

**RADIO AND SMALL SCALE FARMING IN MURANG'A
A STUDY OF MUGAMBO WA MURIMI PROGRAM IN INOORO
FM**

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DECLARATION

This project is my original work and has not been presented in and/or to any forum or audience, in any other university or examination body.

Signed Date

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I confirm that the work presented in this research project was carried out by the above named student under my supervision.

Signature Date

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DEDICATION

I dedicate this project to fellow colleagues in the media fraternity who have tireless efforts to improve livelihoods of the masses.

I also dedicate the project to my father who hails from this county and one of my good examples of the farmers who are so adamant to change. Hoping by use of the recommendations in this research paper, his challenges will be addressed and make him turn from farming as a hobby to agribusiness.

ACKNOWLEDGEMENT

I would like to acknowledge my supervisor Davis Mokaya for your continued moral and academic material support throughout this research. I will forever remain indebted to you. Thank you.

My appreciation goes to Murang'a County farmers who were genuine and opened their hearts to my team, Extension officers in this county and more so the entire agriculture department for the support. Not forgetting my classmates who encouraged me to move on with the research despite the challenges surrounding it.

ABSTRACT

This research is based on the fact that Murang'a County seems to be lagging behind in terms of farming despite educational programs running on radio aired in their own vernacular language. A number of visits were done in different parts of this county. Several were people interviewed including farmers and leaders from different institutions. The research found out that there is lack of paradigm shift by the farmers. Murang'a County residents were producing the most coffee in Kenya a few decades ago, an indication that they are active people who can do serious farming and produce bumper harvests. This is not so, today long after flop of their major cash crop they do not seem to have picked an alternative method of farming that would earn them an income. *Mugambo wa Murimi* seem to know this very well, in its daily program a farmer who stands out in their area is featured in the interview, the farmer encourages the listeners to be more focused in farming and practice agribusiness instead of doing it as a hobby. This program has been running for the last ten years. Although they confessed to be listeners of this radio station and more so followers of the informative farming program, farmers have not yet embarrassed key methods of farming. With the new government dispensation, agriculture is devolved. The farmers are receiving a closer attention and follow up and optimistic results expected. The findings of the study will be useful to the producers of the program to zero in more into Murang'a residents to address their specific challenges other than generalizing the topics they are featuring. Moreover adoption of the recommendations by the county leaders will bring a turnaround in agricultural sector which in turn will bring positive impact in the economy.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
ABSTRACT.....	v
TABLE OF CONTENTS	vi
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Statement of the Problem.....	4
1.3 General Objective	5
1.4 Specific Objectives	5
1.5 Research Questions.....	5
1.6 Justification.....	6
1.7 Scope of the Study	7
CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL	
FRAMEWORK.....	8
2.1 Introduction.....	8
2.2 Radio in Kenya	8
2.3 Radio as an educational tool of Agriculture in Africa	10
2.4 Kenya’s Agriculture Sector.....	14
2.4.1 Horticulture	20

2.4.2 Dairy and Livestock.....	20
2.4.3 Coffee and Tea.....	21
2.4.4 Poultry.....	22
2.4.5 Cereals.....	22
2.5 Agriculture and Technology in Kenya.....	23
2.5.1 Agriculture in Muranga County.....	25
2.6 Challenges facing the Agricultural sector in East African Community	27
2.6.1 Challenges facing the Kenyan Agricultural Sector.....	28
2.7 Theoretical Framework.....	31
2.7.1 Agenda Setting Theory	31
CHAPTER THREE: RESEARCH METHODOLOGY	34
3.1 Introduction.....	34
3.2 Research design	34
3.3 Research Population.....	35
3.4 Research approach: Sampling Techniques	35
3.5 Data Collection, Procedures and Instruments	37
3.5.1 Key Informant Interviews	37
3.5.2 Semi-Structured Interviews	38
3.6 Data Analysis and Presentation	38

CHAPTER FOUR: PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS	39
4.1 Introduction.....	39
4.2 Analysis and discussion of Key Informant Interviews	41
4.2.1 Responses on the different ways to enhance pro-activeness of farmers in Murang’a County.....	41
4.2.2 Responses on identifying challenges facing farmers in Murang’a County?	43
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	48
5.1 Summary	48
5.2 General Conclusions	49
5.3 Recommendations.....	50
REFERENCES.....	54
APPENDICES	56
APPENDIX 1. INTERVIEW GUIDE QUESTIONS	56
APPENDIX 2: LIST OF INTERVIEWEES.....	58
APPENDIX 2: CERTIFICATE OF FIELD WORK	59
APPENDIX 3: CERTIFICATE OF CORRECTIONS	60

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The agricultural sector is the backbone of Kenya's economy and the means of livelihood for most of the rural population. The sector contributes directly 26 per cent of the Gross Domestic Product (GDP) and another 25 per cent indirectly. It supplies the manufacturing sector with raw materials and generates tax revenue that helps to support the rest of the economy. The sector also accounts for 65 per cent of Kenya's total exports, it employs over 40 per cent of the total population, and over 70 per cent of the rural population depends on agriculture for their livelihood. Sustained and equitable agricultural growth is critical to uplifting the living standards of the people as well as generating rapid economic growth. (*Agriculture Sector support program-Ministry of Agriculture 2011*).

Although agriculture is critical to the economy, levels of production and productivity are very low and the vast potential of the sector is scarcely being tapped. Education and creation of awareness is being spread in different parts of the counties and hence the reason why radio stations have picked this up as a platform to necessitate the need to empower farmers.

Murang'a County is located in the central part of Kenya. The economy of this county is driven by agricultural activities. The major crops grown mainly for export include coffee,

tea, and horticultural products. Farming is mainly done by small scale farmers. Food crops like maize, beans, are grown in almost every homestead for local consumption. Dairy farming is another common practice in almost each and every home. Available records show that coffee farming was one of the main income earners in Murang'a County, administratively known as Murang'a District then, up to 1989 when the global prices declined. Although subsequently there was declined farming of coffee, farmers did not uproot their coffee trees. However, farmers did not turn to alternative methods of farming for income. Farmers could no longer afford basic needs such as food, clothing and shelter. The small towns that had started to emerge stalled. The youth who were employed in coffee farms, factories, coffee societies and other areas supported by the income from coffee were rendered jobless. The later emergence of illegal groups extorting money from the members of public dealt a bigger blow to agricultural practices in Murang'a County and more so in the coffee zones.

The terms rural radio and community radio have come to be used interchangeably to describe FM stations established to broadcast to a local and predominantly rural audience. The growth of rural radio stations over the past few decades reflects both the improvements in information technologies and the shifting development paradigm towards a more participatory style of information and knowledge transfer. The 'community' aspect of local radio initiatives combines a number of approaches (Chapman, 2003).

Among media and ICT platforms in Kenya, radio remains the most widely available, reaching directly into more than 85 percent of adults' homes in the country. Mobile phones are increasingly widespread, but they have not yet reached the near-universal coverage of radio.

This started changing from the year 2005 owing to the emergence of vernacular FM stations which communicated to farmers in Murang'a County. There was sustained civic education through the stations and interactive sessions encouraging the locals to participate and raise the issues affecting them. A quick study reveals that *Mugambo wa Murimi* which translates to 'voice of the farmer' is one of the most followed agricultural program in the Murang'a County.

This is a daily feature aired every morning from Monday to Friday on *Inooro FM*. The program involves intensive research mostly on local farming. It touches on all sectors of farming and all the stake holders in agricultural industries. The producer identifies successful small scale farmers to be flagships in their village and encourage other farmers to visit and learn from them. Farmers raise their challenges in farming and experts are invited to address the issues. The program confronts other stakeholders in agriculture to rise to the occasion on areas where policies have to be put in place to improve agricultural practices. These stakeholders include government institutions, researchers, farm input producers, non-governmental organizations among others. Through this program there was continued campaign to compel the government to write off debts for coffee farmers in Murang'a County which had strangled them for a couple of years. The

farmers have been educated on alternative farming like horticulture, especially vegetables like tomatoes, kales, cabbages, capsicum which mature within a short period of time. Farmers have been encouraged to practice agribusiness-to do farming as a business and not as a hobby. They have been educated on proper management on dairy farming for higher returns.

1.2 Statement of the Problem

Radio stations in the country have grown in numbers, in reach in popularity and thus, in audience share market. Driven by profits, radio stations have shown to be the most ideal when it comes to community engagement forums which are development oriented. As by October 2012, Nyanjom, O. (2012) points out that Communication Communications of Kenya had issued 365 radio frequencies, of which 300 frequencies were said to be operational, in use by slightly over 100 radio stations. Of these, according to Maina, S.N. (2013) only 12 Community Radio stations have been granted frequencies by CCK. The show *Mugambo Wa Murimi* has a huge *follow ship* and listeners give feedback on the different issues that affect them as farmers. Although even with this multitude *listenership* very little impact can be seen on the ground, in Murang'a County. Farmers are not really doing farming as a way to invest in their lives and are not using the different methods shared on the show to better their lives. This begs the question 'Is the show having an effective impact on the people of Murang'a County?'

Therefore the statement of the problem here is 'Farmers are not implementing the messages shared on *Mugambo wa Murimi* show to make their farming lives better and

also to build their business life through agriculture. Farmers are not actualizing all that is shared on the show and its productiveness cannot quite be seen in the agricultural sector.

1.3 General Objective

The purpose of this study is to investigate how sustainable the *Mugambo wa Mirimi* show is towards the people of Murang'a County. It therefore seeks to find out ways on how to engage the farmers and make them more pro-active with their farming lives through the show.

1.4 Specific Objectives

The following objectives are geared towards seeking ways to increase pro-activeness of farmers in Murang'a County.

- i. To seek ways on how to enhance pro-activeness of farmers in Murang'a County
- ii. To identify main sustainability challenges for farmers in Murang'a County.
- iii. To determine how and to what extent *Mugambo Wa Murimi* has added value to the people of Murang'a County.

1.5 Research Questions

- i. What ways can be used to enhance pro-activeness of farmers in Murang'a County?
- ii. What are the main sustainability challenges for farmers in Murang'a County?
- iii. What are values are added to farmers by listening to *Mugambo wa Murimi*?

1.6 Justification

Currently, over 10 million people in Kenya suffer from chronic food insecurity and poor nutrition, and between 2 and 4 million people require emergency food assistance at any given time. Nearly 30 per cent of Kenya's children are classified as undernourished, and micronutrient deficiencies are widespread. It is the policy of the government that all Kenyans throughout their life-cycle enjoy at all times safe food in sufficient quantity and quality to satisfy their nutritional needs for optimal health. Investing in agriculture is one of the most high-impact, cost-effective strategies available for reducing poverty and improving livelihoods (*GoK. 2010. Kenya 2009 Population and Housing Census Highlights*).

It is decried that Millennium Development Goals (MDGs) as pointers to poverty reduction efforts face grim prospect that they will not as a whole be realized in the foreseeable future. This is a damning worry especially in the African context including Kenya. The key problem areas in effecting pro-poor change leading to meeting these goals are well recognized by the Kenya government in her policies on issues of broad-based economic growth, access to markets, services and assets, political and social empowerment, etc as the report explicitly states (p9).

Agriculture plays a significant role in Kenya's economy. The sector directly contributes 26 per cent of the GDP and another 25 per cent indirectly. It supplies the manufacturing sector with raw materials and generates tax revenue and foreign exchange that helps to support the rest of the economy¹². The sector employs over 40 per cent of the total

population and over 70 per cent of the rural population. Tea and fresh flowers are key foreign exchange earners. Sisal, cotton, fruits and vegetables are important cash crops. (Agricultural sector development strategy 2010-2020). The interest of this research therefore, is to investigate new methodologies of empowering farmers to better their agricultural ways and also to make them use farming to make high returns.

1.7 Scope of the Study

The research seeks to draw lessons as to why farmers do not adopt skills shared on *Inooro fm* via *Mugambo wa Murimi*. It will be focused on investigating methodologies by *Inoorofm* presenters on how to work with the farmers in ensuring that they are taking up farming not just as a hobby but as a business entity too.

The research is expected to take 8 weeks. Targeted sources of primary and secondary information include farmers of Murang'a County, suppliers of agricultural products, county government, chief *baraza* leaders in different villages and *Inooro fm* presenters/producers.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter will review background of radio broadcast in Kenya which dates back in the year 1927. The research explains how the colonists saw the need of a radio to follow what was happening back in their country. It will also introduce emergence of vernacular stations and their growth. The research in this chapter explains how radio is an educational tool of agriculture in Africa which is viewed as an important channel to pass information to large audiences. It also reviews agricultural sector in Kenya which includes both crop and livestock. Under crops it covers major cash crops within the area of study and horticulture while poultry and dairy farming is covered. Agriculture in Muranga County is given a broader perspective and the challenges facing the same. The study uses the agenda setting theory, with causal hypothesis that the media are capable of setting a public agenda by use of their content they can easily influence the public perception.

2.2 Radio in Kenya

Radio transmission in Kenya started back in the year 1927 with the white settlers who wanted to follow what was happening back in their country and in the other parts of the world as well. In this year there was advent of the East African Broadcasting Corporation (EABC). In the year that followed, 1928, English Radio Broadcasting begun. It was until the World War II when the need emerged to inform parents as well as their relatives all the happenings at the frontage of the war. At the beginning of this war Asian and African

programs were introduced. In the year 1953, African Broadcasting Services was created, this was the first broadcast service created for Africans.

ABS, broadcasted in several dialects including Arabic, Swahili, Kikuyu, Kihaya, Kinandi, Kikamba and Dholuo. In the year that followed the colonial government commissioned a team to deliberate the future of broadcasting in Kenya. With their recommendations, Kenya Broadcasting Services (KBS) was established five years later, 1959, and stations set up in different regions – Mount Kenya Station in Nyeri, Sauti ya Mvita in Mombasa and Kisumu Station in Nyanza. In the year 1960 KBS changed its name to Kenya Broadcasting Corporation, the British government was reluctant to let the same medium they had used to suppress nationalists party who are focused towards attaining independence be used by the Africans after independence. First television transmission was experienced in 1962 first broadcasted from a Limuru farm house with a radius of 15 miles. An Act of parliament nationalized KBC to Voice Of Kenya in 1964.

VoK reverted back to KBC through another act of parliament in the year 1989. It was within the same year that KBC signed a contract with JTEC - Japan Telecommunication Engineering Consultancy to improve and expand the national medium wave frequency radio broadcasting network.

KBC held monopoly in the field of television airwaves until 1990 when the first television competitor was launched, the Kenya Television Network. KBC also dominated in the field of radio for most of the Kenya's history. According to Steadman-Synovate survey funded by KARF [Kenya Audience Research Foundation] in the 2007, 68 percent

of the total media population listenership consume vernacular station. The proportions in rural areas were higher recording up to 73percent compared to that of urban rating up to 68percent. This survey discovered also that a high number of listeners, 84 percent tune into about 3 station a day most of them claiming to have listened to 2stations on a daily basis.

An interesting highlight of the findings is the top ratings for Swahili and vernacular radio stations. Kenya has two national languages - English and Swahili, and over 42 tribes which when subdivided tripples the number of spoken dialects in Kenya. 70% of people sampled listened to Swahili stations for more than 10 hours a week compared to 68% and 52% for vernacular and English broadcasting stations respectively. The other languages were at 30%.

A big player in the vernacular radio segment is Royal Media Services that has eight vernacular stations, two Swahili stations and one English station. According to the report, top radio broadcasting languages by time spent listening are Luo (28%), Swahili (26%), Kikuyu (25%), Kalenjin (24.8%), and Kamba (22%) - stations that receive more than three hours a day of core listeners.

2.3 Radio as an educational tool of Agriculture in Africa

The idea of accelerating development by using both older media such as radio and newer information and communication technologies has gained momentum in Africa over the past decade. The continent's development blueprint, the New Partnership for Africa's

Development (NEPAD), places information technologies high among its priorities. Governments agree that good Internet, telecommunications and broadcasting services can foster regional trade and improve integration into the global economy. The ability of ordinary people to communicate with each other also helps promote democracy and good governance.(Africa renewal, 2005).

Mass media offers effective channels for communicating agricultural messages, which can increase knowledge and influence behaviour of the intended audience. Broadcast media have the ability to disseminate information to large audiences efficiently; the radio can be a particularly important channel (Abbas-2003; Role of electronic media in adoption of electronic technologies by farmers).

Over two billion people live in rural areas of developing countries. In Africa, most agricultural communities live in rural areas. In these rural areas one finds that there is a direct relationship between agricultural and rural development. This comes about by the fact that most people in rural areas depend on agriculture for their livelihood.(FAO corporate document repository). Because such a large population lives in rural areas, they are often the birthplace of trends and events, which will have a major impact on cities later on. For example food is grown there to feed the whole nation and droughts, diseases and infestations to crops are first felt there. Even research meant for better farming practices is tested there. Therefore there is need to keep the communities informed of what is happening in and around them in order for them to adapt to varying situations (Biraahwa- <http://www.fao.org/docrep/003/x6721e/x6721e31.htm>).

In rural development, information and knowledge are two significant factors. Local knowledge provides different ideas for agricultural as well as other changes. The information brought to the area contains fresh ideas, and introduces new opportunities. Knowledge obtained from a specific research can motivate thinking and practices. All the five external and one internal catalyst of social change, which were identified by Figueroa et al. (2002) have the stimulus of new information or knowledge at their core. Neither knowledge is being “transferred” to potential users, nor are the outputs of specific research being “taken up” by farmers and other land managers (Garforth and Usher, 1997; Garforth et al., 2003).

Marshal McLuhan suggested that teachers would turn an outdated ivory tower into a modern-day control tower by plunging into the vortex of electronic technology (Griffin 2000), implying that they could use electronic media to educate. Some attempts have been made to use radio as a medium of education. In 1969, Sesame Street broadcast became the first attempt by a government to use media (TV) to try and achieve some educational goals for disadvantaged preschoolers. According to Severin and Tankard (2001) that was a bold step to reach a large audience and hold their interest by combining information and entertainment.

Many researchers and educators have tested the understanding of farmers and other clients on the delivery of educational information (Suvedi et al., 1999; Trede and Whitaker, SEARCH Vol. 2, 2010 14 Mohammad Reza Nazar & Abu Hassan Hasbullah 1998; Caldwell and Richardson, 1995; Laughlin and Schmidt, 1995; Gamon et al., 1992).

The outcomes of their studies indicate that different media and methods are used by extension educators to communicate new and emerging technologies to farmers.

Experiments with radio as a communication tool have been going on since the 1940s. According to Mytton (2000), Harry Franklin pioneered broadcasting in indigenous African languages as early as 1941 in Northern Rhodesia to provide news of the war to those whose families were fighting in Somaliland as part of the Northern Rhodesia regiment. The problem he faced was getting receivers into villages because the wireless sets were not portable and required mains electricity.

The global increases in technology and connectivity have resulted in a rapid expansion of applications, tools, and software. This has created new opportunities for innovation in information dissemination in poor rural areas. The use of mobile phones, tablets, the Internet, and other modern hardware is common in many development projects today, but one of the oldest technologies—radio—is sometimes unnecessarily neglected. Radio programs have long proved useful in informing populations in remote locations, and in some cases, this was the only way to connect rural communities to information on health, agriculture, and other services (*ICT in Agriculture-New and Improved Radio*).

Through the work of Farm Radio International (Ghana), they found that radio is the preferred source of agricultural information for the large majority of smallholder farmers. Not only is it affordable and accessible to those without formal education, it can also be utilized in local languages. Most importantly, radio, particularly when coupled with other

ICT, such as mobile phones, can give voice to end users through participatory radio programmes. Thanks to this, radio is an effective tool helping farmers to make informed decisions and supporting the adoption of innovative agricultural practices (*Ben Fia for, Regional Field Manager-World Food Program*).

Findings of a 2012 study of over 600 small-scale farm households spread across high- to low-yield agricultural regions of Kenya in Nakuru, Nyanza, Nyeri, Machakos, Makueni and Webuye show that farmers receive mostly basic ‘how to’ and technical information; despite its modest usefulness, this kind of information is not enough to enable these Kenyan farmers to improve their food production levels or practices. Selected findings from this study were shared in a presentation, ‘Shortcomings in communications on agricultural knowledge transfer’, made by Christoph Spurk, a media researcher, at a seminar on 17 Oct 2013 at the International Livestock Research Institute (ILRI), in Nairobi, Kenya.

2.4 Kenya’s Agriculture Sector

The agricultural sector is the mainstay of the Kenya’s economy. According to agricultural sector development strategy prepared by the government in the year 2010-2020- Agriculture is viewed as the core support of the economy of Kenya with a contribution of 26per cent of the total GDP every year, and some 25 percent more that is directly earned. Among the products exported, agriculture enjoys 65 percent of the total exports. In terms of employment agricultural sector provides more than 70percent of the total number of engagements especially in the rural areas and about 18percent in the formal sector.

This makes the agricultural sector to be viewed as means of livelihood for the majority of Kenyan populations as well as a key driver to Kenya's economy [ASDS 2010-2020]. Over 80% of the population, especially living in rural areas, derives their livelihoods mainly from agricultural related activities. Due to these reasons the Government of Kenya (GoK) has continued to give agriculture a high priority as an important tool for promoting national development (*Kenya Agricultural Research Institute*).

The government subdivides the agricultural sector into six subsectors which include Livestock examples; Dairy, beef, sheep, goats, beekeeping also known as apiculture, poultry, pigs and camels, food crops. Mainly classified into cereal[maize, wheat, sorghum, rice, millet], roots and tubers[arrow root, cassava, yam, sweet potato, Irish potato,] legumes [beans, green grams, cowpeas, pigeon pea, beans], main food crops in Kenya being maize, wheat, sorghum, potato, rice, cassava, vegetables and beans. Horticulture-which includes cut flowers, slices, herbs, vegetables and fruits fisheries and forestry and, industrial crops which include sisal, pyrethrum, sugarcane, barley, coffee, tea, sugarcane sunflower, coconut, tobacco, bixa and cotton. Moreover it considers factors of production to be land, water and the farmer institutions known in other words as cooperatives and associations.

It is worth to note that agricultural sector recorded impressive growth in the first two decades after independence. This was the period when the first president led a campaign called *rudini mashambani* which in English means return to farms. This call was well responded to and as a result small – scale agriculture recorded fast growth and as a result

economic growth was rating at a commendable growth of up to 7percent. This was, at that time, the most remarkable growth in sub-Saharan Africa. The main key factors that contributed to this growth was the support rendered to farmers by the government through agricultural extensions and research.

This growth however, started to decline especially the years between 1980-1990. Since the growth of economy depends highly on the growth of agricultural sector economic growth dwindled in a big way during this period. Several factors attributed to this, which included negligence amongst the agricultural extension departments as well as research. Investment in this sector was low with as low as 2percent if not less in the annual budget. There was mismanagement in the sector. The agricultural institutions during this period also collapsed.

The achievement of national food security is to be a key objective of the agricultural sector. Food security in this case is defined as “a situation in which all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life” (Kenya Food Security Steering Group, 2008). Under the Vision 2030, the Government has identified the following seven flagship projects for implementation during the next 5 years:

1. Agricultural policy reforms

Whose main goals include increasing productivity in the agricultural production and commercializing crops and boosting their competitiveness. It aims at improving governance of the agricultural institutions, attract the private sector to participate in all aspects, increase access to market and trade, promote sustainable land and natural resource management and also to review the legal and policy framework surrounding agriculture.

2. Three-tiered fertilizer cost reduction.

Productivity increases is one of the key drivers of every modern agriculture as identified by the Kenya Vision 2030 [www.industrialization.go.ke/index.php...130]. However, high cost of fertilizers remain a challenge in agricultural production. It is for this reason that it proposes three tier fertilizer cost reduction strategy which will encompass bulk procurement of fertilizer, blending and packaging of domestic fertilizer along with supporting establishment of a manufacturing plant aligned with local requirements of fertilizer

3. Branding Kenya farm produce

This is processing agricultural products before reaching the market, to be done in a manner that will enable the producers to compete with other high quality products in the global markets in a better way. To achieve this, an innovative, commercially oriented plus a modern agricultural, fisheries and livestock sectors. When this is done, Kenya will definitely boost the income earned by Kenya from her agriculture, livestock and fisheries.

4. Establishment of livestock disease free zones and processing facilities

Which will plan and implement 4-5 disease free zones and livestock processing facilities which will as a result enable Kenyan meat, hides and skins meet international marketing standards. There will there be an increase of domestic processing of these products for both regional and international markets.

5. Creation of publicly accessible land registries through modernization of land registries. This aims at making land registry accessible to the public as well as improving storage and retrieval of land records.

6. Development of agricultural land use master plan

Value addition was named as a way of raising incomes especially from agricultural products, livestock products as well as those from fisheries. Success of this plan will ensure that producers in these sectors will compete with others from different parts of the world. Such interventions are projected to increase Kenya's annual income by close to 90 billion shillings. This would be achieved through several strategies including transformation of institutions that govern agriculture and boosting productivity in crops and livestock.

Introducing new policies on how land should be used by both high and medium potential land as well as increasing land for cultivation would be of essence. More land in arid and semi – arid areas to be irrigated for both cops and livestock. There should be a clear channel for consolidating agricultural policy reform legislation. Better marketing support

should be given to the small holders to access market through better marketing. Kenyan farm produce should be branded which will in return improve the value gained in both production and supply chain. The other major point is the plan and implementation of at least five Disease Free Zones in order to improve quality of livestock products which include hides, skins and meat making them more competitive in regional and international markets. Land registries should be made publicly accessible under a good governance framework. There should also be a proper developed master plan for agriculture land use.

7. Development of irrigation schemes bearing in mind that almost all poor farmers depend on rain fed agriculture, climate change has been a big challenge to production .Climate change is exposing farms to droughts, floods, pests and other natural threats which adds on to the problems small farmers are facing.

[www.rootedinhope.org]Irrigated crops can produce more than double crop as compared to rain fed crops. However, for decades the potential to achieve these good results of bumper food harvest, water and high income security through irrigation has remained untapped across African continent

According to Agribusiness Africa, Central Kenya is known for its Agricultural lifestyle. It highlights it as below; Agriculture is the back bone of Central Kenya's economy. The region is blessed with good weather, reliable rainfall and good soils that support the growth of a number of cereals, pulses, coffee and fruits and vegetables. The region is the

leading producer of coffee, vegetables, milk and a major producer of tea, cereals and fruits for local consumption and for export.

2.4.1 Horticulture

Central Kenya is the leading producer of fruits, vegetables and flowers for local consumption and export. The region is the leading producer of vegetables (French beans, peas), potatoes, fruits (e.g. avocados and mangoes) and has a thriving floriculture industry. According to the Kenya Economic Survey 2014, Kenya exported 394,387 tons of horticulture produce worth KSh 89.3 billion in 2013, a majority of which was produced in Naivasha and Central Kenya region.

The country produced about 45,000 tons of French beans in 2012, according to the KHCP Competitiveness Study 2014, a majority of the quantity being grown in Central Kenya. Fresh peas have shown a great rise in production, reaching about 230,000 tons in 2012. Avocado production is concentrated in Central Kenya region, with production figures of about 180,000 tons in 2012 according to the KHCP study.

2.4.2 Dairy and Livestock

Central Kenya is a leading producer of milk in Kenya. The region is a major keeper of cattle, sheep and goats. According to the Kenya Livestock Census of 2009, the former Central province had a total of 1.1 million cattle, 660,000 sheep, 531,000 goats and 92,000 pigs. The region leads in the percentage of farmers who keep improved dairy animals in the country with about 80% of farmers keeping the improved varieties, according to the Tegemeo Institute. The region is also a leader in commercial pig

production, keeping about 20% of the country's total pig population. The Central Kenya region is the leader in the production of fruits and vegetables, milk products, coffee, poultry and is the base for the value addition of agricultural produce in Kenya and the region.

The region is home to and a source of milk for a number of milk processing companies including Brookside, New KCC, Githunguri, Meru Dairy Cooperative, Kinangop, Wakulima and Raka Milk. It is also home to a number of dairy cooperatives that sell the collected milk to the bigger dairies. It is projected that a number of these cooperatives will commence milk processing in a few years, in tune with the rest that have made the move to value addition, as the county governments move in to improve the returns from dairy farming in the region. The lower Machakos County, with its marginal weather, is home to a number of ranches mainly for beef production, but is increasingly adopting dairy farming.

2.4.3 Coffee and Tea

Coffee was introduced to Kenya through the former White Highlands, which included Central Kenya. The production of coffee in the region is characterized by large estates and smaller scale farmers of various farm sizes. There are a number of cooperatives in the region. Although coffee production volumes have been declining from the peak of 130,000 tons in the late 1980s to the current volumes which are below 50,000 tonnes per annum, Central Kenya still produces the bulk of the coffee in Kenya due to its acidic soils and adequate rainfall.

Tea production is also an important economic activity in the region. These regions include the areas around Mt. Kenya, the Aberdares, and the Nyambene hills in the Central Kenya. Kenya produced 444 million kilos of tea in 2014, with a significant portion of this coming from the Central Kenya region. There are a number of coffee factories, a majority of which are owned by cooperatives. Private coffee millers including Sasini are also active in the region, adding extra value to the produce for local and export market.

2.4.4 Poultry

Central Kenya is the leading producer of commercial poultry in Kenya. The region, according to the Kenya Livestock Census of 2009, had over 2.9 million commercial chickens, 34% of the country's total. The region's poultry sector is dominated by small-scale farmers, but also has a number of commercial scale poultry farms. Farmers in the region are well placed with ease of access to the fast food and hotel market in the major towns of Nyeri, Meru, Machakos and Nairobi.

2.4.5 Cereals

Maize, being a staple in Kenya, is grown quite abundantly in Central Kenya region, with a production volume of 134,000 tons in 2008, according to FOODSEC. The region also cultivates substantial quantities of wheat in the Timau area near Nanyuki. Rice is also grown under irrigation in the Mwea Irrigation Scheme. In terms of value addition, a number of cereal mills are located in the region, mainly serving the local market and the

high population market of Nairobi with maize meal, milled rice and wheat flour and their by-products.

2.5 Agriculture and Technology in Kenya

Kenya has of late embraced technology in all the sectors and this is no different from the Agriculture sector. Young men in the mid-twenties started the platform M-Farm which has contributed to boosting the Agriculture lifestyle of many Kenyans. The Mail Guardian quoted;

‘M-Farm is one of many services that have been developed in the last five years on the back of Kenya’s lead in Information and Communications Technology (ICT), particularly mobile phones. An increasing number of young Kenyans are developing software, apps and cell phone -based programs to help small-scale farmers increase their agricultural skills and yields. At the most recent Pivot East, East Africa’s premier mobile start-ups competition and conference, held in June 2012, three out of five finalists were young entrepreneurs who had created agrarian apps.

Mwangi is one of 6 400 farmers in Kenya taking advantage of this new high-tech service, powered by M-Farm, according to Jimmy Wambua, an M-Farm spokesperson. Three young software developers in their early to mid-twenties started the company in 2011 to provide market prices to farmers. Previously, Mwangi sold his maize to brokers that arrived with trucks and dictated the maize price. He had no way of finding out the actual market price and often felt cheated. Now, not only does he know how much he can demand but he is able to come together with other farmers and command higher prices.

Agriculture is the backbone of Kenya's economy, earning over 24.2% of the country's \$33 billion GDP and employing 75% of the country's workforce. Farmers, mostly working on smallholdings of less than five acres, produce the bulk of Kenya's cash and food crops such as tea and coffee, the country's largest agricultural exports, and maize, Kenya's staple. While their production is quite considerable, Kenya's rural areas remain the country's poorest.

In addition to the price information, M-Farm offers farmers the chance to sell their crops collectively and to buy their seed, fertilizers and other inputs together, simply by using their mobile phone or logging on to the M-Farm website. Each M-Farm agent aggregates the produce of about 100 farmers and sells it as one lot. The agents also sell seeds, fertilizer and other inputs in bulk at discount prices. Everyone gains as the farmers earn more for their crops and the bulk buyers and sellers reduce the number of farms they visit.

M-Farm collects wholesale market price information on 42 crops in five markets in Kenya: Nairobi, the capital; Mombasa, on the coast; Kisumu, Eldoret and Nakuru in the west. The company employs two full-time college-educated independent agents to collect prices from wholesale traders located in each market. Farmers can then use a free mobile app or send an SMS request to see the latest information on specific crops.

2.5.1 Agriculture in Muranga County

Murang'a County is located in central part of Kenya and constitutes 7 constituencies

- Gatanga
- Kigumo
- Kandara
- Maragwa
- Kiharu
- Kangema
- Mathioya.

[www.opendata.go.ke/facet/counties/muranga] The population for this county according to the last census conducted on 24th August 2009, is about 942,581

[www.citypopulation.de/php/Kenya-admin.php?adm2id=21]

Since its inauguration as a county, Murang'a County government under the leadership of Governor Hon. Mwangi Wa Iria has been on the forefront of establishing developmental initiatives. These initiatives are geared at enhancing the lives of Murang'a residents, economically, socially, in education and general well-being. According to the council of governors website, Murang'a County has embraced the facelift of the Agricultural sector. In order to guarantee food security and sustenance in the county, the county government led by Governor Mwangi wa Iria initiated a program for the lower parts of Murang'a which are normally affected by low levels of rainfall and erratic weather conditions. The program which has seen more than 8,000 farmers receive drought resistance seeds, will

increase food production through employment of modern technology in farming (Food Security).

To realize benefits of devolution amongst Murang'a farmers the county government has enlisted numerous agricultural projects ranging from banana farming fish ponds farming, rice cultivation among others which will be implemented as time goes by.

In August 2010 Kenya voted for a new constitution with over 67 percent of the total votes cast [www.reuters.com/article/2010/08/05/ud-ke-referendum-
iduSTRE6743g720100805](http://www.reuters.com/article/2010/08/05/ud-ke-referendum-iduSTRE6743g720100805) this became the most supreme law on the land it was ratified by the then president H.E Mwai Kibaki. The new constitution created 47 counties. Each county elected its own government. A number of functions were devolved and put under the leadership of county governments. Agriculture was among these devolved functions while others include health services, public amenities, county trade development and regulations, county planning and development among others whose main is to provide residents of that county www.kenya-information-guide.com/kenya-constitution.html

This means that all agricultural related functions are under the county government which include and not limited to Crop and husbandry, Livestock sale yards, County abattoirs, plant and animal disease control and fisheries. Trade development and regulations, including-County governments are given the mandate to develop and manage markets, control cooperative societies as well as trade licenses, local tourism and local tourism. Functions of county governments Part 2 -Fourth schedule, Article 185(2),186(1) and

187(2) 1. Under this article the county governments will control county planning and development which includes statics, surveying of land and mapping. They are also mandated to control their boundaries and fencing

Under the county public works and services the mantle handled to county governments include managing storm water systems and services for water and sanitation. Under the county health services the county government should license and control undertakings that sell food to the public as well as veterinary services

2.6 Challenges facing the Agricultural sector in East African Community

Agricultural production and productivity in the EAC is largely constrained by natural factors, policy and adoption of technologies. The reasons for poor performance of the agricultural sector include:

Policy related factors:

- i. Governance,
- ii. Legal and regulatory framework,
- iii. Insecurity,
- iv. Inadequate access to productive resources,
- v. Inadequate participation of local communities,
- vi. Poor physical infrastructure and utilities,
- vii. Weak institutional framework,
- viii. Low public expenditure; and
- ix. Unfavorable terms of trade

Technology related factors:

- i. Inadequate research, extension services and training; and
- ii. Prevalence of pests and diseases

Nature related factors:

- i. Degradation of natural resources; and
- ii. Climatic and weather unpredictability

Cross cutting and cross-sectoral related factors:

- i. High incidence of poverty;
- ii. Inadequate social infrastructure, and
- iii. Gender imbalances

2.6.1 Challenges facing the Kenyan Agricultural Sector

Kenyan agricultural sector is still facing challenges ;although vision 2030 acknowledges agriculture as one of the most important sector that will drive the economic growth up to 10 percent as predicted by the economic pillar. This growth however is only achievable after transforming small-scale agriculture from ordinary farming practiced more as a hobby into a more modern agribusiness style which would be more commercially oriented. The route to this kind of transformation calls for transformation of agricultural institutions, including livestock, as well as forestry and wildlife. Productivity per crop is also of great essence as well as that of livestock. More emphasis should be applied into irrigation to ensure more areas are put under irrigation especially in arid and semi-arid land.

According to Agricultural Sector Development Strategy [2010-2020] Kenya is classified as one of the countries with water deficiency in the world. It denotes that the water resources in Kenya are not evenly distributed both in terms of both space and even time. The total amount of rainfall received on annual basis is about 400mm. It recommends harvesting of water which should be utilized for both agricultural and domestic use, moreover, practicing irrigation agriculture will boost agricultural yields fourfold and boost income more than 10times higher depending on the type of crop and the investment.[ASDS 2010-2020] Accessibility to the market should also be well taken care of especially for the small scale farmers. As all these factors are being checked value addition for farm products, livestock and that of forestry should be done and ensured that they capture both regional and international markets without assuming the local markets as well.

Major challenges that face agricultural sector as outlined by vision 2030 include that of productivity – levels of production have remained far below the expected produce with some remaining at the same poor performance for over a period of five years or even continue declining over the years in both yield and value. Story is the same with livestock production which also dwindles by day. Forest cover is no better with tree productivity also being on the decline as human life continues encroaching wildlife creating conflicts. It notes that land is not properly exploited for agricultural production. This is noted both in high and even the medium potential areas which encompasses arid and semi-arid areas. Arable land for crop production is only on a 60per cent usage by the small scale farmers.

Markets or where to sell products is a big headache to farmers and holds them back from exploiting their full potential, a recommended remedy, by vision 2030 which concerted efforts towards maintaining the already captured markets as well as stretching out to source for more markets globally. This, it notes, will bring good exposure to Kenyan product and enhance its bargaining power in the major global market for the agricultural products. These products should not be sold raw as it largely happens today, instead, agricultural sector should embrace value addition to make the products more competitive. The common trend today is selling of semi- processed, if not processed at all, products by Kenya farmers to the export market. In total, out of all what this sector exports, about 91 percent of it is mostly a products of low value.

Kenya's agriculture is predominantly small-scale farming mainly in the high-potential areas. Production is carried out on farms averaging 0.2–3 ha, mostly on a commercial basis. This small-scale production accounts for 75 per cent of the total agricultural output and 70 per cent of marketed agricultural produce (Kibet, Caleb 2011).

The major challenges include;

- Climate Change
- Extension Services
- Use of outdated technology
- Pest and Diseases
- Use of Input
- Soil nutrient deterioration
- Poor Infrastructure

2.7 Theoretical Framework

2.7.1 Agenda Setting Theory

This study's literature review covered one theory, the agenda setting theory. The Agenda Setting-theory presumes that the media have the ability to set the public agenda. Agenda-setting which is a causal hypothesis suggests that media content influences the public perception of the importance of issues (Severin and Tankard, 2001). Leon (2003) posits that the media shape the public space and citizenry itself as a result of the weight they bring to bear on the definition of public agendas and their capacity to establish legitimacy of certain debates. This is to say that through their ability of framing, the media are able to activate the people's interpretive schemas (Baran & Davis 2009).

Empirical evidence has shown that agenda-setting effects of media are minimal for obtrusive issues, issues with which individuals have direct experience. However, agenda-setting effects of the media are strong for unobtrusive, indirectly experienced issues because the public has a need for orientation to those issues, particularly when an issue is perceived as personally relevant to the reader (Thomson, Dininni, 2005).

Studies of "second level" agenda-setting, or "attribute" agenda-setting, have shown that media presentations affect public perceptions not only regarding what issues are important, but also what aspects of those issues are important. Both what and how the media report on a topic is reflected in public understanding and opinion about that issue.

Priming occurs when news content suggests to news audiences that they ought to use specific issues as benchmarks for evaluating the performance of leaders and

governments. It is often understood as an extension of agenda setting. There are two reasons for this: (a) Both effects are based on memory-based models of information processing. These models assume that people form attitudes based on the considerations that are most salient (i.e., most accessible) when they make decisions (Hastie & Park, 1986). In other words, judgments and attitude formation are directly correlated with “the ease in which instances or associations could be brought to mind” (Tversky & Kahneman, 1973, p. 208); (b) based on the common theoretical foundation, some researchers have argued that priming is a temporal extension of agenda setting (Iyengar & Kinder, 1987). By making some issues more salient in people’s mind (agenda setting), mass media can also shape the considerations that people take into account when making judgments about political candidates or issues (priming)(*Journal of communication* 2007).

McCombs goes through a recap of some basics of Agenda-Setting. First, he redefines the measurement of issue salience in a modern context. In the year 2000, two dimensions of salience were defined: visibility and valence. It has also been split into personal importance of an issue and societal importance of an issue. Even with this split, the correlation between media agenda and personal/societal agenda is a staggering +0.76. Hence, even with modern contexts and advanced hypotheses, agenda-setting still holds true according to its founder. In his book *Setting the Agenda*, McCombs makes note of a new addition to Agenda Setting Theory, that of “agenda-melding”.

Agenda-melding, McCombs says, expounds on the concept of need for orientation (McCombs, 2004). The addition of “agenda-melding” to the functions of “agenda

setting” proves to be parsimonious among the theoretical vocabulary where the idea of the transfer of salience from one issue to another issue is seen in a single agenda or multiple agendas. McCombs demonstrates his belief that Agenda-Setting is still relevant, even in new media platforms where group agenda built from the agendas of multiple individuals is present.

The media are said to have an effect on culture since media messages and images constitute a powerful social, cultural and political force (Gallagher 1982:151). The mass media “constitute a primary source of definitions of and images of social reality and the most ubiquitous expression of shared identity” (Devereux, 2003:7). Media has also been described as a cultural industry that has already taken shape, an industry that is exclusively governed by commercial criteria whereby the profit motive outweighs public interest Leon (2003). Although *Inooro FM* is a commercial radio station, it has similarities with community or ethnic media which. Georgiou (2004) describes as one that allows members of a group to communicate among themselves to share common information and common cultural tastes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design and specific methodology that will be adopted by this study in examining the contribution of Radio in Promoting Small Scale Farming in Murang'a County. It will include sampling procedure and sample size, target population, research location, research instruments, data collection procedure and data analysis.

3.2 Research design

This research will adopt qualitative research. Qualitative research is primarily exploratory research. It will be used to gain an understanding of underlying reasons, opinions, and motivations. It will provide insights into the problem and help develop ideas for potential quantitative research (Richard, 2013).

In this study qualitative research approach will be used to gain a deep understanding of the contribution of radio in promoting small scale farming in Murang'a County. This type of research method is preferred over a quantitative methodology. Quantitative research is the systematic empirical investigation of social phenomena via statistical, mathematical or numerical data or computational techniques. Unlike quantitative research which is more numerical, qualitative provides detailed data which will allow a framework of data

collection methods for example key informative interviews and semi structured interviews (Silverman, 2005; Baxter 2003).

3.3 Research Population

Mugendi, O. & Mugendi, A (2003) define population as an entire group of individuals, events or objects, having common observable characteristics. They identify two kinds of population: Target population: This refers to the total set of subjects in a study where the research will be generalized. For this study, the target population is the farmers in Murang'a County. This will include the farmers who listen to *Inooro fm* and those who don't. The reason for this is to compare the productivity of those empowered by the *Mugambo Wa Murimi* show versus those who don't.

Another group of target population will be key experts who are well versed with Agricultural issues. By doing so, the researcher will be aiming at achieving all the objectives and hence find a solution of making the farmers more pro-active both for their livelihood and also making the economy better.

3.4 Research approach: Sampling Techniques

Sampling, as it relates to research, refers to the selection of individuals, units, and/or settings to be studied (Creswell, J. W. (1998). A large sample size is required when the accessible population is highly heterogeneous on the variable under study. Therefore, the sample size which will be used in this study will consider the farmers in Murang'a County because it is through them that the general objective (seek ways to engage the

farmers and make them more pro-active with their farming live)of this study will be achieved.

The sampling technique which will be used is purposive sampling. Purposive sampling is a sampling technique that allows a researcher to use cases that have the required information with respect to the objectives of his or her study (Teddlie, 2007). Purposive sampling represents a group of different non-probability sampling techniques. Also known as judgmental, selective or subjective sampling, purposive sampling relies on the judgment of the researcher when it comes to selecting the units (e.g., people, cases/ organizations, events, pieces of data) that are to be studied. Usually, the sample being investigated is quite small, especially when compared with probability sampling techniques. Cases of subjects are therefore handpicked because they are informative or they possess the required characteristics (Tongco, 2007). The researcher will sample the farmers in different categories;

- Gender
- Expertise on farming background
- Education background,
- Religious background
- Demography within Murang'a county

This is because people of diverse backgrounds have different experiences and opinions of different issues. This will help in getting concrete answers that are objective.

3.5 Data Collection, Procedures and Instruments

Data Collection is gathering specific information aimed at proving or refuting some facts (Kombo and Tromp, 2006:99). The researcher seeks to use expert interviews and semi-structured interviews for the youth.’

3.5.1 Key Informant Interviews

Key informant interviews are qualitative in-depth interviews with people who know what is going on in a particular society or forum (Kumar 1989). The purpose of key informant interviews will be to collect information from people who are renowned as opinion makers in the world of Agriculture. The following are two common techniques used to conduct key informant interviews:

- Telephone Interviews
- Face-to-Face Interviews

The researcher will use face to face interviews because they will help in creating rapport with the respondents and also allow for longer interviews that can hardly be conducted over the telephone.

The researcher will use the key informant interviews to achieve the three main objectives;

1. To seek ways on how to enhance pro-activeness of farmers in Murang’a County
2. To identify main sustainability challenges for farmers in Murang’a County.
3. To determine how and to what extend *Mugambo Wa Murimi* has added value to the people of Murang’a County.

3.5.2 Semi-Structured Interviews

Here the researcher will tailor the questions targeted to the farmers in Murang'a County seeking to achieve the following objectives;

1. To identify main sustainability challenges for farmers in Murang'a County.
2. To determine how and to what extent *Mugambo wa Murimi* has added value to the people of Murang'a County.

This will allow for a more fluid conversation with follow up questions that will help meet all the above objectives. The researcher will use an interview guide which will have general questions on farming and the radio show so as to achieve the objectives.

3.6 Data Analysis and Presentation

The data collected from the field will be qualitative.

The researcher will go through the responses collected from the different interviews noting down the main ideas in each set of data in the basis of the research questions and theoretical framework. For each of the research question, the researcher will analyse the answers from the different responses and compare it with facts that were already there regarding to the topic at hand. For the farmers in Murang'a County the researcher will collect answers by mixing them according to their different characteristics, that is, backgrounds, age, religion, education background and gender. With the aid of the agenda setting theory, the researchers will therefore critically analysis recurring patterns and meanings. This will help to capture different accounts that will lead to a practical understanding of how the *mugambo wa murimi* has had an impact on farmers and at the same time seek ways to upgrade the lives of the farmers.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter presents, discusses and analyses the main trends of research findings from the qualitative key informant and semi- structured interviews of the farmers and Agriculture experts in Murang'a County.

The key experts who were interviewed were Principle Kenyatta Agricultural centre, Head of the raising cattle in the Mariira farm, Assistant General Manager Kakuzi Horticulture, and Overseer of the growth of Avocados. The persons put in charge of Agriculture department including the Chief Executive Committee member shared a lot of information as well.

The interview notes were used to provide qualitative analysis of how radio has been effectively used to promote small scale farming in Murang'a County. This chapter therefore gives an in-depth analysis of the interview findings based on the agenda setting theory. The main aim is to link the research findings with the reviewed literature and the theoretical framework.

The first set of questions were to find out why farmers are not proactive enough when it comes to embracing new methods of farming and seek to identify what ways would make

them more proactive so as to overcome the challenges they face and at the same time upgrade their farming culture.

The second set of questions was to establish the main challenges that farmers in Murang'a county face. The aim of these questions was to identify methods which can be used to empower the farmers work on the challenges which they face. Also the questions were used to find out how *Mugambo wa Murimi* show would be used more effectively so as to help curb the challenges which the farmers are facing. The third set of questions were on what the farmers viewed as being the influence of radio to small scale farmers in Murang'a county. These were based on whether the program *Mugambo wa Murimi* has had an impact on the farmers farming culture. The aim here was to link the agenda setting theory and its influence to the farmers. Have agendas been set by Inooro FM to tackle farming issues? If so has the information being passed been effective to the farmers?

Four key experts and twenty farmers were interviewed for this study between the periods of May-July 2015. The researcher recorded the interviews which were analyzed. This chapter ends with a summary of the research findings discussed which leads us to the next chapter on the overall conclusions that can be deduced from the study findings and the recommendations that can be made.

4.2 Analysis and discussion of Key Informant Interviews

4.2.1 Responses on the different ways to enhance pro-activeness of farmers in

Murang'a County.

The researcher spent time with the principal of Kenyatta Agricultural Centre who has a broad understanding of agricultural practices in Murang'a. This principal confessed that he has never missed a single program on *Mugambo wa Murimi*. In all his sessions with the farmers, as he explained to the researcher he doesn't miss to encourage them to listen to the farming program that is aired in their own mother tongue to get more insights on modern ways of farming and get inspired by other farmers who have made it in farming. He went further to share his concerns that the farmers in Muranga, who, remain did not rise up from the flopping of the cash crop they had relied on for decades. Farmers in this county, he explained, say that when coffee farming flopped there was no immediate crop to grow. The farmers have therefore stuck with the believe that the only cash crop that can support them is coffee. Others have not gained confidence in trying their luck in any other agribusiness practice since the frustrations of their trusted one, coffee. It has therefore not been easy for anyone to train them on new farming methods.

Head of raising cattle in Mariira farm:

Researcher interviewed head of livestock department, in the same institution to get a clearer picture. Sharing his experience with the head of raising cattle in Mariira farm, he made it clear from his conclusive observation that; Murang'a people are known for their entrepreneurial spirit. He went ahead to explain his statement by saying most of the spectacular business buildings in Nairobi are owned by Murang'a residents. He said this

was the reason therefore he thought, they do not venture into pro-active farming as they would prefer an activity that they would perceive brings back quick and easy returns, and he put it in Kiswahili ' *sio hii maneno ya kungoja.* ' Meaning they would probably not as opt for livestock farming which does not earn them quick in returns.

Assistant general manager Kakuzi farm;

Responding to the researcher interview, assistant manager Kakuzi farm Limited commented on single parenthood in most families within this county. In his explanation, he mentioned that families in Murang'a County don't have men full time present. The reason being, according to him, these men have moved to towns and cities hustling to feed their families, they are busy looking for jobs away from their homes leaving the wives behind to take care of the children and their homes single handedly. He further explains how overburdened the woman ends up to be, carrying out the whole family chores all alone. She is therefore not able to practice good farming be a mother and act as the head of the family at the same time. The woman, mother, therefore can only farm what is enough for the family to eat, with no time to do a surplus farming or engaging in agribusiness. When the children grow up in this kind of environment they have no choice but to end up adapting their mother's lifestyles of planting foodstuffs only which in most cases is maize and beans.

Overseer of the avocado growth;

At Kakuzi farm, the researcher interviewed Overseer of the avocado growth. In his response he shared his encounter with farmers who give all manners of excuses as to why

they have not shifted from hobby farming to more extensive agribusiness. He said that even though the farmers in Murang'a County seem to be very much aware that they need to be proactive they don't seem to be making any efforts. He said they have held several sessions with the farmers to raise awareness on horticultural farming including avocados which Kakuzi has ready market but the response has been very slow. After all the doubts they raise are dealt with they complain of lack of irrigation water and depend on rainfall. This means they can only plant the crop which will grow during rainfall, hence having the same crop all season, which in this case is maize and beans. According to the avocado officer, Muranga County has very many permanent rivers therefore raising issue of lacking water for farming is one of delaying tactics used by the farmers who are adamant to change

4.2.2 Responses on identifying challenges facing farmers in Murang'a County?

A farmer;

Researcher interviewed a farmer at the lower part of Muranga County, who explained that the main reason they do not struggle practicing any serious type of farming was that there was no other source of farming water apart from rains. Putting it in Kiswahili he said *'Maji ni shida sana huku. Sasa hata ni kisema ni kupanda vitu zingine kwa shamba ni tatoa maji wapi?'* (Water is a problem here. Even if I was to plant, where would I get water to help the crops grow?)

A grandmother of three and a farmer; Researcher interviewed an elderly looking woman who was a farmer and at the same time taking care of her grandchildren, who she claims the parents had gone to look for paying jobs. Responding in Kiswahili on the challenges

they face as farmers she exclaimed '*Huku kuna shida ya kutojua vile ya kupanda mimea vizuri. Kwanza sasa unajua kahawa ndio ilikua cash crop yetu. Afadhali ni pande mahindi na mbosho kwa sababu itanipea chakula ya kulisha wajukuu wangu.*(There is a problem when it comes to awareness. See coffee was the main cash crop but we hardly plant it. So I would rather plant maize and beans and feed my grandchildren).

Another farmer echoed the same complains saying that there is lack of awareness. She said that long time ago they had the extension officers who would educate farmers on crop rotation, curbing soil erosion and what to plant in which season. She further said that for the longest time the extension farmers were not heard of. However, she said that there is hope with the new set of government;" At least now I hear that they are coming back with the whole introduction of county government," She concluded.

A shopkeeper and farmer

Another farmer who doubles as a shopkeeper as well said that Women are left to do everything on their own. She complained that, farming does not give her financial support that the family requires. All she can find from her shamba was food, she therefore needs the shop on the side to fill in the gap. She prefers spending more time at the shop. She notes that if she had someone else to share the duties with she would do a better farming practice ,but the multitasking, from shop to the *shamba* as the family awaits her attention as well is at times overwhelming. "*So I would rather stay here and sell. Farming is a good thing, but kama mtu ako peke yake afadhali ikae tu*", she lamented.

A student at the Murang'a Training College and a Murang'a resident;

An engineer student at Murang'a University College pointed his finger at the leadership in the county; "We have poor leadership. First of all there is little or no literacy among the people who head the Agriculture corporative societies. This in turn affects the farmers because they are not empowered in the right way. They are not given the right tools to enhance and better their farming culture. Also they should be advised to save, because it is one thing to plant and have a *shamba*, and it's another thing to ensure that you save up to have diverse farming methods/products in the *shamba*."

A farmer's daughter said;

Our parents are not ready to release portions of the land to us. If they did we would have taken up farming. It's as if they don't trust us with the lands yet us young people are the future of tomorrow. I just wish they would give us a chance.'

A farmer;

Another farmer at the upper part of this county lamented unaffordable farm implements. He complained that the farmers in Muranga County have no one to offer subsidized farm implements to make their farming more affordable and lower cost of production. He compared their failing county in terms of agriculture with other counties with bumper harvest like Rift Valley which he said has succeeded from this kind of support. According to him the government has portrayed biasness in the distribution of things like fertilizers. That would have boosted their farming as well as it has in the done in the

region perceived to be producing the highest percentage of the food consumed in our country Kenya.

4.1.3 Responses on to what extend Mugambo wa Murimi has added value to the people of Murang'a County

Responding to the question on to what extend the farming program, *Mugambo wa Murimi*, had added value to the people of Murang'a County, a female hawker in the county said;

'I have a farm...or rather we have a farm together with my husband and we have been listening to *Mugambo wa Murimi* for the past 5 years. I love the show a lot, because it is the only one that talks a lot about farming and new methods. I believe many people here in Murang'a listen to it because Inooro is the station we all tune into.'

A male bus driver told the researcher that he loves Inooro FM. He said he loves the show *Mugambo Wa Murimi*, and, has never missed a to listen to the program which airs when he is starting off his day's work. He said that as a matter of fact, in his bus they only listen to Inooro. He however complained that farming is too expensive to practice. He said getting a *shamba* is expensive. Getting the right crop to grow is also expensive. So in as much as he loves the show and admires the successful farmers interviewed he said he would not to get into farming soon as he preferred waiting until the day he will make a lot of money.

A female primary school teacher told the researcher that it is the father who is a retiree that follows the program more 'My father has land where we plant maize and beans. We

all listen to the show whenever we get time. But nowadays it's hard to listen because we have already left the house that early morning and gone to school. I wish the timing would change. I believe that is my father listens to it more and if I too would listen to it at an appropriate time, I would definitely empower people in our village," she said Another farmer shared his view saying; "I listen to the show a lot. But you see here in Murang'a we have issues of water and we are waiting for this problem to be sorted out. Once it is sorted out I think the lessons we get from *Mugambo wa murimi* can easily be implemented. I hope the government helps us.'

A female farmer from married here but originated from Embu told the researcher that ;'I was born in Embu County, but when I got married here, in Murang'a County, I saw an opportunity. That is why I have invested in agriculture. The show *Mugambo wa murimi* has really helped me boost my farming skills and I have seen the fruits of implementing what I learn.'

Another farmer who is also a health worker told the researcher that; 'I absolutely love the show *Mugambo Wa Murimi*. I get to learn a lot about improving farming methods in the county. But want my farm to become big and have fruitful farming products. I will continue to listen to the show but I will have to wait until the farm is big enough.'

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

From the responses gathered from the interviews, respondents generally seem to agree on different key issues. For the first objective, people of Murang'a County are not as proactive as they ought to be with their farming culture. The farmers in this county are not willing to go out of their way to ensure that they step up their life and eradicate poverty by embracing diverse methods of farming.

The challenges for farmers in Murang'a County can be seen clearly but they can be done away with. The researcher found out that the successful farmers did not want to be mentioned as case studies of successful farming in the county because they felt that they were not that good.

The researcher also got to learn that 'freebies' that the county government gives to the farmers such as seedlings or Napier grass end up being wasted. For example for the napier grass, the farmers end up using it to light the 'jiko' or build fire. This in turn ends up getting wasted. For case of seeds, the people of Murang'a end up keeping the seeds and not taking the initiative of planting them. The seeds end up being wasted. But the county government continues to give some of these farm necessities to the people of Murang'a County and they end up not using them to benefit their Agriculture lifestyle.

Mugambo wa Murimi has set pace for this but it still is not enough. The people here listen to the show but opt not to practice farming because they think that their lands are small and need not to be used for farming until they become big *shambas*. The researcher also found out that Murang'a County is attracting investors from different counties who go there, buy lands and practice farming. These investors are from both nearing counties and those that are far e.g. Nakuru. The issue of young people being given land is also a challenge as many of the youth felt that they are able to be better farmers than their parents, but their parents would not trust them to practice farming.

Knowledge of different crops to plant in the county was also missing in that farmers practiced to plant maize and beans and would dare not venture into other farming practices. Farmers here do not embrace keeping cattle as a culture they can embrace. During this time of researching, the researcher visited a farmer in Kiambu county where she learnt that the farmer had one cow but was using the cow to supply milk to the people who lived in that village. This beats the argument that the people of Murang'a County have in regards to small lands limiting them to practice farming. This particular farmer in Kiambu, Kahunira village had a very tiny land but that one cow which lived in his house made him sales for two hundred thousand Kenya Shillings(Ksh. 200,000).

5.2 General Conclusions

There is hope for Murang'a County. There is a lot of potential for the growth in agriculture within this county. The governor of Murang'a County, Mwangiwa Iria is passionate about farming and his name actually has some farming twist to it. '*Iria*' means

milk in the Kikuyu language. The governor has supported farmers from the days when he was MD at Kenya Cooperative Creameries (KCC) where he helped improve the prices of milk for farmers, which means, therefore, more income for the farmers. He revived the corporation [www.ipsos.co.ke/NEWBASE_EXPORTS/unilever/140615_The People Sunday_17_77bd2.html](http://www.ipsos.co.ke/NEWBASE_EXPORTS/unilever/140615_The_People_Sunday_17_77bd2.html) It is for this record therefore that it Murang'a County farmers are very optimistic that under his leadership the county is bound for success agriculture wise.

Investors who go to Murang'a County are doing a good thing since they are helping to boost the economy of the people in the county, but the *Muranga County* should be bold enough and seize the opportunity that the county presents. Education and empowerment is really important too, in this county. There are so many success stories which the media has not highlighted about the county. *Mugambo Wa Murimi* is doing a good job in empowering the farmers but the community leaders in the county should play their role to ensure that the dream of agriculture success becomes a reality in Kenya.

5.3 Recommendations

There should be more pro-activeness from the farmers. This can only be achieved through empowerment and offering the right Agriculture solutions so as to have this vision a reality. There should be campaigns that seek to reward farmers who have embraced new methods of farming plus those who seek to boost the agriculture culture in the county. For example rewarding a coffee farmer who has planted a seedling and it has gone to a certain height...meaning that this farmer is keen to see the coffee grow.

There should also be on ground farmers field days where farmers get to feel mingle with other farmers and get challenged to boost their farming methods. This will in turn motivate the farmers who are doing well to continue working hard. Also in as much as county and community leaders will offer solutions for farming, the farmers too should be given a platform to voice their needs.

The introduction of exchange programs in the county should too be embraced; For example, coffee farmers in Murang'a County being taken to Bungoma county where coffee growing is very common and doing well. This will help with the diversity of knowledge in regards to Agriculture and hence lead to pro-activeness among the farmers of Murang'a County.

For farmers complaining of small land, they should visit other areas within the Central region and get to see how most who have small land are utilizing it and improving their farming with the little they have as the case at Kahunira village.

Media as an agenda setter should too prioritize this and ensure that issues to do with farming in Murang'a County should be addressed. This more so, also applies to the broadcast media that seeks to target the people in the county. Kevin Makhanu of Agriculture Society of Kenya quotes in Food Tank;

(<http://foodtank.com/news/2014/05/using-technology-to-farm-kenyas-future>)

‘Kenya is one of the hardest-hit regions of the globe in terms of climate variations. The population growth rate is currently around 4.4 percent, which means by 2050 the population will double from 40 million to 80 million. The government is still struggling to feed the population. But two-thirds of Kenyan land has never been farmed because there is no rainfall. However, the world’s leading scientists have given us a way out. Large tracts of land can be converted to arable land through irrigation. The government is already working on the Galana-Kulalu project in Tana River County—a one-million-acre irrigation scheme that will dramatically change the landscape of Kenya’s food economy.

There is not going to be room for large-scale farming on arable lands due to population growth that has led to most of the land being taken over by home construction and other real estate projects. So most farming is going to rely on irrigation and greenhouses to create concentrated, sustainable farming that has proven to yield more and feed more as well as increase family income. There is also good news: the new Constitution offers women property ownership rights and we are not going to be surprised when the richest person in agriculture will be a woman in Kenya! In a nutshell: within ten years, technology will define agriculture. Innovators and entrepreneurs will have room to flourish here.

The Christian Monitor, A United States of America website, highlights on the importance of media in Kenya in influencing positive attitude among farmers. It quotes;‘Shamba Shape Up (Shamba) is a television series in Kenya helping small-scale farmers give their farms a make-over. It has an estimated audience of more than 11 million people, and is

Kenya's most watched agricultural television show. The series has a format similar to that of other home renovation shows-Shamba visits a new farm each week and helps give both farmers and the television audience the tools they need to improve productivity and increase income on their farms.

Shamba (Swahili for farm) is the first television program of its kind in Africa-and perhaps the world-dedicated to helping small-scale farmers learn about a variety of issues including: irrigation; animal husbandry; pest control; and, financial management.

The *Shamba* team is made up of veterinarians, agronomists, and crop specialists-from partner organizations including the International Fund for Agricultural Development (IFAD), and the African Agricultural Technology Foundation (AATF). The partners change each week depending on the theme of the show. In this regard, more media can too tone down their own agendas and work with the farmers to understand what they need and what their agriculture vision is.

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APPENDICES

APPENDIX 1. INTERVIEW GUIDE QUESTIONS

Guide Questions

Ways which can be used to enhance pro-activeness of farmers in Murang'a County?

- What are the reasons that contribute to lack of pro-activeness of farmers within your county?
- Does farming have a future in Murang'a County?
- What crops are mostly planted by farmers in the county?
- Do you think that measures should be put in place to increase pro-activeness

What are the main sustainability challenges for farmers in Murang'a County?

- What are the main challenges that affect farmers in Murang'a?
- What challenge do you think should be tackled first so as to limit the farming difficulties
- What farming products do you think should be embraced so as to do away with the challenges?
- What would motivate the farmers to proactively tackle the challenges?
- What role is the county government playing in order to do away with the challenges?
- What role do farmers have to boost their farming?

What are values are added to farmers by listening to *Mugambo wa Murimi*?

- Do you listen to *Mugambo Wa murimi*
- What is it that you like about the show?
- Has the show taught you anything in regard to farming?
- Has the show helped you to become proactive in boosting your farming culture?
- What do you think should be done so as to encourage more farmers to listen to the show?
- Have you seen any value between the farmers who listen to the show and those who don't?

APPENDIX 2: LIST OF INTERVIEWEES

Key Experts

- Principle Kenyatta Agricultural centre,
- Head of the raising cattle in the Mariira farm
- Assistant General Manager Kakuzi Horticulture
- Overseer of the growth of Avocados.

APPENDIX 2: CERTIFICATE OF FIELD WORK



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This is to certify that all corrections proposed at the Board of Examiners' meeting held on 10/04/2015 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: K50/79512/2012

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APPENDIX 3: CERTIFICATE OF CORRECTIONS



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This is to certify that all corrections proposed at the Board of Examiners meeting held on 12/11/15 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: K50/79512/2012

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Title: RADIO AND SMALL SCALE FARMING IN MURANGA
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for Dr Samuel Singh [Signature] 16/11/2015
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