radio is best demonstrated by the stranglehold post authoritarian African governments maintained over the medium soon after gaining independence through state owned radio with the excuse that they were protecting the citizens from its corrupting influence on the audience. (Williams, 2003:5).

According to Myers 2008 in her publication, *Radio and Development in Africa*, radio is the most popular medium, research findings in the publication indicated radio ownership levels among adults in East Africa to be between 69%-93%, Kenya being in the second position with 92% after Tanzania, and Burundi with the least 69%. (Myers, M 2008:8)

AMDI radio's preference as a mass medium is attributed to its unique characteristics that allow the journalists or program producers to expand their spectrum beyond urban areas and to avoid economic consumer barriers posed by high priced newspaper or TV subscriptions. The oral nature of radio and its ability to employ native languages enables the medium to reach the critical rural population, which in Kenya, is about 80%. Radio is also preferred for its portability, affordability, simplicity, and flexibility to the user.

(AMDI: 31).

According to Pavindrath (2014) the role of mass media is to inform, educate, entertain and persuade. Correctly used, radio has power to transform society in a very short time. Radio has an added advantage over other media because it can reach the illiterate unlike print media. However he notes that the presenter has a challenging task of convincing the audience to accept the new change he is advocating for and to implement it. (Pavindrath, P.2014:1)

Kotter and Cohen (2002) concur with Pavindrath by affirming that people do not change because they are provided with ideas that change their thinking, but they change because they are shown something that affects their feelings. In the case of the small scale farmers,

the desire for a high yield and more income can be the motivating factor. (Kotter, J& Cohen, D.2002)

According to Pavirandath (2004), radio is a very important media for reaching the people in the remote areas where electricity may not be available. Properly utilized and channeled, it could come in very useful in pushing through development projects and transforming societies as it creates awareness in the minds of the people. When special messages aimed at target audiences are broadcasted, they can effectively reach out to them, emphasizing the benefits of the new project in order to make the audience accept it. Radio is more effective especially when it is broadcast in the local language of the listeners, which is in itself an incentive. (Pavirandath, P. 2004: 2)

Mensa (2000) explained that the key words for community radio are access and participation. It is an up-down channel allowing sharing and discussion of ideas. He advocated for a media that would allow members of the community to participate in creating the development information; it is a means of expression of the community rather than for the community. When the audience gets a chance to participate in creation of the messages disseminated through a channel, they identify with the medium of communication; they own the message and therefore take the message seriously. (Mensa, O.2000:309-311)

Mwakawago (1996) emphasizes the role of radio by stating that its main objective should be to pass carefully assembled messages which, once received, will generate in the person receiving them a feeling of dissatisfaction with the current state of affairs and an urge to act. The message should encourage the listeners to act along similar lines and therefore cause change to the whole community. (Mwakawago, D. 1996: 309-311)

The researcher in this study sought to investigate how influential vernacular radio programs are and how they direct and affect the farmers' behavior and actions. It was an attempt to evaluate the impact of *one acre fund*, a farming program aired on citizen's Mulembe FM radio station on small scale farmers in Manyoni village, Kakamega county, western province. It also sought to find out whether *one acre fund*, has played its role effectively by influencing farmers in Manyoni village by helping them to learn and implement new ideas in relation to farming.

1.3 Background to the study

1.3.1 Manyoni Village in Lugari district

Lugari Constituency covers the entire Lugari District and shares common borders with Trans-Nzoia district on the North East, and Uasin Gishu District on the South East. It also borders Kakamega District on the South West and Bungoma District on the North West. Lugari district was established by Presidential decree in late 1998 and therefore it is one of the lately created districts in Kenya. The district is still underdeveloped and her inhabitants mainly practice small scale agriculture. The District runs along the Great North Road (Nairobi-Kampala Road). It is close to Eldoret, Kitale, Kakamega, and

Bungoma towns: Kitale town on the North, Webuye town on the West and Eldoret town on the South East. The district has Kipkarren River that runs across the district and River Nzoia that borders the district to the North East, providing shallow water. Lugari district covers approximately 9400 kilometers squares with an estimated population of about 300,000 people. Women and the Youth take the larger portion of the population.

The major settlers are those who occupied the settlement scheme as early as 1962, immediately after independence when the fertile lands were recovered from the white settlers by the government. Although this group initially had large parcels of land of between sixteen and a hundred acres, they have since divided and sub-divided it amongst their children and grandchildren or sold part of it. Around fifteen years ago, the government settled a group of squatters there on land that had been part of forest. Lugari district also includes some part of the Bukusu ancestral home. The inhabitants are economically impoverished.

Lugari district used to be occupied by Kenyans of different tribes before issues of land clashes and post-election violence hit the area. These problems led to the migration of people of other tribes out of the area after selling their parcels of land to Luhya people who are the majority. As a result the area is basically occupied by Luhya community.

The infrastructure (rural roads) is under-developed, the roads are in poor conditions, hospitals are far and although electricity is now available, not all the villagers can afford installation fee. The village lies between the Rift valley highlands and therefore receives adequate rain between the months of March and April and between July and August.

1.3.2 Radio as a source of knowledge

Conby (2010) states that when radio emerged in Britain, the telegraphy acts of 1868 and 1904 put control of the emerging technology of radio under post office and therefore government. Its main objective was to develop a higher sense of national community as an enlightened and informed public. It aimed at informing, instructing and entertaining; responsibilities that it still holds up to today. (Conby, M. 2010:189)

Mensah (2000) noted that In Africa the idea of rural radio has existed in various forms for almost 46 years. It has served as the voice of the peasant farmers, providing an opportunity for them to share their views. Africa's first community radio station was established in Kenya, 'Homabay community radio station' in May 1992 by the Kenyan government in conjunction with UNESCO. Its aim was to experiment on decentralizing structures, programs and also to gain experience in low cost technology for broadcasting. Nowadays, Vernacular radio stations in Kenya enjoy overwhelming support from the 42 ethnic communities they serve since they have taken over the role of educating the masses on diverse areas of concern. The rise of vernacular radio station should be seen as a trend in the right direction and indigenous languages in which it communicates, embraced and given the nobility they deserve. (Mensa, O.2000:857-858)

The 2009 Kenya census report revealed that 75% of Kenyans own radios. Nowadays people have more access to radio as they can access it over the phone considering the fact that almost every adult in Kenya owns a phone. Therefore radio is the quickest and most affordable way of disseminating any information. Kenya's constitution states that the state shall facilitate and encourage public awareness and participation in decision making by ensuring information is widely available. This principle is important since it provides a direct link between sustainable development, media and democracy. Vernacular radio stations, including Mulembe FM are capable of being the conduits through which information can reach the people and have an impact on promoting practices that are sustainable. (Maloba, B. 2013)

Myres (2008) asserted that unlike television and newspapers, radio is still the most popular and widely used medium of communication. Its popularity has recently increased due to increase in local stations, democracy, market liberation and the availability of mobile phones. Mobile phones have increased its popularity and use as people can listen and call the presenters to share their views, opinions and ideas. Radio has helped to bridge the digital divide by providing an opportunity for sharing information limitlessly. (Myers, M. 2008)

Mulembe FM is owned by the Royal Media Services and it targets the Luhya audience which accounts for 5.6m people of the over 46 million Kenyan citizens. The station is popular especially with the rural populace since it offers an access to entertainment and information on various issues. Though there are other stations that offer broadcasts in

Luhya language, Mulembe FM stands out as a popular Luhya station. Call in shows is an integral part of their broadcasts which offers an opportunity to the listeners to express their views and opinions in an interactive manner. (Maloba, B.2013).

1.4 Statement of the problem

Kenya has evolved over time and situations have changed; population has increased and technology has evolved. In areas like Manyoni village, people cannot continue to do things the way they did them twenty years ago. If they do not change with the time, they will be swallowed with eventuality or modern trends. Now, people use machines for ploughing land and fertilizers to increase their yields, even these fertilizers have varieties and the farmer needs to be aware of the best kind to use in specific situations. The weather has also changed and the small scale farmers cannot continue growing the same crops they did years ago, they need to grow variety of crops and perhaps drought resistant crops that can withstand the harsh weather conditions. These and the fact that pieces of land have decreased due to increase in population have all affected the farmer and his yields. Therefore something has to be done.

Manyoni village has agricultural officers but they cannot reach everyone and may not have suitable forums to speak to the masses and to hold participatory discussions where the farmers can share their ideas and discuss their concerns. Therefore, despite regular rainfall and availability of land for farming, people of this area remain economically poor as they always depend on the seasonal rainfall and mainly maize crop which is grown and harvested during the rainy season. Over the years, the people have planted maize crop by April and harvested it in the month of September and October. Since then, they are able

to provide food for their families until January, but after that, most of them will have exhausted their maize stock through consumption and selling and are without food. Therefore, they struggle to survive through the month of January up to June/July when they harvest the beans planted with the maize. During this period, deaths due to starvation are common. Poverty levels in the county stand at 52%. It means that above 50% of the residents live below poverty line. Ngetich (2013) in his research concluded that the main cause of poverty in Kenya is a combination of many factors including low productivity of agricultural sector due to retrogressive farming methods.(Ngetich,J. 2013)

Ngetich 2013 observes that at this time when rural development is affected by various challenges, Communication for Development should focus on sharing of information and training of agricultural officers. The desire for development can only be achieved if new knowledge and new technologies are shared effectively and local people are allowed to share in decision making. (Ngetich,J. 2013) This research is vital because it seeks to find out the extent to which our local radio programs (with reference to Mulembe FM's One Acre Fund) are effective in assisting the farmers of Lugari district in their farming activities.

1.5 Objective of the Study

The research sought to investigate the impact of vernacular radio farming program on effective farming in Manyoni Village of Kakamega County.

1.6 Specific objectives

- a) To investigate whether the vernacular farming program *one acre fund* aired on Mulembe FM is popular among small scale farmers in Manyoni village.
- b) To establish whether this program (*one acre fund*) has influenced diversity in farming among small scale farmers in Manyoni village.
- c) To determine the extent to which the program (*one acre fund*) has been able to influence small scale farmers' participation in farming and involvement in development programs.

1.7 Research questions

- a) To what extent do people in Manyoni village listen to the vernacular radio farming program (*one acre fund*)?
- b) To what extent has *one acre fund* program influenced diversity in farming among small scale farmers in Manyoni village?
- c) To what extent has vernacular radio farming program (*one acre fund*) influenced farming methods among small scale farmers in Manyoni village?

1.8 Justification of the study

Since farming is an important economic activity for this country and for Manyoni village in particular, these findings will inform the government in policy making especially in relation to communication with small scale farmers.

The producers of *One acre fund* will benefit by obtaining information about the level of success of their program, vital information that can assist them in their endeavor to be effective in promoting development through their radio programs. In summary it will inform and affirm policy positions of media.

Studies carried out by various organizations including Tegemeo Institute and East African Grain Council in western Kenya concluded that the yearly maize production had been reducing significantly from an estimate of 34 million bags in the 90s to about 25 million in 2008. Other studies carried out by Adija, M. et.al in 2011, on Challenges Facing Small Scale Maize Farmers in Western Province of Kenya in the Agricultural Reform Era and Karnebäck 2013, Missing grains- Post- Harvest Loss in Maize in Kakamega, Western Kenya, identified the problems that have led to the decrees in production in this area. My study seeks to find out what the vernacular radio program producers have done to address the challenges identified by the above researchers, and the extent to which the radio program producers have been effective in providing solutions to the farmers.

Tanni and Linda (2003) argue that if media provides the platform for issues to be discussed then journalists and citizens can consider which problems can be solved through local intervention, for example through change of farming methods, change of seeds or crop variety, and which problems require the government or international intervention. For those problems that require local intervention, journalists should support and promote local intervention. For those that require broader intervention, journalist

should encourage citizens to join larger-scale systematic organizations or push for large-scale systematic interventions. In some parts of the world including Kenya, farmers have come together and started farming projects that they could not have managed on individual basis. This includes raising money to construct boreholes that avails water for irrigation purposes. They could also form cooperatives that can help them to obtain favorable markets for their products. In both situations, journalists and citizens can work together. (Tanni, H.& Linda, S.2003:40)

Maloba(2013) affirms the argument above by stating that vernacular radio stations, including Mulembe FM are capable of being the conduits through which information can reach the people and have an impact on promoting practices that are sustainable.(Maloba, B.2014; 172-174).

The aim of this study was to investigate whether the producers of one acre fund are effectively fulfilling their responsibility as media and if not then through the finding of the study, the producers of the program can be able to make amendments and be able to play their role effectively. The study generated new empirical data that had not been generated before in Manyoni area; data that will be helpful to the policy makers, the program makers, the farmers themselves and the leaders of Manyoni area.

1.9 Limitation of the study

This study could have been carried out in the whole of Lugari county but due to financial constrains in was limited to Manyoni village in Lugari county.

The respondents were farmers in Manyonyi village, who listen to One acre fund, understand English and can read and write. The last two qualifications eliminated many candidates who would have given us important relevant information. Due to the above constraints, we could not meet our target of 300 respondents. Although we visited every homestead in the village, we were only able to get 158 respondents who qualified for our study.

Despite having the introduction section on the Key Informants questionnaires, some agricultural officers refused to fill the questionnaires, claiming that they cannot be sure what the information sought would be used for. However, other officers were very supportive and provided all the information that was required.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 An Overview

This chapter deliberates literature that relates to this study and the theoretical frameworks. The literature review is divided into five sections: challenges facing small scale farmers in western Kenya, radio listenership in Africa, radio listenership in Kenya, communicating agricultural information through radio and previous studies that have been done on the impact of effective radio farming programs.

2.2 Problems facing farmers in western Kenya

Adija, M. et al (2011) in their studies of Challenges Facing Small Scale Maize Farmers in Western Province of Kenya in the Agricultural Reform Era confirmed Tegemeo Institute and East African Grain Council findings that the national maize production levels have been declining from an over 35 million bags in the 90s to about 25 million in 2008. The reasons for this decline in production were identified as reducing parcels of land, change in whether and changing government policies. Analysis of the findings per districts revealed that 26.5%, 13.2%, 30.9% and 29.4% of the respondents from Bungoma District, Lugari District, Mt. Elgon District and Busia District respectively did not acquire credit because they did not know where or how to acquire it. Further consultation with the extension agricultural staff regarding challenges facing maize production among small scale farmers in Western Province of Kenya revealed that a high percentage of extension staffs (42.9%, 41.7%, 33.3% and 32.1%) from the above districts respectively believed that use of uncertified seed by farmers, late farm operations, lack of finance and lack of fertilizer respectively were the main factors that hindered maize

production in Western Province. For example, farmers were confused on which seed to purchase as a result of the presence of a wide variety of maize seeds in the market furthermore, a high percentage of respondents from Lugari District (43.3%) and Mt. Elgon District (17.2%) experienced problems with the right choice of seed variety. This study conducted partly in Lugari County, aimed at identifying the problems faced by farmers in Lugari district, while our study is aimed at finding out how media has assisted to solve some of the problems identified by the studies above. (Adija, M et al 2011)

Another study conducted by Karmebäck on harvest loss in the neighboring villages of Munyuki and Mukuyu, aimed at identifying the reasons why farmers lose their crop after all the hard labor in the process of production. The field research carried out between January and February 2013 was to contribute with specific insights into the amount of food losses and reasons behind post-harvest losses (PHL) in maize grain in Mukuyu and Munyuki villages in the Lugari- Kakamega district of Western Kenya, and to analyze the findings in the larger context of sustainable agricultural intensification. (Karmebäck, V. 2013:144)

Some of the reasons for harvest loss she identified include heavy rains during harvest season that destroy the crop, lack of funds for constructing proper storage facilities, lack of knowledge of proper storage of produce and lack of ready market for the perishable goods (Karmebäck, V. 2013:144). She was able to identify the reasons for food loss while our study seeks to investigate whether mass media, through research and by the help of agricultural and weather experts, have been able to identify and provide lasting

solutions. Through our study, we would like to find out how media has been effective in addressing some of the problems identified above.

Wekulo (2013) also carried out a research on the relationship between agricultural knowledge and information system in adoption. The study carried out in Lugari sub County, sought to find out whether the available communication tools had been helpful in disseminating information on amaranth production, a new crop that was being introduced in the area. The research concluded that radio programs played an important part in informing the farmers about the product, but it is interpersonal communication which played a major role. (Wekulo 2013)

This study concentrated on all communication channels available to the farmer and one crop (amaranth.) Unlike his study which concentrated on one crop and all channels of communication available in the area, our study specifically focused on the impact of vernacular radio program in relation to general farming in the area and therefore generated specific information on their effects.

2.3 Radio Listenership in Africa

Kwesi (2004) carried out a research on Radio Listening spans and Television Watching in West African countries. Most of respondents in the urban areas listen to the radio for more than 2 hours per day. In the case of the Ghanaian respondents 53% said they listened to radio for more than 3 hours per day. 43% of respondents from Mali and 37% of the respondents from Senegal respectively spend more than 3 hours per day listening

to the radio. He concluded that a good proportion of radio audiences in West Africa spend substantial time listening to the radio. (Kwesi, K. 2004: 6) This is important to this study as it posits that agricultural information disseminated through radio can easily reach the targeted audience.

Myres 2008 while discussing the challenges developers of content on radio face noted that African program producers have to work with a tight budget while preparing potentially high impact educational drama that requires retaining dedicated teams of writers, actors, technicians, and other committed professionals. Most stations cannot afford to produce such programs and opt to buy them from private producers who can afford to produce them as they are often sponsored by donors or other interested stakeholders. Otherwise African radio stations air live programs which are fresh but dangerous as they lack checks and control

The above argument relates to farming programs where farmers are involved in discussions either when they are invited to the studio or they are allowed to call and give their views. There is the danger that the farmers may share ideas that are not well researched and if there are no experts to correct the relayed information immediately, the listeners may take the ideas and practice them and suffer the consequences. (Myres, M. 2008)

2.4 Radio listenership in Kenya

The mass media especially radio, is the most cost effective medium for informing the masses especially the marginalized societies. As a form of media, it plays the role of

creating opportunities for debating, informing opinion and encouraging people to work towards development. Media has an important role in fostering debate, influencing public opinion and encouraging people to make changes towards sustainability.

Maloba (2013) argues that the media including the radio in an information society has a role of informing the general public of policy, national development and current affairs especially those affecting them directly. For the farmer, it should provide information about latest innovation and most effective farming methods. It also has to give the public the ability to make their voice heard. The media is seen as a vital two-way tool, providing information from the top to the masses at the grass roots and allowing their views, ideas and opinions to filter back to policy makers. (Maloba,B.2013)

Ngechu and Peter (2002) carried out a longitudinal study to identify factors that influence farmer adoption of agricultural and health knowledge. Participants were organized in three categories: women only, men only and mixed groups of men and women. They listened to radio programs in their separate groups. They discovered that radio message which was useful to the farmer was adopted and implemented. The idea of radio listening groups (RLGS) is not new. It had been practiced in Canada and Britain during 1920s. (Ngechu, M. & Peter, W.2002:20-25)

Research carried out in Kenya and Zambia by the Centre of governance and human rights revealed that interactive radio programs are very popular and almost everyone that has access to radio listens to such programs. (Toolkit for stations, 2016)

Another study was conducted by Maloba (2013) on programs promoting sustainable development through communication. He used Mulembe FM as his research radio station. The main objective of his study was to find out whether Mulembe FM broadcasts offer any programs on environmental sustainability development and if they do, if the programs have any impact on the audience in promoting practices that would ensure a sustainable environment for the future generation. The data generated from this study demonstrated the potential of radio broadcasting as a high efficiency / low cost means to meet development goals. (Maloba, B .2013:173)

Maloba's (2013) findings demonstrated the power of radio in communication and proved that radio programs have power and ability to transform communities. If through radio programs on Mulembe FM, messages on environment sustainability reached the targeted audience and led to positive change, we can therefore expect that radio agricultural programs on the same radio station will influence farmers' decisions. (Maloba,B.2013:173)

Edwin (2015) in his research on the Emergence and Growth of Vernacular Radio stations in Kenya argued that lack of vernacular radio stations in the past had denied the uneducated Kenyans access to crucial information. Therefore, the availability of this radio stations has helped to bring the illiterate and the uneducated to the level of the elite. They can now access information, make informed decisions and raise their standard of living.

In 2016, UNESCO organized training for eight Kenyan community radio stations on capacity building. The participants said they understood the need to use radio to give the audience a voice through call –in programs. Moreover they realized that radio is a powerful tool for enhancing development among the poor. (UNESCO, 2016)

2.5 Communicating agricultural information through radio

FRI is a Canadian-based, not-profit organization that works directly with about 400 radio broadcasters in 38 African countries to fight poverty and food insecurity. Their main objective is to give assistance to radio stations so that they can promote farming activities among peasant farmers. FRI was a solution to the need of farming programs that supported small scale farmers. The available stations only supported large scale farmers whose needs were very different from those of the small scale farmers. By producing suitable programs, they were able to meet their goal of helping the small scale farmers.

The aspect of communication is critical to sharing of agriculture innovations among actors, in the more than fifty years of radio broadcasting, the farm forum is perhaps the best known type of rural broadcasting. Dikshit et al (1979). In their compilation of a publication for UNESCO about rural radio, they provide a glimpse into the history of agriculture programming on radio in the world. The potential of radio in development was apparent from its inception in the 1920s, in Africa in 1980s, it was viewed as a tool of power with which authoritarian governments used to mobilize communities or rally them around the development agenda. For farming communities living on the periphery

of information technologies and societies, radio is the only window to global reality (AFRI 2008:66).

In 1980, before rural radio became a common phenomenon, McAnany (1980,) complained that participatory communication channels that were almost unavailable in rural areas could connect the agricultural officers, farmers and the government officers. Every significant activity that supports development depends on communication. In the developing world, radio is the only media that can reach the remote areas. He argued that if radio became available to the rural people, it could make it easy to communicate with them and have them participate in development. Since radio has become more accessible in Africa today, it should now play a bigger role in communicating to the masses and accomplish McAnany's desire for an informed audience in Africa. (McAnany, E.1980.)

Chapman (2003) concurs with the above argument by noting that rural radio can be used by remote rural farming communities to promote the circulation of agricultural information. Participatory communication techniques can supplement agricultural extension efforts especially through using local languages and rural radio to communicate directly with farmers and listener groups. (Chapman, R.2003:10)

Arpita (2011) argues that since community radio is limited to a small community or area, it disseminates information to a community which shares resources for livelihood. Such a community has common development challenges or problems, which directly affects it although they may relate to national and regional development goals. Therefore

community radio connects the hard-to-reach rural audiences and serves a specific purpose of community radio that national or international mass media cannot deal with. (Arpita, S. 2011) From the above arguments, it is clear that radio if well used, can play an essential role in reaching the small scale farmers with vital information that can transform their lives and their economic activities in a positive manner.

Fisher 1990 explains that early development communication theorists believed that mere dissemination of information could lead to development. This belief led to the launch of many development projects. In the earlier farm forum programs, messages were primarily sent “down” from the government agricultural department or the extension agent to the rural people. Very limited feedback was expected from the farmers: the messages were often too complex, technical and descriptive to be understood. It was difficult for the farmers to understand the message and this discouraged them from adapting it. These early schemes clearly revealed the limitations of “top down” government campaigns designed to foster development. For radio to be more effective in communicating, it has to adopt a two way communication channel, whereby the recipients are allowed to air their views and ask for clarification. (Fisher 1990) This argument posits a need for the program producers to be careful with the formation of the programs so as to make sure that they are easy to understand and that during dissemination, they provide for adequate feedback from the audience. (Fisher 1990)

2.6 Previous studies on the effect of agricultural programs aired on radio

Rural radio has existed for more than a century. (Mensa 2000) states that in Canada where it originated, it was known as the voice of the peasants/people. Through radio

forums, the farmers assembled together to discuss their farming problems and seek for solutions. In 1964, the UNESCO with Canadian aid organized a research that involved 40 villages in an experiment that involved radio programs. The farmers were involved in creating the educative materials. This design proved educative to them. They easily owned the program and the information and were willing to implement the new ideas. They were also willing to monitor and evaluate the success of the program. These radio listening groups attracted people of all gender, professionals; both the educated and illiterate. This system was subsequently utilized on a large scale in 400 groups in Ghana, Zambia, Malawi and Nigeria. (Mensa, O.2000:857-858)

Africa Farm Radio Research Initiative (AFRRI) was created to investigate the effectiveness of radio programs in addressing the food security and agricultural goals of resource-poor farmers in five African countries: Ghana, Malawi, Mali, Tanzania and Uganda. Commonwealth (2012). AFRRI developed the use of Participatory Radio Campaigns (PRC) to gather, implement, evaluate and share best practices for using radio-based communication strategies to enhance food security in rural Africa. It started in Malawi, in 2007 with the inception of AFRRI-I project, funded by the Bill and Melinda Gates Foundation (BMGF) and implemented by Farm Radio International (FRI). Participatory Radio Campaigns (PRCs) were developed by Farm Radio International as a way of assisting farmers to learn, evaluate and try new farming ideas. It provided support and trained radio station producers to work with stakeholders to carefully plan and disseminate farming campaign programs. (www.farmradio.org).

FRI (2016) acknowledges that knowledge transmitted over radio has the ability to transform lives by empowering the farmers at the grass root levels. Such information enables the farmers to deal with their developmental challenges as they are able to produce food, take care of their environment and generate economic opportunities. With access to mobile phones, the farmers have an opportunity to speak for themselves as they participate in development.(FRI 2014-2015)

A study by CEDA (2001) on the impact of agricultural programs transmitted by Radio Nepal confirmed the fact that such programs have helped the farmers to improve their farming methods. The farmers, who participated in the program, received and listened to the agricultural programs transmitted by Radio Nepal and Nepal Television with enthusiasm. Africa has so many local languages which the radio producers can use to communicate effectively with farmers. Overcoming the challenges of language barriers by communicating in local language is a great step forward because for a long time, many illiterate Africans have been starved of information (CEDA 2001).

A study carried out by Teran, A. et al (2015) in Congo on the impact of radio programs on Climate change knowledge is very important to our research. The overall aim of the study was to relay information on climate change and to create an opportunity for stakeholders to share their views and ideas in a language they easily understand. (Teran, A. et al 2015) The results showed that the program was very effective as the knowledge level among the listeners increased.

Girard (2003) emphasizes the importance of vernacular rural radio by explaining that the strength of rural radio as an extension tool greatly lies in its ability to convey information to illiterate farmers by providing relevant agricultural information in their local language. Although extension officers do a great job, they may not be able to reach all the farmers nor to communicate to all the tribes effectively. To the program producers, this does not mean simply reading technical information over the airwaves in local languages, but understanding the way farmers themselves discuss their problems in the community and providing relevant information in the local agro-ecological and cultural context. (Girard, B, 2003; 10)

Chapman, R. et al (2003) in their research on rural radio in agricultural extension: the example of vernacular radio programs on soil and water conservation in Northern Ghana, report that the respondents, in general, liked the radio program, and mostly enjoyed the drama and the group discussion between the presenter, extension agents, NGO representative and the invited farmers. The farmers' understanding of soil and water conservation practices, agro-forestry and use of organic manure seem to have improved after listening to the program. If similar programs were to be transmitted regularly, they could be used as an educational tool, especially in the area of agro-forestry, where farmers stated that there is lack of information. All Local vernacular radio stations need to adapt such methods of disseminating information, so that they can be relevant and more effective. (Chapman, R. et al 2003)

2.7 Theoretical framework

2.7.1 Diffusion of innovations theory

Diffusion is the process in which an innovation is communicated through certain channels over time among the members of a social system. As expressed in this definition, innovation, communication channels, time, and social system are the four key components of the diffusion of innovations. Diffusion is a special type of communication concerned with the spread of messages that are perceived as new ideas. An innovation is anything that is perceived as new by an individual or adopters which includes organizations or communities. The characteristics of an innovation, as viewed by adopters, determine its rate of adoption. (Roggers, E.1995.)

Diffusion research centers on the conditions which increase or decrease the likelihood that a new idea, product, or practice will be adopted by members of a given culture. Diffusion of innovation theory assumes that media as well as interpersonal contacts provide information and influence opinion and judgment. Studying how innovation occurs, Rogers (1995) divides it into four stages: invention, diffusion (or communication) through the social system, time and consequences. The information flows through networks. The speed of adoption depends on the nature of the new ideas and its implementation, the nature of networks and the roles opinion leaders will play in the process. (Roggers, E. 1995)

This theory was applicable to our study because the study was concerned with how the small scale farmers receive information through radio and how they perceive this information, accept or reject it and how the information affects their farming activities. Rogers (2003) explains that adoption is a decision of full use of an innovation as the best course of action available while rejection is a decision not to adopt an innovation. The duration it takes for the innovation to be adopted depends on four main factors including triability, compatibility and complexity.(Roggers, E. 2003)

If the media considers all these factors especially complexity and create messages that can easily be understood by the small scale farmer, the latter can be encouraged to implement the new ideas. For the small scale farmers to adapt the new ideas, the journalist should present them in a simplified manner so that the illiterate and the old do not shy away or get discouraged. Moreover, media can easily reduce the time of diffusion as it is able to reach a large number of people in the shortest time possible and therefore make people aware of the new innovations. Media can encourage the farmer to adopt mechanization in farming and help demystify the complexity of the innovation. However, the cost of the machines can be a deterring factor.

In conclusion, dissemination of information through radio can give the extension officers an easy time especially if other farmers can attest on radio of having succeeded in using the same ideas/innovations.

2.7.2 Agenda setting

The news media are a primary source of those pictures in our heads about the larger world of public affairs, a world that for most citizens is out of reach, sight, or mind. Our understanding of the world is largely based on what the media decide to tell us. What the media deems important and shares with the audience greatly affects what the audience prioritize. As a result, elements that are forefront on the media agenda become significant to the audience. (McCombs, M. & Shaw, D. 2006:177)

According to (McCombs & Shaw, 1972) as quoted by Sheaffer & Weimann (2005) the media influence public opinion by emphasizing certain issues over others. The amount of media attention, or the media salience, devoted to certain issues influences the degree of public concern for these issues. In relation to farming, media can influence the farmer's views on various issues that relate to their farming activities all the way from their land cultivation methods, choice of crop and seed they use, to the end where they harvest and sell their crops. (Sheaffer, T & Weimann, G. 2005:347)

Shaw (1979) states that media is persuasive. By focusing public attention on specific events, issues and persons they determine the importance people attach to certain matters. The agenda setting theory states that because of newspapers, television, and other news media, people are aware or not aware, pay attention to or neglect, play up to or down grade specific features of public scene. People tend to include or exclude from their context or to assign an importance to what they include that closely resembles the emphasis given to events, issues and persons by mass media. (Shaw, E. 1979)

Mass media act as watchdogs who get information and report it, they guide and enable the masses to focus on specific topics that they (mass media) think are important, they can raise the people's attention by making them work hard so as to achieve certain lifestyle; they can assist in decision making by emphasizing on some information.

(Schramm, W. 1964:26-28)

In today's society all important issues like national defense, water pollution, and education policy involve highly specialized kinds of knowledge. The citizen cannot adequately understand issues unless his prior education and also his journalist gives him some access to that essential part of public question that lies outside his own immediate sphere of interest and competence. (Stuart 2006, A & Clark, R.2006:101)

In serving their role as agenda setters, the program producers in conjunction with other stake holders can create programs with relevant information for farmers in rural areas. They can research on new farming ideas or borrow practices from other parts of the world and share the findings with the farmers in the best frames possible so that the farmers can be influenced to take the required action.

According to Shoemaker and Reese 1996 as quoted by (Scheufel, D and Tewksbury, D. 2007) framing refers to the modes of presentation that communicators use to present information in a way that resonates with the existing schemata in their audience. Framing is a necessary tool because it helps the producer to communicate complex ideas in a simple and familiar way which the audience can relate with and easily understand. The

producer uses framing to bit the challenges of time limitations. Scheufele,D& Tewksbury,D.2007)

Agenda building and agenda framing refer to macroscopic mechanisms that deal with message construction rather than media effects. The activities of interested parties in shaping media agendas and frames can have an effect on the character of messages on a particular issue. They can influence the way the message appears to the audience either in a positive or negative way. In case of the messages framed for the farmers, inventors of a new machine or new product for example a type of fertilizer would want the media to portray their product in a positive way to encourage the farmers to use it. However, the producers of alternative products may not like this framing, and therefore may want the framing to be negative so that people can prefer their products. All this factors, depending on whose side the journalist is, will affect the framing of the messages delivered to the audience. Never the less, it should be noted that the media can use frames to discourage retrogressive farming methods and to encourage effective and efficient practices in farming.

Moreover, both the public and the media can jointly build frames around issues especially in cases where the audience is given a chance to participate either through feedback or call-in shows. In farming, the farmers can share their experience on radio if they have already had a chance to implement the new ideas or can share information on their own new inventions; information that can be more relevant to the audience than foreign ideas,

given that the farmers share the same environment and challenges. (Scheufele, D. & Tewksbury, D. 2007: 12)

Tanni and Linda (2003) in discussing the proper relationship between journalists and citizens, debate whether journalists or the public should set the news media agenda. Some critics object by arguing that allowing audience to set the news agenda requires public journalists to cede not merely their autonomy but also an essential part of their professional role. This takes away the journalists proper role as leaders and turn them into followers. Neither journalists nor the public alone should set the media agenda. If journalists are to focus attention on issues of concern to citizens and to offer citizens opportunities to deliberate on those issues in their own words, they need to share their agenda setting responsibility with the audience.(Tanni,H & Linda, S.2003:40-43)

Paulo's concurs by arguing that every human being should be given an opportunity to speak for themselves and that nobody can fully represent another. Mass media should share their agenda setting responsibility so that people can enjoy their freedom of expression and own the new ideas. (Paulo, F.1970:40)

The agenda setting theory is important to this study because firstly, we would like to find out whether *one acre fund* has been effective in focusing the attention of the farmers in Manyonyi village on new farming methods, new, easy to manage crop varieties, ways of improving the old farming methods, use of new technology or discouraging them from

using retrogressive farming methods by promoting awareness and offering new, more effective solutions.

Secondly, this study seeks to find out whether one acre farm has provided an opportunity for the farmers to give feedback, raise their own ideas as they participate in discussions on the program and therefore act as co-agenda setters of *one acre fund*.

CHAPTER THREE

3.0 RESEARCH DESIGN AND METHODOLOGY

3.1 Overview

This chapter explains how the research was carried out .It shows the sample size and the sample procedures that were used, how the data was collected ,gives the scope of the study ,the limitation of the study and the ethical considerations.

3.2 Research design

Research design is a blueprint, or procedures for conducting the study in such a way that maximum control will be exercised over factors that could interfere with the validity of the research outcome. It is the researchers overall plan for obtaining answers to the research questions guiding the research (Polit and Hungler, 1998) This study attempts to quantify the effectiveness of farming programs on vernacular radio stations on farmers in Manyonyi village.

This is an exploratory study. Exploratory research studies what has not been previously studied in an attempt to give it new meaning or to give new insights or facts. It examines the relevant factors in detail to arrive at an appropriate description of the reality of the existing situation (Brink & wood 1998) The purpose of this study is to provide the perception and views of the respondents about the phenomenon studied (Burns& Grove 2001) Such a design may be used for the following purposes: developing theory, identifying problems with the current practice, making judgments or determining what others, in similar situations are doing. (Waltz & Bausell 1981:7).

This design is suitable for the study because it is appropriate when seeking a better understanding of the issue under study. Experimental designs would be unsuitable because we are studying an undergoing phenomenon and it would be very difficult to have control and experiment group. This research will be conducted through primary data collection methods.

3.3 Sample size and sample procedures

The sample for the research was selected through purposive sampling .Oliver (2002) defines purposive sampling as a form of non-probability sampling in which decisions concerning individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue or capacity and willingness to participate in research. Some type of research necessitate researchers taking a decision about the individual participants who would be most likely to contribute appropriate data, both in terms of relevance and depth (Oliver, P. (2002)

The main goal of purposive sampling is to focus on particular characteristics of a population that are of interest, which will best enable you to answer your research questions. Palys (2008) argues that whoever a person is and where he is located in a group is important. Unlike other forms of research where all the people in the entire population qualify to be part of the sample, one well placed articulated informant will often advance the research far better than any randomly chosen sample. (Palys, T (2008)

Considering the above arguments, purposive sampling is suitable for this study as we chose our sample considering the following factors that enabled us to obtain the specific information required. They were to be residents of Manyoni area, people of adult age brackets, small scale farmers, people who know how to read and write and most importantly should know about or be listeners of the program: one acre fund. We purposed to use a sample of three hundred (300) peasant farmers, number considered to be statistically significant considering the size of the total population of adults who meet the above description and live in Manyoni village.

We also applied stake holder purposive sampling techniques, as we acquired data from the producers of the program *One acre fund*, and the agricultural officers in Lugari sub County. Palys. T. (2008) explains that stakeholder sampling is particularly useful in the context of evaluation research and policy analysis. This strategy involves identifying who the major stakeholders are that are involved in designing, giving, receiving or administering the program or service being evaluated, and who might otherwise be affected by it. In a way, this research aimed at evaluating the effectiveness of *One acre fund program*. That is why we obtained data from the producers of the program so that we could identify their aims and whether they have achieved them. We also acquired data from the agricultural officers in Lugari sub-county who work in Manyoni area. Since they are the agricultural experts, they were able to evaluate the effectiveness of the program.

3.4 Data collection methods

This study relied on primary data generated in the field by way of administering questionnaires with open and closed end questions to the farmers in Manyoni village. These questionnaires were administered by me, with the assistance of trained research assistants under my supervision.

Additional data was obtained through questionnaire for the key informants who included:

- a) Media program makers from Mulembe FM, managers, supervisors who informed us why they conceptualized the program, their aims and objective and what they have achieved.
- b) The county government of Kakamega agricultural officials who work in Lugari Sub county so that they could clarify the challenges the farmers undergo and the effects of the program on farming in the area from their perspective

Jacobson, M, Et al (2009) supports the use of questionnaire in research by arguing that they reduce chances of evaluator bias because the same questions are asked of all respondents, many people are familiar with surveys, some people feel more comfortable responding to surveys than participating in an interview and lastly tabulation of closed-ended responses is an easy and straightforward process. (Jacobson, M, Et al 2009)

Mugenda & Mugenda (1999) argued that Questionnaires are frequently used to obtain important information as each item on the questionnaire addresses a specific objective. (Mugenda & Mugenda 1999:9)

3.5 Scope of the study

This study was carried out in a period of one week between 27th September and 4th October 2016, in Manyonyi village, Lugari sub- county.

3.6 Ethical considerations

The University of Nairobi, School of journalism and mass communication issued the researcher a certificate of fieldwork.(see Appendix 4), after she successfully defended her proposal, allowing her to embark on data collection. The three questionnaires that were used in data collection had an introductory part that introduced the researcher as a student of the University of Nairobi. It explained why the data was being collected and assured the respondents that the information would not be used for any other purpose. During the data collection process, the respondents were informed that filling the questionnaire was voluntary and they had the right to ask for any clarifications. For reasons of confidentiality, the respondents were not required to write their names. The researcher also filled a Declaration of Originality (see Appendix 5) form that was approved by the university after obtaining plagiarism results of 10% (see Appendix 6).The researcher appeared before a panel of scholars at the University of Nairobi and passed the defense with a few corrections. All the corrections were made and the researcher was issued with certificate of corrections (see Appendix 7), all attached here respectively.

CHAPTER FOUR

4.0 DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 An overview

This chapter deals with the analysis, presentation and interpretation of the collected data aimed at evaluating the effectiveness of communicating farming information using vernacular radio stations. The analysis was done based on the objective of the study which included assessing the popularity of the program, its effectiveness in promoting variety in farming and in encouraging farmers to participate in farming activities.

Obikeze, (1990) argues that data cannot convey the necessary information required for decision making on its own. Raw data does not speak on its own but needs to be analyzed and interpreted to provide answers to research questions. (Obikeze, D.1990)

Data obtained through the questionnaires was coded and analyzed through the SPSS package. The system gave quantifiable data with respect to frequency distribution, percentage distribution and cross tabulation. The cross tabulation was used to examine the relationship between the variables by breaking down the variables into sub groups. Frequency distribution was used to display the percentage of the nominal level responses on the questionnaire. From the analyzed data, tables, graphs and charts were prepared and used in interpretation and conclusions.

4.2 Response Rate

A sample size of 300 respondents was targeted. The researcher managed to administer 198 questionnaires to the respondents. This is a response rate of 66.7%.

4.3 Characteristics of Respondents

The researcher sought to find out the characteristics of the respondents in terms of age and the responses provided are detailed in the table below. This question was meant to determine the respondents age in relation to response to information and change.

Table 4.1: The Age of respondents

Age	No of respondents	Percentages
Above 50	20	14.6
41-50	50	25.3
31-40	52	26.3
21-30	67	33.8
Total	198	100.0

Source: Field survey 2016

Out of the total percentage, 33.8 percent were aged between 20-30 years, 26.3 percent were aged between 30-40 years whereas 25.3 percent were between 40-50 years and only 14.6 percent were over 50 years.

The significance of this finding is that majority of the respondents were between age 20-30, people who are considered to be the youth. This is important because, this is the youngest demographic group and therefore debunks the normal held myth that the young are not interested in farming. This is closely followed by the 30-40 age group who represented 26.3% of the respondents. This shows that this is an area of high agricultural potential as a whole 59.6 percent of the total respondent are young people able to learn new ideas quickly and strong enough to work in their farms and implement new ideas.

Table 4.2: Type of Farming

The respondents were asked to give information about the type of farming which they are involved in. This question provided information about the type of farming that can be carried out in the village. They provided diverse answers as captured in the table below.

Type of farming	No of respondents	Percentages
Rabbit	2	1.0
Mixed	99	50.0
Fish	5	2.5
Tree	3	1.5
Bee	5	2.5
Poultry	9	4.5
Livestock	8	4.0
Crop	67	33.8
Total	198	100.0

Source: Field survey 2016

50% of the respondents said they were involved in mixed farming, which means they grow crops and keep animals while 33 % said they were purely crop farmers. The remaining 15 % were involved in the following types of farming: fish farming, poultry farming, bee keeping, livestock farming and rabbit farming. It is evident that most people in Manyoni village who listen to the programme *One acre fund* are either involved in mixed farming or practice crop farming, notwithstanding the fact that from time to time, they are involved in various types of farming. This evidence revealed that the people in this area are involved in a variety of farming, the area is suitable for different types of farming and the farmers too are willing to diversify their farming.

Table 4.3: Size of Land

Since this study aimed at establish the impact of one acre fund on small scale farmers in Manyoni area, the respondents were asked to approximate the size of their pieces of land .We established that the size of land held by the respondent ranged between less than one acre and 4 acres. This was important to us as we were interested in comparing the capacity of production and the efficiency undertaken. The result is explained in the table below.

Size of Land	No of respondents	Percentage
4 and above	10	5.1
2-3 acres	13	6.6
1-2 acres	65	32.8
Below 1 acres	110	55.3
Total	198	100.0

Source: Field Survey 2016

Respondents were asked to approximate the size of their land. Majority of the respondents, 55.3% said that their land was less than one acre, 32.8% said they had 1-2 acres, 6.6% said they had 2-3 acres and 5.1% had above 4 acres of land. The significance of this distribution of land is that only a small percent of the total sample(5.1%) have in their possession a large piece of land(more than four acres and above) yet the majority totaling 110 out of 198 respondents have land less than one acre. This causes serious congestion and lack of land for production of food both for own consumption and surplus to be sold for income. This group of people is the one which may need intense intervention from agricultural officers and other concerned stake holders. Through vernacular radio and other media, they can be taught how to maximize land use so that although it may be small, it can be able to produce enough for the farmers' subsistence needs and for sale. The other farmers, who own more than one acre, may gain more from the vernacular farming programs as they are already advantaged by having relatively big sizes of land.

4.4 Length of service of Agricultural extension officers

The research sought to find out the length of service of the agricultural officers who work with farmers in Manyoni village. This was significant to our study so as to gauge their ability to inform on agricultural issues since the onset of the program *One acre fund*. Agricultural officers who had been there longest would be able to give reliable information as they had been working with the farmers throughout this period.

The respondents included five agricultural officers whose length of service in the area was between two and five years.

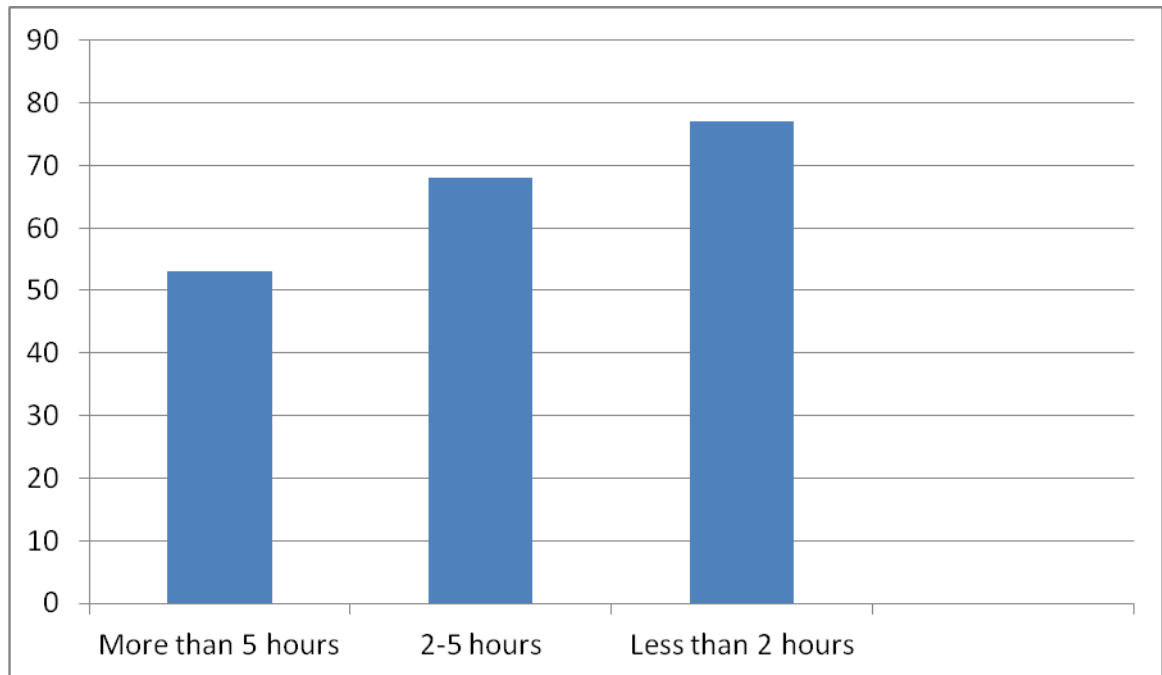
4.5 Most effective method of communicating with farmers according to the Agricultural extension officers

The officers were of the opinion that the most effective method of communicating with farmers is face to face communication although they agreed that radio helped a lot in promoting new ideas.

4.6 Popularity of ‘One Acre Fund’ program aired on Mulembe F.M

The research sought to find out the popularity of Mulembe F.M in Manyoni village. This was important to this research as it intended to survey the impact of farming programs aired in vernacular language: Luhya. Therefore the popularity of the vernacular radio station would relate to the listening and awareness of the program *One acre fund*. The respondents were therefore asked how many hours they spend each day listening to programs on Mulembe F.M radio station. The results of the respondents are illustrated in the graph below.

Figure 4.1: Popularity of Mulembe FM



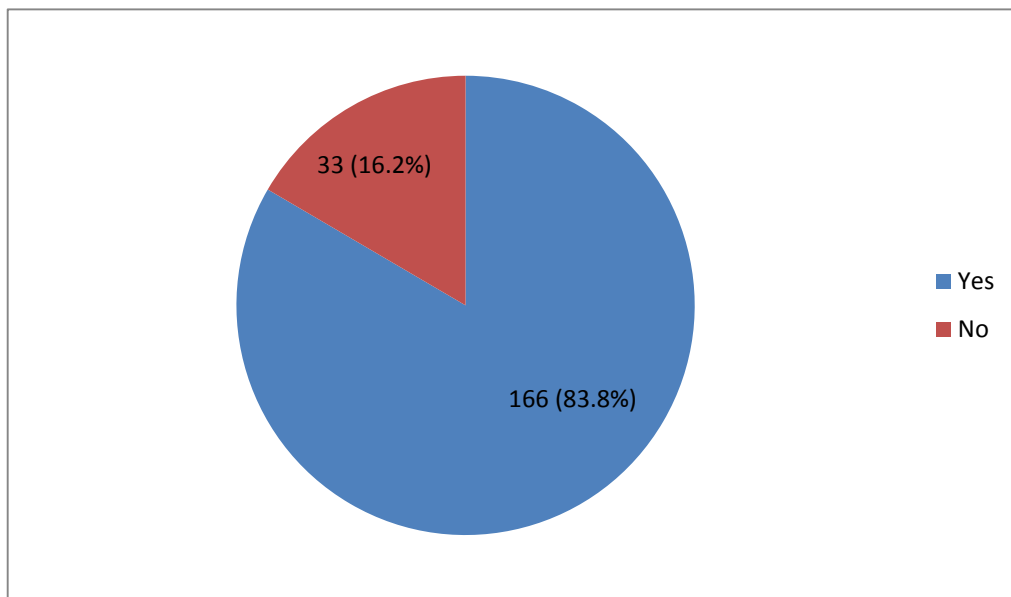
Source: Field Survey 2016

The respondents were asked to state the number of hours they listened to Mulembe FM in a day. 53 of them said they listened to the station for more than 5 hours a day, 68 of the respondents listened to it for 2-5 hours a day and 77 listened to it for less than 2 hours a day. Therefore, majority of the respondents listened to Mulembe FM for more than two hours per day. Although, a significant number of respondents said they listened to Mulembe FM for less than two hours a day, the total number of those who listened to the station for more than two hours every day is more than half the total number of respondents. This means the vernacular radio station is popular in the area and can effectively be used by the government and other stake holders to disseminate important farming information to the farmers in Manyonyi village. It should be noted that even

those who listen to the station for less than two hours could be listening to programs like *one acre fund* that helps them improve economically.

Figure 4.2: Knowledge about One Acre Fund.

As a follow up question to the popularity of the program, the researcher sought to find out whether the farmers in Manyonyi village knew about the particular program under study: *one acre fund*. This was significant to this study because popularity of a farming program would only be due to the important information the farmers gain from it. They provided the following information illustrated in the chart below.



Source: Field Survey 2016

The respondents were asked whether they knew of a program called *One Acre Fund* aired on Mulembe FM. 166(83.8%) of the respondents were aware of the program while 33(16.2%) were not aware of the program. 83.8 percent of the respondent said they knew about the program. This shows that there is a high possibility that they listen to it. This is

significant for this research because it revealed that most farmers in Manyoni village are aware of this program and other similar farming programs, they can purpose to listen to them and acquire important farming knowledge disseminated through such programs.

Table 4.4: Listeners of the One Acre Fund

The researcher sought to find the degree of popularity of *one acre fund* in Manyoni village. This was important for the researcher because the degree of popularity of this farming program was a sign that it is effective in communicating with the farmers. Being a farming program, it was not expected that farmers would listen to it for any other reason. The respondents were asked to state whether or not they listen to the program and the response was as expressed in the table below.

	No of respondents	Percentage
No	48	24.2
Yes	150	75.8
Total	198	100.0

Source: Field Survey 2016

Respondents were asked if they listened to *One Acre Fund program*. 75.8% of the respondents said they listen to the program while 24.2% said they did not listen to the program. This evidence proved that the majority of the respondents listened to the program. This is significant for this research because it is a confirmation that farming programs aired on vernacular radio stations, like one acre fund on Mulembe FM, are popular and are able to reach the target audience to inform or educate them. As illustrated

by this finding, a high percentage of the farmers in Manyoni village listen to one acre fund and if the information relayed through the program is properly designed with the audience in mind, it can be very effective in promoting successful farming in Manyoni area and other areas with similar challenges.

Table 4.5: Reasons for not listening to One Acre Fund

The researcher further sought to find out from those who did not listen to the program, the reasons for not listening to it. This would help the researcher to identify the reasons why the respondents did not listen to the program, analyze them and gauge their significance in relation to the program. The conclusions could inform the program producers on the changes they need to make. Respondents gave a variety of reasons why they do not listen to the program.

Reasons for not listening to the program	No of respondents	Percentages
Poor signal	4	8.2
Do not listen to the station	5	10.2
Do not know when its aired	2	4.1
Not aware of the program	5	10.2
Busy when the program is being aired	16	32.7
Not interested in program	10	20.4
Do not understand the language used in the program	4	8.2
Do not have power/ batteries for the radio	1	2.0
Do not have a radio	2	4.1
Total	49	100

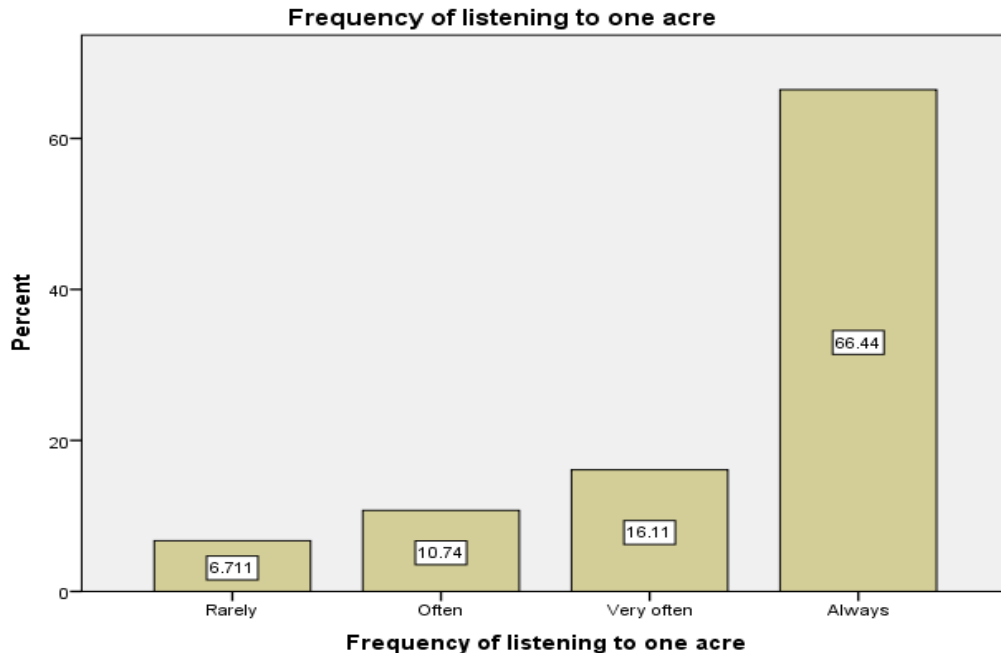
Source: Field Survey 2016

Respondents who said that they did not listen to the program were asked why they did not listen to it. 32.7% said they were busy when the program was being aired, 20.4% said they were not interested in the program, 10.2% were not aware of the program, another 10.2 did not listen to the Mulembe FM, 8.2% did not listen to the program because there was a poor reception of Mulembe FM channel, another 8.2 did not understand the language used in the program, 4.1% did not have a radio and another 4.1% did not know the time when the program was aired while 2% did not have batteries/power for their radios.

Out of the total percentage of those who said they did not listen to the program only 20.4 percent said they were not interested in the program, while a total of 20.4 percent did not listen to Mulembe FM or did not know about the program. However, all the other respondents gave reasons that imply they could listen to the program if they had time, if they knew when it was aired, if they had good reception of Mulembe FM radio station or if they could afford the batteries. Out of the total percentage, 59.2 percent would have listened to the program if all conditions were favorable. Apparently, *One acre Fund* is very popular in Manyoni area, but there are some conditions that render it impossible for some of the residents to listen to the program.

Figure 4.3: Frequency of listening to One Acre Fund

The respondents who listen to one acre fund were asked to indicate the frequency of their listening to the program. It was important for this research to specifically identify the percentage of farmers who religiously follow the program so as to get the information disseminated.



Source: Field Survey 2016

6.7% said that they rarely listened to the program, 10.7% often listened, 16.1% listened very often and 66.4% always listened to the program. These findings show that majority of the respondents always listened to One Acre Fund program.

This finding is very significant for this study because it revealed that 66.44 percent always listen to one acre fund and 16.11 listen to it very often. If the program is almost always able to attract 82.55 percent of farmers in Manyonyi village, then it is a very powerful tool of reaching the grass root farmers and can be used to generate significant positive results if the program producers make sure that they disseminate information that is specifically designed to meet the listener's needs.

Moreover the fact that this program is famous in Manyonyi village is evidence that the producers of the program are able to meet the needs of the farmers for that is the only reason why they would follow the program religiously.

Figure 4.4: Recommend Program

The researcher further sought to find out if the respondents would recommend the program to other people. This question was asked to verify the importance the listeners of the program attach to the information disseminated in this program. They could only recommend it if they valued it. The response given is illustrated in the pie-chart below.



Source: Field Survey 2016

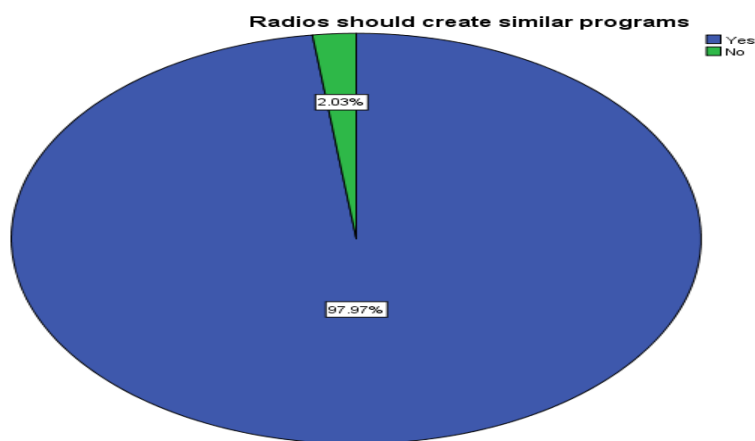
The respondents were asked if they would recommend *One Acre fund Program* to other listeners. 98.7% said they would recommend the program to other listeners while 1.3% said that they would not recommend the program. This showed that 98.7 % found the program helpful and thought that it could help other farmers gain important knowledge of farming as they had done. In short, they recommended it because it had been helpful to

them. The small percentage that did not recommend it: 1.3 % is insignificant and it could include the people who rarely accept change or those who may not understand the content of the program due to various reasons stated in table 4.13 above.

All the agricultural extension officers said that they would encourage farmers in the area to continue listening to *One Acre Fund*. This is because the program provides the farmers with essential information for example they advise them where to sell their produce and how to diversify their farming.

Figure 4.5: More programs like One Acre Fund to be created

In an attempt to find out the level of farmers' appreciation of the program *one acre fund*, the respondents were asked to state whether they would like more programs like *one acre fund* to be created. This question was meant to gauge the importance the respondents have put on this program. They would only need more of such programs if they were helpful to them. The response was as illustrated in the pie chart below.



Source: Field Survey 2016

The respondents were asked whether they would like the radio station to create more programs like one acre fund. 98% of the respondents said they would like to listen to more programs like *One Acre Fund* while 2% would not like similar programs. Since, 98% of the respondents said they would like more of such programs, this signifies the desire for knowledge within the farmers and the need for more educative programs in areas of farming which will go a long way in providing the necessary information that the farmers need in order to improve their farming and also advice on how to minimize farming costs and maximize profits.

4.7 Popularity of One Acre Fund program in relation to other programs on Mulembe FM

The study sought to find out from the producer of the program how popular the program was in relation to other programs on the same station. The producer said that the program is very popular. The producer's opinion on the popularity of the program concurred with the majority of respondents view; therefore it confirmed the fact that the program is very popular in Manyonyi village. This question is relevant to our study because it provides information for the producer on the kind of programs that interest the audience and therefore need to increase the number for such programs or increase the duration of the programs.

4.8 Influence of One Acre Fund on the diversity of Farming among farmers

The farmers were asked whether the program had influenced them to diversify their farming. This question was significant to the researcher because through information

gathered, we would gauge the level of impact the program has had on the small scale farmers in Manyoni village. Their responses are illustrated in the table below.

Table 4.6: The level of Influence of One Acre Fund on the diversity of Farming among farmers

The respondents were asked whether the program had influenced them to diversify their farming activities. This question is significant to the researcher as it helped to answer our second research question in which we were investigating if *one acre fund* had influenced diversity in farming among small scale farmers in Manyoni village.

Type of farming	Listen to one acre fund	
	Yes	No
Crop	51(76.1%)	16 (23.9%)
livestock	3 (37.5%)	5 (62.5%)
poultry	4(44.4%)	5(55.6%)
Bee	1(20.0%)	4(80.0%)
Tree	2(66.7%)	1(33.3%)
Fish	3(60.0%)	2(40.0%)
Mixed	85(85.9%)	14(14.1%)
Rabbit	1(50.0%)	1(50.0%)
Total	150(75.8%)	48(24.2%)

Source: Field Survey 2016

Diversity was determined by the type of farming that the respondents were involved in. Those involved in mixed farming were assumed to be diverse. Diversity in farming was found to be higher among the farmers who listened to one acre Fund (85.9%) compared to those who did not listen to the program (14.1%).

A chi –squared test was also run to establish the relationship between listening to the program and diversity in farming. The test yielded a $\chi^2 = 26.683$ and a P-value = 0.001 at 7 degrees of freedom. Since the P-value was less than 0.05, the study established that there was a relationship between listening to the program and diversity in farming. Chi-square is a statistical test commonly used to compare observed data with data we would expect to obtain according to a specific hypothesis. The research wanted to establish whether there is a relationship between listening to one acre farming program and the diversity of farming within Manyoni village. Based on the analyzed data, diversity was higher among farmers who listened to one acre farming program as opposed to those that never listened to the program and yet they had diversified their farming. The Observed values represented those that were gathered in the research. The expected values are the frequencies expected, based on our null hypothesis. Therefore it is evident that the program *one acre fund* has influenced the diversity of farming in Manyoni area.

Table 4.7: Ideas learnt from One Acre Fund

The respondents were further asked to state some of the ideas they had learnt from the program *one acre fund*, this question gauged the ability of one acre fund to educate and inform small scale farmers in Manyoni village. It was measuring our second research question of whether the program has influenced the farmers’ participation in farming.

The respondents provided the following responses.

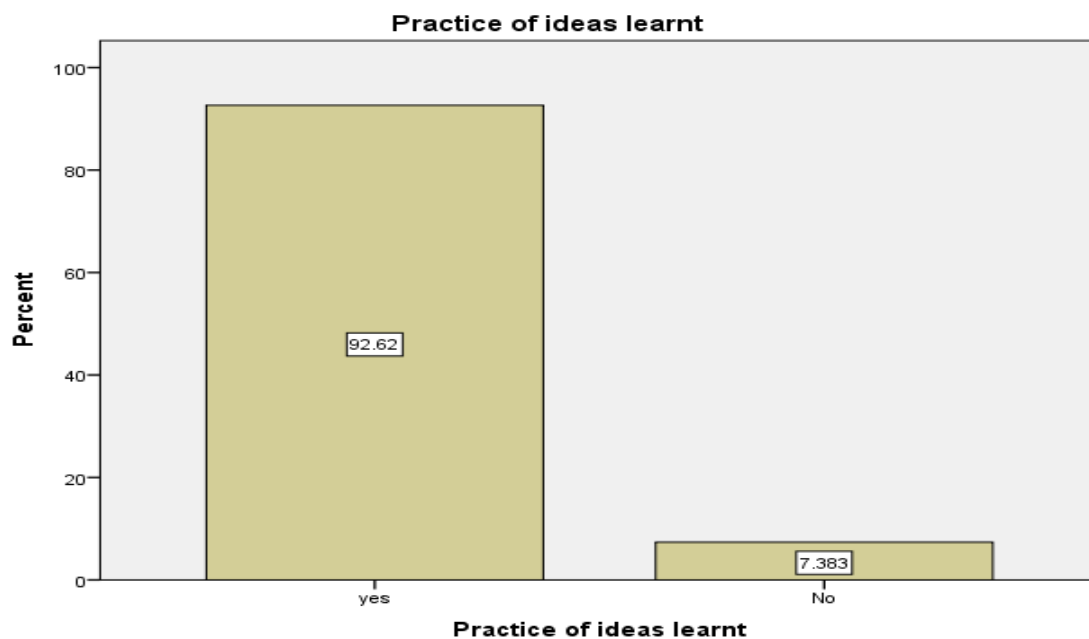
Ideas learnt from One Acre Farm	Responses No.	Percentages
Better use of land	55	15.6%
Spacing of crops	32	9.1%
Getting markets	11	3.1%
Types of farm inputs	47	13.3%
Timely planting	25	7.1%
Pest and diseases control	36	10.2%
Reduced cost of farming	5	1.4%
Land preparation	32	9.1%
Economic use of inputs	35	9.9%
Planting techniques	55	15.6%
storage	6	1.7%
Better animal keeping	14	4.0%
Total	353	100.0%

Data Source: Field Survey 2016

The farmers in Manyoni area stated the kind of information they had learnt from the program *One acre fund*. From the response, it is obvious that the radio program has provided information in almost all areas of farming. However it should be noted that various respondent specified the areas in which they had acquired knowledge. As much as the audience will be interested in knowledge that satisfy their specific needs, there are areas of concern like information on market, reduced cost of farming and storage where we expected more respondents to mention as areas where their needs had been met. The fact that very few respondents said they had been educated in these aspects show that the radio station has to reconsider their approach in these areas and try and repackage their ideas and disseminate them in more appealing and easy to understand frames.

Figure 4.6: Putting ideas learnt into practice

Apart from just learning new ideas, the survey also sought to find out what the farmers had done with the information they had learnt from the program. Just like the question in table 4.6 above, this question gauged the level of impact of *one acre fund* on small scale farmers in Manyoni village. It was measuring our second research objective of whether the program has influenced the farmers' participation in farming. They responded as follows.



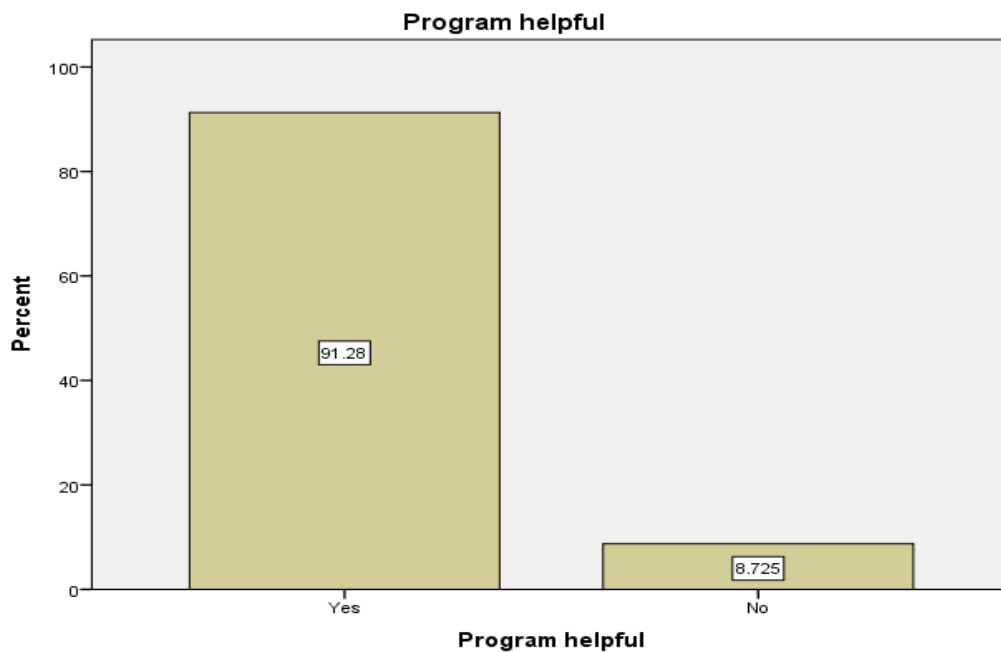
Source: Field Survey 2016

The study sought to find out whether the respondents practiced the ideas learnt from *One Acre Fund* program. 92.6% of the respondents who listened to the program put the ideas learnt into practice while 7.4% did not put the ideas into practice.

This is significant to the study since we found out that the respondents did not just listen to the ideas discussed on the program but went a step ahead and implemented them. This is also important for the producer as it shows that they are able not only to inform the farmers but also to persuade them to implement the new ideas they have learnt.

Figure 4.7: Helpfulness of the program

This question was significant to the researcher as we wanted to know if the knowledge relayed on the program had had a positive economic impact in the lives of the audience. When asked if the program had been helpful to them, the respondent gave the following responses.



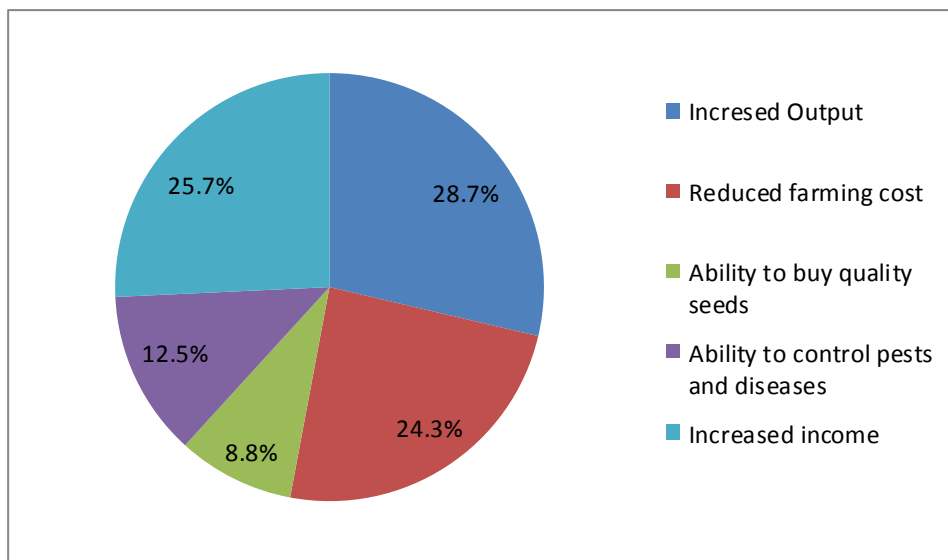
Source: Field Survey 2016

The respondents were asked whether they found the program helpful. 91.3% of the respondents who listened to the program found it helpful while 8.7% did not find it helpful. A whole 91.28% of the respondent said that the program had been helpful to

them and they had seen the significant changes that practicing the ideas learnt on the program had brought into their lives. This is through giving the farmers better farming ideas and also advice on better use of land and market. Only 8.7 % said the program had not been helpful because they were not able to implement the new ideas.

Figure 4.8: How One Acre Fund Program is helpful

As a follow up to the question on economic impact, the respondents were asked to state the specific impact the program had had in their economic lives. This question was significant to the researcher as it gave evidence that the message on the program had actually transformed the small scale farmers' lives.



Source: Field Survey 2016

Respondents who found the program helpful were asked how it has been helpful to them. 28.7% said the program has enabled them to increase their farm output, 25.7% were able to increase their income, 24.3% were able to reduce their cost of farming, 12.5% were able to control pests and diseases and 8.8% were able to buy quality seeds. The findings

therefore indicate that majority of the respondents were able to increase their farms' output.

The producer was asked how the program had been helpful to the farmers. The producer said that the program had helped farmers to achieve their dreams and that it had taught them new technologies in farming such as greenhouse farming.

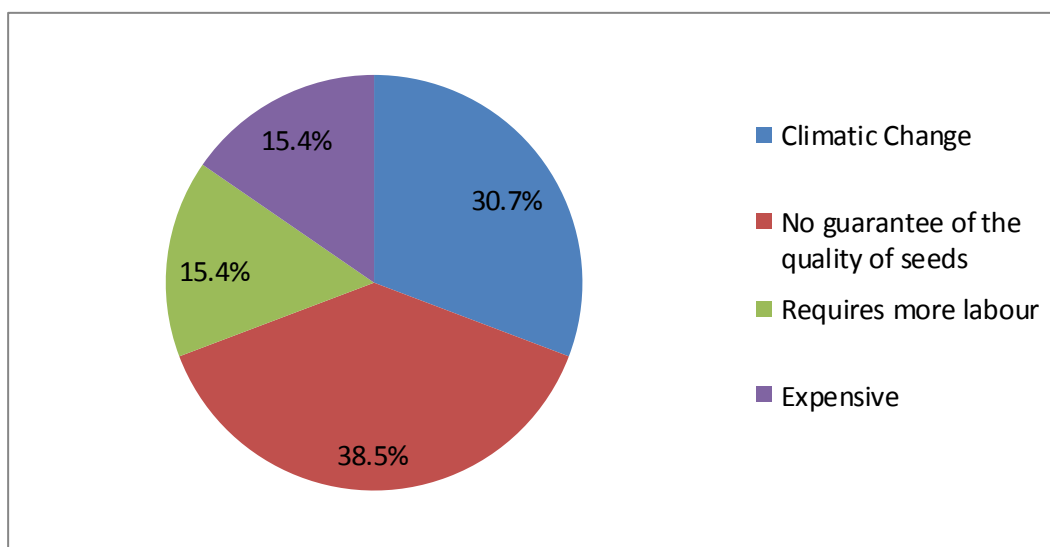
The producers also said that the program has met its objectives which were:

- a) To be able to inform the listener on new ways of farming.
- b) To help farmers get market for their produce.
- c) To educate the farmers on emerging technologies in livestock keeping.
- d) To connect farmers with other trained farmers and experts so as to enable them to get information about what is needed in farming.

The program is therefore helpful according to the producer.

Figure 4.9: Why One Acre Fund is not helpful

The respondents who said that the program was not helpful to them were asked to state why the program was not helpful. This question was important for the researcher because it provided important data that the producer can use to provide programs that are appealing and satisfying to almost all the audience. The response was as follows.



Source: Field Survey 2016

Respondents who did not find the program helpful were asked why it was not helpful. 30.7% did not find the program helpful because there were climatic changes that could affect their farming, 38.5% said there was no guarantee of the quality of recommended seeds, 15.4% said the methods recommended in the program were expensive and another 15.4% said that the method required more labor.

This group which was just 9.7 % of the respondent gave various reasons why they could not implement the new ideas. The majority (69.2) who said that the climate change was unfavorable and those who said that there is no guarantee of the recommended seed are the laggards who wait to see how it works for other people before they implement anything. The other 30.8% who said that it was too expensive or requires a lot of labor include the poor people who may not afford to buy the fertilizers or the required seeds or the old who may not be strong enough to work on their farms as required.

Therefore, it is not that the program is not helpful to them but they are faced with other limitations that deter them from practicing the new ideas.

4.9 Improvement of farming standards in the area

The agricultural extension officers were asked whether the farming standards of Manyoni area had improved. Since the agricultural officers are always on the ground, they were able to give an expert opinion about the effects of the program to the farmers. The officers said that the standards had improved. The officers attributed the improvement to the availability of extension services, subsidized farm inputs and information learnt through *One Acre Fund* program.

4.10 Promotion of Farming by One Acre Fund

The officers were asked if the program *one acre fund* had been helpful in promoting farming in Manyoni area. This question was significant because it gave an opportunity to get the experts' opinion.

The officers agreed that vernacular radio stations as well as One Acre Fund program have been helpful in promoting farming in Manyoni area by providing information about inputs to farmers, thereby facilitating timely planting of crops.

Figure 4.10: Opportunity to give feedback

The farmers were asked to state the extent to which they agreed that the program *One acre fund* provided an opportunity to give feedback to the producers. This question was important to the researcher as it sought to find out whether the popularity of the program

was partly due to the producers inclusion of call-in sessions to the program which may have given the audience a chance to share their views and therefore like the program. The responses are illustrated in the chart below.



Respondents were asked to state the extent to which they agreed with the statement ‘The program gives you an opportunity to give feedback and discuss issues’. 48.99%, agreed with the statement, 28.86% strongly agreed, 18.12% disagreed and 4.03% strongly disagreed. 77.85% of the respondents agreed that the program gave them an opportunity to give feedback and discuss issues. According to the producer of the program, they are able to get feedback of the program from the audience through call-in sessions, SMS and trained farmers feedback. The producer ranked the feedback received from the audience at 80%.

This is significant to the study because it confirms that effective communication is two way communications that allow feedback from the listeners, give them an opportunity to air their views and participate by sharing their challenges and also by giving feedback on their experiences with the new ideas. They also get an opportunity to share their challenges and ask for clarification. In this case the producer is able to identify the farmer's needs through this feedback and provide information that is specifically tailored to the needs of the specific group. It is a two way communication that allows information to flow forth and back and leaves both parties contented.

Table 4.8: Ways to improve the program

The respondents were asked what they thought should be done to improve the program. This question was important to the researcher as it gave the audience an opportunity to give feedback and share in the policy making of the radio programs. Through this, the researcher was able to identify some of the farmers' needs that the producers can address in order to make the program more effective.

Ways to improve the program	No of respondents	Percentages
Advertise more	45	30.4
Give loans	12	8.1
Invite farmers to the program	29	19.6
Give farm inputs	22	14.9
Give radios to farmers	9	6.1
Give farm equipment to farmers	5	3.4
Offer the program in Kiswahili	8	5.4
Bring the program on T.V	8	5.4
Give t-shirts	1	.7
Use polite language	2	1.4
Increase frequency of the program	7	4.7
Total	148	100.0

Source: Field Survey 2016

The respondents were asked for their suggestions on how One Acre Fund program can be improved. 30.4% were of the opinion that the program should be advertised more, 19.6% suggested that farmers be invited to the program, 14.9% suggested that the program producers should give farm inputs to farmers, 8.1% suggested that they should give loans to farmers, 6.1% suggested they should provide radios for farmers to enable them listen to the program, 5.4% suggested changing the language of the program to Kiswahili to avoid language barrier, another 5.4% suggested airing the program on television, 4.7% suggested changing of the time of the program, 1.4% suggested that the program should use polite language and 0.7% suggested giving of t-shirts to farmers.

Although the respondents gave various suggestions to what the producer should do, the highest percentage suggested that the program should be advertised more, which is significant because it shows the respondents recognize the importance of this program and would like other farmers to learn from it. This could also be a solution for those who said they did not listen to the program because they either did not know about it or did not know when it was aired.

19.6 % of the farmers suggested that farmers be invited to the program, this is also significant to this study as it emphasizes the theory of diffusion where the laggards can learn from those who attest to having tried the new ideas and succeeded. Moreover, if the farmers go to the studio to discuss issues they will be representing the farmers at the grassroots and will discuss issues from their perspective thus making it more relevant to them. In other words, this is another significant way of providing instant feedback.

The agricultural extension officers recommended that the program should continue being aired and that the program should be allocated more time. They also suggested that the program producers should give loans and grants to farmers.

CHAPTER FIVE

5.0 CONCLUSIONS, POLICY IMPLICATIONS AND RECOMMENDATION

5.1 An Overview

This chapter presents the conclusions and policy implications drawn from the findings and the recommendations. The purpose of the study was to evaluate the effectiveness of vernacular radio farming programs. The conclusions in this chapter are based on the objective of the study while the policy and recommendation give the way forward in relation to the use of radio and what should be done to improve the impact.

5.2 Conclusions

The above research proved that *One acre fund* has impacted positively on small scale farmers in Manyoni Village and has led to the improvement of their economic well-being.

The farmers affirmed that they had acquired knowledge that has been helpful to them in their farming activities. 55% of the respondents said that they had learnt better ways of using their land, and a similar number of respondents said they had learnt effective planting techniques while 47 percent said they had acquired knowledge that related to farm inputs. Other respondents had learnt about spacing of crops, pests and disease control, economic use of inputs among others. It is therefore evident that *one acre fund* has positively influenced the farming activities of small scale farmers in Manyoni village.

As observed in table 4.7, the program needs to improve their method of delivering information so that the message relayed can influence almost everyone. It is true that the audience has different needs and will respond to information that satisfies their specific needs, however, since one of the ultimate objective of the program producers is to assist the farmers to improve their economic status through farming, the impact of their programs should increase especially in discouraging farmers from using retrogressive farming methods.

This research also revealed that young people in this village are interested in farming. This is a significant finding as this is a group of people who are strong and quick to learn. If they are given proper information and financial support, they can be able to improve the agricultural and economic standards of the village.

5.3 Policy Implications

The research findings revealed that farmers and especially in the chosen village of study express positive view on the role vernacular radio program has played in enhancing their farming activities and above all the productivity of their farming activities. From the above analyzed data, it is clear that the radio program *one acre fund* has played a vital role in influencing the farming activities within the area of Manyoni. It is also evident that most of the farming practices have changed drastically due to the knowledge and skills acquired through the program aired to them. Mixed farming has become popular in the area as people try new ideas that are aired on the farming programs.

Since young people in the area are interested in farming the radio station can take advantage of this and provide a variety of information that is challenging, interesting as young people are always willing to explore and would be interested in new ideas which will hold their motivation compared to the old people who are resistant to change. However, we should keep in mind that this group may have challenges of lack of funds and small pieces of land at their disposal. Therefore the government in conjunction with the program producers should come up with policies that will ensure maximum use of the available land for maximum profit. They should also consider providing loans or other financial assistance to the young farmers. This young people are either parents or are about to become parents, so for the government to discourage them from leaving the village to seek jobs in towns and cities where some end up as criminals for lack of jobs, the government in conjunction with the vernacular radio producers can make farming and therefore village life more appealing to them by ensuring that farming becomes profitable.

Policies should be formulated by the management of the vernacular radio stations to ensure that all the information aired to the farmers touches on the key pressing issues affecting them on their day to day farming. They should be encouraged to practice mixed farming and to use the best farming methods so that the little land is fully utilized. The policy makers need to involve the farmers in the formulation of these policies so as to have all their needs met through the information disseminated over the radio programs.

Although farmers mentioned the areas that the station had covered by providing knowledge, it was noted that various people acquired different knowledge from the program. This is good but since we would like almost all the farmers to obtain the knowledge, accept it and implement it, the program producers should try and simplify the information and frame it in an attractive way so that it appeals to all the farmers and cause change. Knowledge that needs to be re-visited includes how to reduce the cost of production, knowledge on storage and getting the best market.

The farmers recommended that their representatives should be called to the studio and allowed to share their views, challenges and knowledge with other farmers. It is also paramount for the management to have policies in place that will ensure long time sustainability of the impact of the program on the farming in the area. This can be achieved through feedback or through reports by the agricultural officers on the ground.

Proper mechanism must also be put in place that will influence positively on the outcomes of *one acre fund* program. The management of *one acre fund* program, apart from providing information on how to farm effectively, they should liaise with the government to lay down mechanisms that ensure that seeds and fertilizers are readily available to the farmers at an affordable price.

Since more than 90% of the farmers in this area said they frequently listen to this program, that they would recommend it to other listeners and that more programs like one acre fund should be aired on the station, it is important that the radio station

considers this need and plans to either allocate more time to the program or create similar programs.

The government should take advantage of the fact that many people in Manyonyi village listen to Mulembe FM and particularly vernacular radio programs and maximally use this programs to communicate to the farmers their agricultural policies because then the message will reach a wide audience and will be well understood.

One reason why the farmers liked the program is that it provides a window for feedback. This is important for effective communication and to enhance it, more participation by the audience should be encouraged. From this research, it is clear that farmers get new ideas through listening to radio and also practice them; therefore both the government and the program producers should use this powerful tool well, avoid misusing it and positively explore its use. The program producers should only air information that is well researched and confirmed so that the farmers' confidence in the radio program as a means of gaining agricultural knowledge can be maintained. Moreover since this a powerful media of communication that is far reaching, the radio stations should try to improve their signals so that farmers in the remote areas do not lose on important information because of lack of signal or signal interruption.

5.4 Recommendation

The voice of the farmer in farm radio programs enhances the credibility of the programs and encourages the adoption of agriculture innovations for farming audience's thereby

increasing productivity. Radio stations need to invest more in the participation of farmers in the programs if they are to be effective and sustain listenership as intended. The researcher recommends that the management of one acre farm should invest more in the program and should consider building partnerships with farming institutions within Manyoni village and Kakamega County for both technical and financial support for sustainability. This will ensure long term sustainability of the impact of the farming programs within the region and beyond.

It is also recommended that the management of *one acre fund* program should not only provide information to the farmer but also give some technical support to the farmers. They should be mechanisms in place that ensure that all and only genuine requirements for effective farming are readily available to the farmers. It is recommended above that the producers of this program should re-package their ideas in a more simpler and attractive way so that it can influence more people.

The respondents also suggested that their representatives should be invited to the studio to participate in the discussions .When all this has been implemented, another study should be conducted where the respondents are asked about the ideas they have learnt from the program to as to see whether the numbers of those who will have acquired knowledge in various aspects of farming will have increased.

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APPENDIX I

QUESTIONNAIRE FOR THE SAMPLE POPULATION

INTRODUCTION

My name is Grace Lieta Wanda; I am a student of communication at the University of Nairobi. My student registration number is(K50/76109/2014).As part of my course work, I am carrying out a research in Manyonyi village to find out the extent to which vernacular radio agricultural programs (one acre fund) have influenced farming in the area. All information given will be treated as confidential and will only be used to draw the objective of this study.

Your information will not be used for commercial purposes and your cooperation will be highly appreciated.

1) Age (Tick where appropriate)

21-30 ☐

31-40 ☐

41-50 ☐

50 and above ☐

2) Are you one of the farmers in Manyonyi village?

Yes ☐

No ☐

3) If yes, describe the type of farming you are involved in.

.....

.....

.....

.....

.....

4) Approximately, what is the size of your piece of land?

(Tick where appropriate.)

1 acre and below ☐ 1-2 acres ☐ 2-3 acres ☐ 4 and above ☐

5) How often do you listen to Mulembe FM radio station? (Tick where appropriate)

a) Less than 2 hours per day ☐

b) More than 2 hours per day ☐

c) More than 5 hours per day. ☐

6) Do you know a program called one acre farm? Yes ☐ No ☐

7) If **Yes**, do you listen to it ? Yes ☐ No ☐

8) If **Yes**, please state your reasons

1)

.....

2)

.....

3)

.....

9) If **No**, Please state your reasons

1)

2)

.....

.....

10) If **yes** for number **7**, how often do you listen to the program **one acre fund**? (Tick where appropriate)

i) Always ☐

ii) Very often ☐

iii) Often ☐

iv) Rarely ☐

11) What are some of the ideas you have learnt from the program?

a).....

b).....

c).....

d).....

.....

12) Have you practiced some of the ideas that have been discussed on the program?

Yes ☐

No ☐

13) Would you say the program has been helpful to you?

Yes ☐

No ☐

14) If **Yes**, state your reasons

a).....

b).....

c).....

d).....

15) If **No**, state your reasons

a).....

b).....

c).....

d).....

16) The program gives you an opportunity to give feedback and discuss issues. To what extend do you agree

Strongly disagree ☐ disagree ☐ agree ☐ strongly agree. ☐

17) What do you think can be done to improve the program?

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

18) Would you recommend this program for other listeners?

Yes ☐ No ☐

19) (If **yes**, why?.....

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

20) (If **No**, why?.....

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

.....
.....

21) Would you like the radio station to create more programs like 1 acre fund?

Yes ☐ No ☐

22) If **Yes**, give your reasons.

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

23) If **No**, give your reasons.

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

APPENDIX II
QUESTIONNAIRE FOR THE PRODUCERS OF ONE ACRE FUND
PROGRAMME

INTRODUCTION

My name is Grace LietaWanda, I am a student of communication at the university of Nairobi. My student registration number is (K50/76109/2014). As part of my course work, I am carrying out a research in Manyoni village to find out the extent to which vernacular radio agricultural programs (one acre fund) have influenced farming in the area. All information given will be treated as confidential and will only be used to draw the objective of this study.

Your information will not be used for commercial purposes and your cooperation will be highly appreciated.

- 1) Why did your radio station start this program?

.....

.....

.....

- 2) Who are your target audience?

.....

.....

.....

.....

3) Has your program been able to reach your target audience?

Yes

☐

No

☐

4) Does the program serve the intended purpose?

Yes

☐

No

☐

5) Has the program, so far met the reasons your station expected to achieve?

Yes

☐

No

☐

6) If yes, please explain.

.....

.....

.....

.....

.....

.....

.....

7) If no, please explain

.....

.....

.....

.....

.....
.....

8) If No for number 7, what do you intend to do to meet your intended purpose?

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

9) How can you rate the popularity of this program in relation to other programs on

Mulembe FM. ☐ Less popular ☐ Popular ☐ very popular

10) How do you identify the needs that you address on this program?

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

Are you able to get feedback from the audience of this program?

Yes ☐ No ☐

12) If **No**, please explain why

.....

.....

.....

.....

13) If **Yes**, please explain why

.....

.....

.....

.....

.....

14) If **yes**, what percentage of feedback?

20 ☐ 40 ☐ 60 ☐ 80 ☐ 100 ☐

15) If **yes**, how does the feedback influence your programming?

.....

.....

.....

16) To what extend is your program interactive? (Rate in percentage)

20% ☐ 40% ☐ 60% ☐ 80% ☐ 100% ☐

APPENDIX III

QUESTIONNAIRE FOR THE AGRICULTURAL EXTENSION OFFICERS

INTRODUCTION

My name is Grace Lieta Wanda, I am a student of communication at the university of Nairobi. My student registration number is (K50/76109/2014). As part of my course work, I am carrying out a research in Manyoni village to find out the extent to which vernacular radio agricultural programs (one acre fund) have influenced farming in the area. All information given will be treated as confidential and will only be used to draw the objective of this study.

Your information will not be used for commercial purposes and your cooperation will be highly appreciated.

1) How long have you worked with the farmers in this area?

a) Less than 2 years ☐

b) 2-5 years ☐

c) More than five years ☐

2) In your opinion, which is the most effective method of communicating with the farmers on farming techniques?

a) Face to face communication ☐

b) Use of radio ☐

c) Other media ☐

3) What are some of the challenges facing farmers in Manyonyi area?

.....

.....

.....

.....

.....

4) From your own observation, are the farming standards of this area improving or declining? ☐ ☐

Improving

declining

5) If **declining**, explain the reasons why

.....

.....

.....

.....

.....

6) If **improving** explain the reasons why

.....

.....

.....

.....

.....

7) Are the vernacular radio stations helpful in promoting farming in this area?

.....

.....

.....

.....

8)Has **one acre fund** program on Mulembe FM been helpful in promoting farming in this area? ☐ ☐

Yes No

9) If **yes**, please explain why

.....

.....

.....

.....

.....

10)If **No**, Please explain why

.....

.....

.....

.....

.....

11) Would you encourage the farmers in this area to continue listening to **1 acre fund**?

Yes ☐

No ☐

12) If **yes**, explain why

.....

.....

.....

.....

.....

.....

13) If **No**, explain why

.....

.....

.....

.....

.....

.....

14) What recommendations would you give to the producers of **1 acre fund program**?

.....

.....

.....

.....

.....

.....

APPENDIX IV: FIELD WORK CERTIFICATE



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P.O. Box 30197-00100
Nairobi, GPO
Kenya

REF: CERTIFICATE OF FIELD WORK

This is to certify that all corrections proposed at the Board of Examiners' meeting held on _____ in respect of M.A/Ph.D final Project/Thesis defence have been effected to my/our satisfaction and the student can be allowed to proceed for field work.

Reg. No: K50/76109/2014

Name: GRACE LIETA WANDA

Title: INFLUENCE OF VERNACULAR RADIO PROGRAMMES

ON FARMERS IN MANYONYI VILLAGE: CASE OF ONE ACRE FUND.

POLYCARP OMOLO OCHILO
SUPERVISOR

Dr Samuel Siringi
ASSOCIATE DIRECTOR

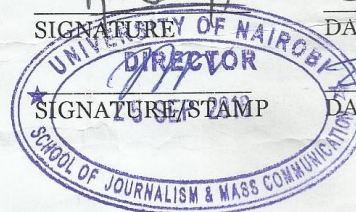
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DIRECTOR

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SIGNATURE

23rd September, 2016
DATE

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SIGNATURE

26/9/2016
DATE



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SIGNATURE/STAMP

27.9.2016
DATE

APPENDIX V: CERTIFICATE OF CORRECTIONS



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Nairobi, GPO
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REF: CERTIFICATE OF CORRECTIONS

This is to certify that all corrections proposed at the Board of Examiners meeting held on 31/10/16 in respect of M.A/PhD. Project/Thesis Proposal defence have been effected to my/our satisfaction and the project can now be prepared for binding.

Reg. No: K56/76109/2014

Name: GRACE LIKIA WANDA

Title: THE IMPACT OF VERNACULAR RADIO FARMING

PROGRAMS ON SMALL SCALE FARMERS: A CASE OF ONE ACRE FUND

POLYCARP OMOLO OTHILO 10th November, 2016

SUPERVISOR

SIGNATURE

DATE

Dr Samuel Siringi

ASSOCIATE DIRECTOR

SIGNATURE

DATE

11/11/2016

for Dr Samuel Siringi

DIRECTOR

SIGNATURE/STAMP

DATE

14/11/2016

APPENDIX VI: DECLARATION OF ORIGINALITY FORM

UNIVERSITY OF NAIROBI

Declaration of Originality Form

This form must be completed and signed for all works submitted to the University for examination.

Name of Student GRACE LIETA WANDA

Registration Number K50/76109/2014

College HUMANITIES AND SOCIAL SCIENCES

Faculty/School/Institute SCHOOL OF JOURNALISM AND MASS COMMUNICATION

Department SOJMC

Course Name MASTERS OF ARTS IN COMMUNICATION STUDIES

Title of the work

DECLARATION

1. I understand what Plagiarism is and I am aware of the University's policy in this regard
2. I declare that this Thesis (Thesis, project, essay, assignment, paper, report, etc) is my original work and has not been submitted elsewhere for examination, award of a degree or publication. Where other people's work, or my own work has been used, this has properly been acknowledged and referenced in accordance with the University of Nairobi's requirements.
3. I have not sought or used the services of any professional agencies to produce this work
4. I have not allowed, and shall not allow anyone to copy my work with the intention of passing it off as his/her own work
5. I understand that any false claim in respect of this work shall result in disciplinary action, in accordance with University Plagiarism Policy.

Signature Grace

Date 10/11/2016



APPENDIX VII: PLAGIARISM TEST RESULTS

11/10/2016 Turnitin Originality Report

Turnitin Originality Report

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