

**ROLE OF VERNACULAR RADIO IN ENHANCING SMALL SCALE DAIRY  
FARMING AND MARKETING IN KENYA IN GITHUNGURI SUB-COUNTY**

**BY**

**KAMANDE MARTIN NDUNGU**

**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF JOURNALISM  
AND MASS COMMUNICATION IN THE FACULTY OF ARTS IN PARTIAL  
FULLFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE  
DEGREE MASTERS OF ARTS COMMUNICATION STUDIES OF THE  
UNIVERSITY OF NAIROBI**

**2016**

**DECLARATION**

This project is my original work and has not been presented for a degree in any other university.

Kamande Martin Ndungu

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

This project has been submitted for review with our approval as University supervisor.

Dr. Ndeti Ndati

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

## **DEDICATION**

To Children Cyprian, Fabian and Piama,

And

Naomi, my Wife, Friend and Colleague

## **ACKNOWLEDGMENT**

I would like to thank Dr. Ndeti for his guidance. For your wisdom, patience, feedback and suggestions that steered me in the right direction, Thank you. To my entire family for their encouragement to remain on course. Your suggestions and ideas have being invaluable. I could not have done it without you all, but above all I thank the Almighty God for his guidance all through my Course work.

## LIST OF TABLES

|   |    |
|---|----|
| Table 4.1: Response Rate.....                                       | 28 |
| Table 4.2: Distribution of Respondents by their Age bracket .....   | 30 |
| Table 4.3: Distribution of Respondents by their Age bracket .....   | 31 |
| Table 4.4: Challenges Encountered When Listening to the Radio ..... | 36 |
| Table 4.5: Time allocated to dairy farming programs .....           | 39 |

## LIST OF FIGURES

|   |    |
|---|----|
| Figure 2.1: Conceptual framework .....  | 22 |
| Figure 4.2: Distribution of respondents by gender .....                             | 29 |
| Figure 4.3: Ownership of the Radio.....   | 33 |
| Figure 4.4: Addressing Needs on Small Scale Dairy Farming .....                     | 34 |
| Figure 4.5: Vernacular Radio and Passage of Development Messages to Rural People .. | 38 |
| Figure 4.6: Improvement of Dairy Farming Practices .....                            | 40 |

## ABSTRACT

Over the years, several channels have been used to disseminate information on dairy farming. They include extension officers, pamphlets, field days, newspapers, television, radio and many more (van den Ban and Hawkins, 1992; Olowu and Oyedokun, 2000). Radio as a channel has been successfully used to disseminate agricultural information especially to rural populations. Many experts identify radio as the primary medium of communication that is effective in reaching rural communities. This may be attributed to the various advantages it bears including; its portability, relative affordability, coverage of wide geographical areas, language of broadcast (Kuponiyi, 2000). The dairy industry is a major employer in the world and it is growing further as the demand for milk is increasing with the growth in population to over the 7 billion mark. The global milk production increased by 32 percent. On the contrary, the global per capita registered a 9 percent decline. Consequently, the global milk production has not experienced the same growth as the global population. Countries whose milk production has grown are cited to be well equipped with information from the electronic media (Van den Ban, 1992). The overall objective of this study was to assess the role of vernacular radio on enhancing small scale dairy Farming and marketing in Githunguri sub-county, Kenya. This research study used mixed methods with two data collection methods used. These were unstructured questionnaires and interviews. Descriptive statistics were used to analyze the quantitative data. The study concludes that most of the people in Githunguri sub-county owned radio and that the topics that are presented in dairy farmer's vernacular radios address their needs on small scale dairy farming. The study also concludes that vernacular commercial radio stations being driven by profits, cannot afford to air their own sponsored agricultural programs at prime time, which is taken up by paid sponsors who broadcast sponsored programs beneficial to them. In addition, the study concludes that information from the vernacular radio programs with regards to dairy farming practices has really helped dairy farmers in boosting their farming skills and has seen the fruits of implementing what they learn.

## TABLE OF CONTENTS

|   |            |
|---|------------|
| <b>DECLARATION.....</b>   | <b>ii</b>  |
| <b>DEDICATION.....</b>  | <b>iii</b> |
| <b>ACKNOWLEDGMENT .....</b>   | <b>iv</b>  |
| <b>LIST OF TABLES .....</b>   | <b>v</b>   |
| <b>LIST OF FIGURES .....</b>  | <b>vi</b>  |
| <b>ABSTRACT.....</b>  | <b>vii</b> |
| <br>  |            |
| <b>CHAPTER ONE: INTRODUCTION.....</b>                                 | <b>1</b>   |
| 1.1 Overview.....   | 1          |
| 1.2 Background of the study.....                                      | 1          |
| 1.3 Statement of the problem.....                                     | 5          |
| 1.4 Objectives of the study.....                                      | 8          |
| 1.4.1 General objective.....  | 8          |
| 1.4.2 Specific objectives.....  | 8          |
| 1.5 Research questions.....   | 8          |
| 1.6 Justification of the study.....                                   | 8          |
| 1.7 Scope and limitation of the study.....                            | 9          |
| 1.8 Definition of Key terms .....                                     | 10         |
| <br>  |            |
| <b>CHAPTER TWO: LITERATURE REVIEW.....</b>                            | <b>11</b>  |
| 2.1 Overview.....   | 11         |
| 2.1.1 Awareness of the role of vernacular radio station programs..... | 11         |
| 2.1.2 Factors hindering use of vernacular radio station.....          | 12         |
| 2.1.3 Role of vernacular radio station.....                           | 13         |
| 2.2 Empirical review.....   | 15         |
| 2.3 Summary of Existing gaps.....                                     | 17         |
| 2.2 Theoretical Framework.....  | 18         |
| 2.2.1 Participatory Communication Theory .....                        | 18         |
| 2.2.2 Agenda Setting Theory.....                                      | 20         |

|  |           |
|--|-----------|
| 2.3 Conceptual framework.....  | 22        |
| <b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>   | <b>23</b> |
| 3.1 Overview.....  | 23        |
| 3.2 Research Design.....   | 23        |
| 3.3 Target Population.....   | 23        |
| 3.4 Sample and Sampling Technique.....   | 24        |
| 3.4.1 Sample Size .....  | 24        |
| 3.4.2 Sampling Techniques .....  | 24        |
| 3.5 Data Collection Methods .....  | 25        |
| 3.6. Pilot Study.....  | 25        |
| 3.6.1 Validity .....   | 26        |
| 3.6.2 Reliability .....  | 26        |
| 3.7. Data processing and Analysis .....  | 27        |
| <b>CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION.....</b>   | <b>28</b> |
| 4.1 Overview.....  | 28        |
| 4.1.1 Response Rate.....   | 28        |
| 4.2 Demographic Information.....   | 29        |
| 4.2.1 Distribution of respondents by gender.....   | 29        |
| 4.2.2 Age of the Household Head.....   | 30        |
| 4.2.3 Respondents' Level of Education.....   | 31        |
| 4.3 Factors influencing awareness of the role of vernacular radios in enhancing small scale dairy farming..... | 33        |
| 4.3.1 Ownership of the Radio .....   | 33        |
| 4.3.2 Addressing Needs on Small Scale Dairy Farming .....  | 34        |
| 4.3.3 Agricultural Information/Topics on Small Scale Dairy Farming .....                                       | 35        |
| 4.3.4 Other Source of Agricultural Information on Small Scale Dairy Farming .....                              | 35        |
| 4.4 Factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-county.....            | 36        |
| 4.4.1 Challenges Encountered When Listening to the Radio .....   | 36        |

|  |    |
|--|----|
| 4.4.2 Participation or Contribution to the Programs on Marketing of Dairy Products                 | 37 |
| 4.4.3 Improvement on Marketing of Dairy Products Programs.....                                     | 37 |
| 4.5 Role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County..... | 38 |
| 4.5.1 Vernacular Radio and Communicating Development Messages to Rural People .....                | 38 |
| 4.5.2 Time allocated to dairy farming programs.....  | 39 |
| 4.5.3 Improvement of Dairy Farming Practices.....  | 40 |
| 4.5.4 New Methods of Small Scale Dairy Farming Learnt.....   | 41 |

**CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 43**

|  |           |
|--|-----------|
| 5.1 Overview.....  | 43        |
| 5.2.1 Factors influencing awareness of the role of vernacular radios in enhancing small scale dairy farming..... | 43        |
| 5.2.2 Factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-county.....            | 45        |
| 5.2.3 Role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County.....             | 46        |
| 5.3 Conclusions.....   | 47        |
| 5.4 Recommendations.....   | 49        |
| 5.4 Recommendations for Further Studies.....   | 50        |
| <b>REFERENCE.....</b>  | <b>51</b> |
| Appendix 1: Research Questionnaire.....  | 55        |
| Appendix II. Interview guide for producers of the agricultural programmes.....                                   | 59        |
| Appendix III. Fieldwork certificate .....  | 60        |
| Appendix IV. Certificate of Corrections.....   | 61        |
| Appendix V. Plagiarism Report .....  | 62        |
| Appendix VI. Declaration of Originality .....  | 63        |

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Overview**

This chapter will cover the background, statement of the problem, significance of the study, objectives, research questions, scope and limitations of this study.

### **1.2 Background of the study**

For several years, many methods have been used to pass vital information about dairy farming. These encompass radio, television, newspapers, field days, pamphlets and the use of extension officers (van den Ban and Hawkins, 1992; Olowu and Oyedokun, 2000). The radio has previously been used to disseminate information on agricultural issues specifically for rural communities. Communication experts identify radio as an effective tool for communication especially for rural populations. Radio communication has the advantage of being affordable, portability and covers large regions (Kuponiyi, 2000). The dairy industry is a major employer in the world and it is growing further as the demand for milk is increasing with the growth in population to over the 7 billion mark. The global milk production increased by 32 % while the global milk production per capita declined by 9 %. This trend shows that global milk production has not followed the same trend as global population. Countries whose milk production has grown are cited to be well equipped with information from the electronic media (Van den Ban, 1992).

Agriculture has been and remains the backbone of Kenya's economy. This means that, it is in turn the livelihood of the largest population that makes the rural community. On the other hand, the agricultural sector directly contributes 26% of the country's GDP, as well

as another 25% indirectly. The sector is well recognized as a primary source of raw material as well as a tax revenue generator that supports the rest of country's economy. In addition, the agricultural sector accounts for 65% of Kenya's total exports, not to mention that, 40% of Kenya's population directly depends on the sector as a source of employment. 70% of the country's rural population directly depends on agriculture for their livelihood. This in turn means that, sustainable and equitable growth in the agriculture is essential. This is due to the fact that, agriculture source of tax revenue for the nation's economy but also a source of livelihood for the Kenyans, and more so to uplift their living standards and maintaining the 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.

Dairy production is a major agricultural activity in Kenya. This is due to the fact that, it is referred by many as a key smallholder success story that entails over 1.8 million smallholder farm households, who produce over 70% of all milk marketed (SDP, 2005). With reference to the importance of the dairy farming practice, the sector accounts for an estimated 14% of agricultural GDP, not to mention contributing to the livelihoods of countless small-scale farmers in Kenya. This is due to the idea that, it acts as a source of income, food and employment. Since the independence in 1963, smallholder dairy farming and production has been on the rise. This has been as a result of supportive and subsidized services as well as guaranteed market for the dairy products for both the

processing plants and the farmers. In 1992, there was countrywide liberalization of the dairy industry, which in turn led to more and healthy competitive markets for milk as well as reduced accessibility to public livestock services. Moreover, dairy farming contributed to the growth in milk markets in the urban areas and population, which today makes up 80% of the marketed milk. In terms of demand for dairy products, local market continues to grow more so due to the rapid population growth and the fast spreading urbanization which is increasing the urban market for milk and other dairy products. In 2010 demand for milk in Kenya rose to about 5.8 billion metric liters, 15% higher than the projected supply of about 5 billion liters (SDP, 1996). However, while the increase in demand for dairy products has been a positive development, there has been a concern among the development agencies as well as the policy makers over the ability of the small scale milk producers to withstand the ever growing competition with intensive large scale production of the dairy products. These include large scale livestock production farms that are being set-up in the urban and peri-urban areas.

Agricultural information regarding small-scale dairy farming thus is a critical ingredient to improving dairy farming production and linking farmers to remunerative markets. Consequently, this will positively impact on national economies, livelihoods and food security in Kenya. Improved productivity in agriculture can only be achieved by connecting small scale farmers to markets through timely information (Rogaly, et al, 1999). In an effort to improve agricultural produce, many experts in Kenya have recognized radio as an effective tool for dissemination of information. Vernacular radio has specifically received attention for the role it play in providing timely, accurate and relevant information to dairy farmers. This is because most listeners dwell in rural areas

where dairy farming is commonly practiced. However, the fact that most of the people are not educated and neither speak English or Kiswahili means that vernacular radio stations are the most effective tools to reach them. Consequently, vernacular radio can improve agricultural practices and increase household and national GDP (Van den Ban and Hawkins, 1992).

One of the major achievements of radio stations is the ability to establish key platform for information sharing as well as forming key networks with farmers. This has in turn been one of the contributions with reference to vernacular radio programmers. With the increase in access to agricultural related information and messages by the small scale farmers, the result has been an improved daily farming. According to Gathigi (2009), people in rural areas in Kenya often prefer and regard information delivered by a word of mouth to be reliable and better compared to the written word. This is due to the fact; a spoken word bypasses the illiteracy barrier which is more prominent in rural areas. The strength of vernacular radio as an extension tool lies in its fact that it can deliver information to even the most illiterate small scale farmers. Vernacular radio can be explored to disseminated relevant and critical agricultural information through a language that farmers can understand (Chapman et al, 2003; Gathigi, 2009). This in turn appeases the listeners hence making both the message and the programme acceptable to the rural community. With reference to messages through the radio, almost every/any type of information or advice can be disseminated using radio transmission. However, most radio stations lack accurate statistics regarding the nature and composition of their audiences, in terms of demographic figures and listener preferences (Nazari and Hassan, 2010). Further, the timing, sustainability and continuity of the programmers must be reflected,

and the content being transmitted should regularly be repeated on regular intervals in order to realize the intended and desired effect among the community. With reference to the development and management of airwaves in Kenya, the initiative was undertaken by the state broadcast. However, since 2001 the development of radio has grown by a whopping 280% and by the mid 2011 there were 319 licensed radio station (Butunyi, 2011), though a large number of these stations were privately owned vernacular radio stations. Githunguri sub- County is privileged to have three vernacular radio stations.

Githunguri sub-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 dairy farming has been one of the main income earners of Githunguri sub-County residents. Githunguri sub-County is a major supplier of milk to Nairobi.

### **1.3 Statement of the problem**

Vernacular radio stations often operate as commercial businesses. They are meant to maximize investors returns. Consequently, they focus more on advertisements which make them generate more revenues. As a result, programs for farmers are not a major attraction of vernacular radio stations (McLeish, 2005). Githethwa (2008) argues that the influence of sponsors in vernacular radio station programming does not encourage educative programs for rural communities. As a result, informative and educative radio programs especially for dairy farming are not given priority compared to cultural talk,

political and social programs (Wekesa, 2009). Given their closeness to listeners and their scales in communication, vernacular radio stations have comparative advantage compared to national radio stations. However, the influence of sponsor limits the exploration of vernacular programs for the purpose of educating small scale dairy farmers.

According to [www.kilimo.go.ke](http://www.kilimo.go.ke), the need to interact with agricultural markets remains an important undertaking with respect to livelihood strategies of majority of rural. Markets are ideal platforms that bring together both the consumer and the producer. I.e. it is the place where the producer purchases their inputs while at the same time sell their products. More so, the market provides a place where the consumers get their desired products as per their income. Virtually all households in agricultural areas are, by preference, both producers and consumers, buyers and sellers; and many sell agricultural produce and buy their food at different times of year (Mbugua, 2012). Regardless of the increasing interest by development agencies to use radio communication for marketing and delivering agricultural information to farmers, very few literatures available about farmers' awareness and use of these tools for agricultural transactions. Low bargaining power has also seen farmers fetch poor prices for their produce. Reduced net revenues from farming activities will continue to result into reduction in investment in agriculture (Kiplang'at, 2004). Not only do they need knowledge on how to access markets but also on how to improve their dairy products.

According to Mwangangi (2012), the delivery of agricultural information to the rural farmers with an effort to improve food security in Machakos County was hampered by inappropriate broadcast time, poor signal and power problems. Odira (2014) carried out a

study on the role of radio broadcasting in enhancing farm production in rural Kenya. The study found that while vernacular radio stations are the ideal platforms on which local farmers can access information that in turn shape their farm productivity agenda, it ends with some recommendations on how best the radio stations can bring out the extension service by organizing agricultural field days accompanied by experts in various fields of profession to demonstrate practically complex issues to farmers; manufactures of farm inputs, and other agricultural information for easier access. These proposed research study also aims at assisting radio stations in their programming, to include more agricultural programs not only on dairy farming but also on the best practices farmers can employ in marketing their products, a void noted in Odira's study.

In addition, Anam (2013) sought to find out the role of vernacular radio in peace building in Kenya. The study found that while vernacular radio stations world over are the ideal platforms on which the marginalized, rural and peri-urban populations can access information that in turn shape the peace agenda, there is need for further studies to be conducted on the subject with the view of promoting the effectiveness of vernacular radios in Kenya. These findings show that there is need to investigate the role of vernacular stations on small scale dairy farming and marketing in rural Kenya. This is too further promoting the rural radio effectiveness in enhancing small scale dairy farming and marketing. This study therefore sought to assess the role of vernacular radios on enhancing small scale dairy Farming and marketing in Githunguri sub-County.

## **1.4 Objectives of the study**

### **1.4.1 General objective**

The main objective of this study was to establish the role of vernacular radios in improving small scale dairy Farming and marketing in Githunguri sub-County, Kenya.

### **1.4.2 Specific objectives**

- i. To examine factors that influence awareness of the role of vernacular radio programs in enhancing small scale dairy farming in Githunguri sub-County.
- ii. To access factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-County.
- iii. To establish the role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County.

## **1.5 Research questions**

- i. What factors influence awareness of the role of vernacular radio programs in enhancing small scale dairy farming in Githunguri sub-County?
- ii. What are the factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-County?
- iii. How do vernacular radios enhance small scale dairy farming and marketing in Githunguri sub-County?

## **1.6 Justification of the study**

The government of Kenya through the Ministry of Agriculture employs agricultural extension officers who teach rural farmers best agricultural practices. However, there are few extension officers in the Counties serving farmers, with the ratio being one extension officer to 753 farmers (Sanga 2013). Thus from these study the GOK and also extension

officers will learn how they can collaborate with vernacular radio stations to help improve their extension services towards the farmers.

The overwhelming focus on modern vernacular radio-based strategies of accessing information is informed by the realization of the crucial role they play. Farmers will learn how the vernacular radio should be beneficial to them through increased access to critical information about markets, access to credit, consequently empowering farmers to better negotiate for prices of commodities. Additionally, it will develop and enhance networking activities. Information plays a crucial role in availing opportunities to farmers and hence lessening their vulnerability. Kiplang'at (2004) posits that, equipped with relevant information, farmers are likely to adopt new technologies such as agricultural inputs, having bargaining power in the market decision as well as acceptance of improved scientific methods.

### **1.7 Scope and limitation of the study**

The study focused on the role of vernacular radios on enhancing small scale Dairy Farming and marketing in Kenya: a case of Githunguri sub-County. The study concentrated on agricultural shows aired on the three rural radio stations, Coro FM-Muhua wa Urimi, Kameme FM-Kayu ka Murimi, and Inooro FM-Mugambo wa murimi. The limitation of the study was the scope since the study covered small scale farming in Githunguri. In addition, inadequate funds slowed down the study and there was limited time to conduct the study.

## **1.8 Definition of Key terms**

**Vernacular radio-** FM stations established to broadcast to a local and predominantly rural audience. The terms vernacular radio, rural radio and community radio have come to be used interchangeably to describe these kinds of FM stations.

**Small Scale Dairy Farming-** A type of milk production where milk is processed on the farm or on a small dairy plant for the purpose of sale.

**Marketing-** The process identifying buyers, promoting and selling a product or a service. It also incorporates the method of obtaining quality information of the market through research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Overview**

This chapter basically focuses on reviewing the available literature on the role vernacular radio plays in enhancing small scale dairy farming and marketing. The review delves into various reports and findings that act as a foundation for this research study.

##### **2.1.1 Awareness of the role of vernacular radio station programs**

Rural vernacular radio has been widely cited as an effective tool for improving small scale dairy farming. This is because, through vernacular radio is able to reach even the most illiterate dairy farmers. Consequently, it has been identified as useful for dissemination of information that is critical for agricultural production. Vernacular radio can use local languages and therefore provoke discussions on various problems and issues that small scale farmers are experiencing. It also allows for contextualization of the information in terms of ecological characteristics of the region. Contrary extension services have failed to disseminate information to small scale dairy farmers in several developing countries. Additionally, the language used to communicate may be a major hindrance to successful dissemination of information. Consequently, vernacular radio has been hailed for its relevance and wide audience nature thus enabling community participation in dairy farming programs. Additionally, Girard (2001), argues that local radio speaks in the language and accent of the local community.

The importance of having local communities discuss dairy farming issues in the accent of the local community cannot be overemphasized. Consequently, there has been a growing need to use indigenous languages spoken local communities in rural areas most of who are illiterate. Radio as opposed to print media which still required literacy or television which would be quite expensive to establish was best suited to use vernacular language. To rural communities, official languages are less used since a greater part of the population is uneducated and their main focus is on obtaining livelihood (Orao, 2009). A majority of Kenyans (67 per cent) still live in the rural areas where two dynamics exist: higher illiteracy levels and low levels of connection to electricity (less than 30 per cent on average according to Kenya's Rural Electrification Authority). This makes this audience tend towards using radio, which is a cheaper gadget to acquire and power, as their main source of information. The low levels of literacy (44 per cent according to the data from KNBS 2010), means these people need a radio medium that speaks in their mother tongue to put them on a par with the rest of the country as far as agricultural information flow on small scale dairy farming is concerned.

### **2.1.2 Factors hindering use of vernacular radio station**

Kenya's ethnic diversity and the subsequent connection between ethnicity and political ideologies since independence in 1962 has been the key negative aspect surrounding anything labeled ethnic, including the vernacular radio stations. Of concern also are issues of ownership by the elite. As a result, the poor community groups are not well represented particularly in terms gender. In stations like Mama FM and Radio Mang'elele, men are under-represented both in terms of personnel and programs made. Stations located in rural areas, broadcasting in local languages are automatically

considered community radio stations. Interwoven with ownership are the notions of access and participation (Okigbo, 1996).

Vernacular radio broadcasting has been overshadowed by players who do not belong to the community broadcasting category. These usually have more financial muscles, often protected by the strong political backings owing to their ownership or loyalty to the government, have more broadcasting flair because they can afford the latest broadcasting technology and use local languages, thus winning the very audiences that community broadcasters are trying to reach. Seemingly, this has muted true community broadcasters and forced them to play second fiddle in a very competitive broadcasting market (Girard, 2001). A closer analysis reveals that these powerful broadcasters often give less priority to community development content such as agricultural information on how small scale dairy farmers can market their products.

### **2.1.3 Role of vernacular radio station**

The media has an critical role to play in development. Chadra (2004) notes that the media plays a major role in empowering small scale farmers to take control of different aspects of their agricultural production. Consequently, the media sets the pace for economic, political and social development . It can be used as an effective tool to speak out against marginalization of by staging public and political debates. Srampickal (2006) insists that television, radio , internet and print media can be used to disseminate information, clear doubt by educating large masses of audience of development issues. He further states that the mass media provide a vast reservoir of knowledge and information serves as a tool for development and complements other development approaches.

The radio has proved to be one of the most effective mediums in promoting agriculture and development in rural areas. Radio communication for rural communities takes an interactive approach and thus enabling effective dissemination of skills, knowledge and information to farmers, extension service providers and other stakeholders.

Media such as print, radio, information and communication technologies tools have been known to be effective in dissemination of information to farmers (Okigbo, 1996). This implies that vernacular radio can be used to pass on development messages to rural people. The main goal is to empower rural communities with relevant , timely and accurate information that is necessary for decision making and improvement of livelihood. Local and community based media have a particular role in enabling rural communities to access information in their local languages. Regular transmission of radio programmes related to dairy farming and marketing gives valuable information about new farming methods (Ekoja 2003). As the farmer receives useful information on the radio, they are able to apply the new techniques gradually improving their dairy farming methods. In Kenya, The Kenya Broadcasting Corporation has radio stations that cater for particular regions and broadcast in local languages. Some of these stations air programmes that have useful development information.

There are many success stories where vernacular radio stations have been used to enhance agricultural production. Through varying aspects such as training and access to the airwaves, the existence of a vernacular radio can be a catalyst towards different capacity building activities within a community. In addition, the exchange of information, establishment of network within different community groups as well as the delivery of

skills and training are key tools and elements that undoubtedly define a developing community. In other words they are essential aspects for community development.

It can also be used to enhance awareness of communities and create a channel through which groups can be empowered . This is because radio can speak directly to different groups and stakeholders in the agricultural industry. For example Radio Madanpokhara in Nepal has been used to deliver agricultural education programs for rural communities . Consequently, even communities that lack access to electricity or telephone are able to benefit from the programs by taking part in discussions on how to improve agriculture and development (Buckley et al 2008).

According to an independent listener survey, the vernacular radio contributes to improved agricultural techniques and improves access to news and information.

In Senegal, Senegalese state radio carries better quality development programmes and caters well for local languages compared to the under-resourced community stations (Myers 2008). In Egypt, the state radio and television are well known for their agricultural and health information. In a research study carried out in *Kieni* west, Nyeri County on listeners' radio listening habits, farmers reported that they listen to agricultural programmes on the Kikuyu Vernacular stations because they provide practical information that they require in their dairy farming activities and skills on how to market their products (Gathigi 2009). These agricultural programmes addressed various issues such as different diseases that affect crops and animal husbandry.

## **2.2 Empirical review**

Jepkemboi, (2013) did a study on impact of agricultural programs on dairy farmers a Case Study Of Kass Audiences In Uasin Gishu County. The study found communication

of information to farmers was not accorded the appropriate priority at the international and national level. However, the researcher identified media as a powerful tool to empower farmers for the purpose of agricultural and general development. Some insist that mainstream media has a critical role to play in spreading information about appropriate agricultural methods to small scale farmers in addition to influencing policy by engaging decision makers on critical issues faced by farmers. In Kenya, vernacular stations have played a major role in dissemination agricultural information due to their audience needs.

Odira, (2014) investigated the functions and impact of radio broadcasting towards enhancing farm production in rural Kenya. Odira's work entailed a case study of Radio Nam Lolwe in Kakelo location, Homa Bay County. According to the findings it was established that; Radio Nam Lolwe had six segments of varying that were coined with focus to the needs of its listeners. Moreover, the findings also revealed that poor reception of the alternative radio stations were a main catalyst as to why majority of the farmers from the region opted for Radio Nam Lolwe in their need to access agricultural related information and programs. Finally, the study also established that, in addition to the vernacular stations, other sources of farming related information prior to the coming of the stations included agricultural officers department, NGO, parents and neighbors.

Githiora, (2015) studied that factors affecting growth of small-scale dairy farming in Kiambu County in Kenya. The researcher noted that limited access to finance to purchase milking equipment and animal feeds were among critical factors that affected the industry. The other important factor noted was access to market. The study noted that

there was a greater need to open new markets for milk and milk-related products. According to Anam (2013), the existence of vernacular station facilitated in peace building as it helped to establish a platform that enabled the community to actively participate and deliberate on issues as well as find solutions. In addition, the author (Anam) established the fact that, Radio Mayienga through its broadcasting, and programmes facilitated peaceful coexistence within the community and among its listeners. With reference to the findings in his work, Anam found that, the existence of Radio Mayienga changed its listener's attitude and behavior more in the conflict ridden areas of the county. This is according to the article by Anam, 'role of vernacular radio in Peace Building in Kenya: Case of Radio Mayienga in Kondele Kisumu' that was published in 2013

### **2.3 Summary of Existing gaps**

The following studies have indicated the importance of agricultural programs on dairy farmers, the function of vernacular radio stations with reference to peace building and factors influencing small- scale dairy farming . However, little scholarly research explores the role of vernacular radio in enhancing agriculture small scale dairy farming and marketing. With reference to the study on the role of radio broadcasting towards the enhancement of farming and farm production, it was established that, poor reception of other radio stations was a major reason as to why a good number of the farmers choose Radio Nam Lolwe in their quest to access agricultural related trainings and information. However, the growth and establishment of the vernacular radio stations added to the prior in existence sources of agricultural information which entailed parents, NGOs, neighbors as well as the agricultural officers.

The study on commercial vernacular radio Stations and food security in Machakos County found that CVR stations delivery of agricultural information to rural farmers in an effort to improve food security in Machakos County was hindered by inappropriate broadcast time, poor signal and power problems.

Following the above afromentioned research studies, none has done been regarding the role played by the vernacular radio stations in promoting small scale dairy farming and marketing. None of the study delves on how farmers can learn and also utilise the information they get from the vernacular radio to improve their dairy farming practices and marketing of their products. Moreso how vernacular radios can tailor make their programs to benefit the small dairy farmers. Therefore, this study will seek to fill the identified research gap by evaluating the role of vernacular radio stations in enhancing small scale dairy farming and Marketing.

## **2.2 Theoretical Framework**

This research study was guided by two theories. These are: Participatory Communication theory and McLuhan's theory of Medium in Message.

### **2.2.1 Participatory Communication Theory**

Mefalopulos (2003), notes that participatory communication refers to the practices or theories that are used in communication. Participatory communication is critical to decision-making. On the other hand, Mody (2011), the word community comes from the Latin word 'communis'. Mefalopulos insists that the main aim of communication is to share meaning, knowledge, worldviews and perceptions. Additionally, communication should be natural.

The development and adoption of participatory communication is a dialogue based approach to communication. The approach allows sharing of information, opinions and perceptions among varying stakeholders. This in turn leads to the empowerment of the stakeholders involved more so the marginalized and vulnerable with reference to the use of vernacular radio stations. Focusing on the aspect of ‘participatory communication’ it not only entails exchange of experiences and information, but also it entails the exploration and generation of new and important knowledge that used to improve the community lives. In summary, for communication to be genuinely effective and participatory, it should occur among all stakeholders entailed or affected. In other words it should ensure that, all parties involved have the same and equal opportunities to influence the outcome of the intended initiative (Tufte and Mefalopulos 2009).

Mass media plays a key role in communication. This is because it is diffusion-oriented and uses a monologic model of communication. Additionally, community based media can adopt participatory strategies where dialogues is permitted. Media can either be used for social mobilization or become a catalyst for social change. According to Rodriguez (2001), providing access and space for citizens to take part in media production can become an effective way to enhance communication.

However, media specific issues such as types of media, satellite communication, internet and mass media have to be carefully considered when developing participatory communication strategies. Additionally, nature of media such as interactive or one-way, institutional characteristics such as private and public and business models such as non-

profit media and commercial media have to be considered when deciding which media to use (Mody, 2011).

This theory will guide the research study which explores the role of vernacular radio in enhancing small scale dairy farming and marketing in rural Kenya. Radio is an important channel of communication and thus should employ the aspect of ‘participatory communication’. This is due to the fact that, participatory communication is a dialogue based approach, which will allow the rural people share information, perceptions and opinions and in turn facilitating the process of empowering them, especially the marginalized and vulnerable people. Farmers in rural Kenya listen to local language radio stations for information, education and entertainment. Local language radio stations have agricultural programs which teach farmers various farming practices. The radio as a mass media should provide the farmers with a platform to air their views hence create awareness of new agricultural innovations through its programming.

### **2.2.2 Agenda Setting Theory**

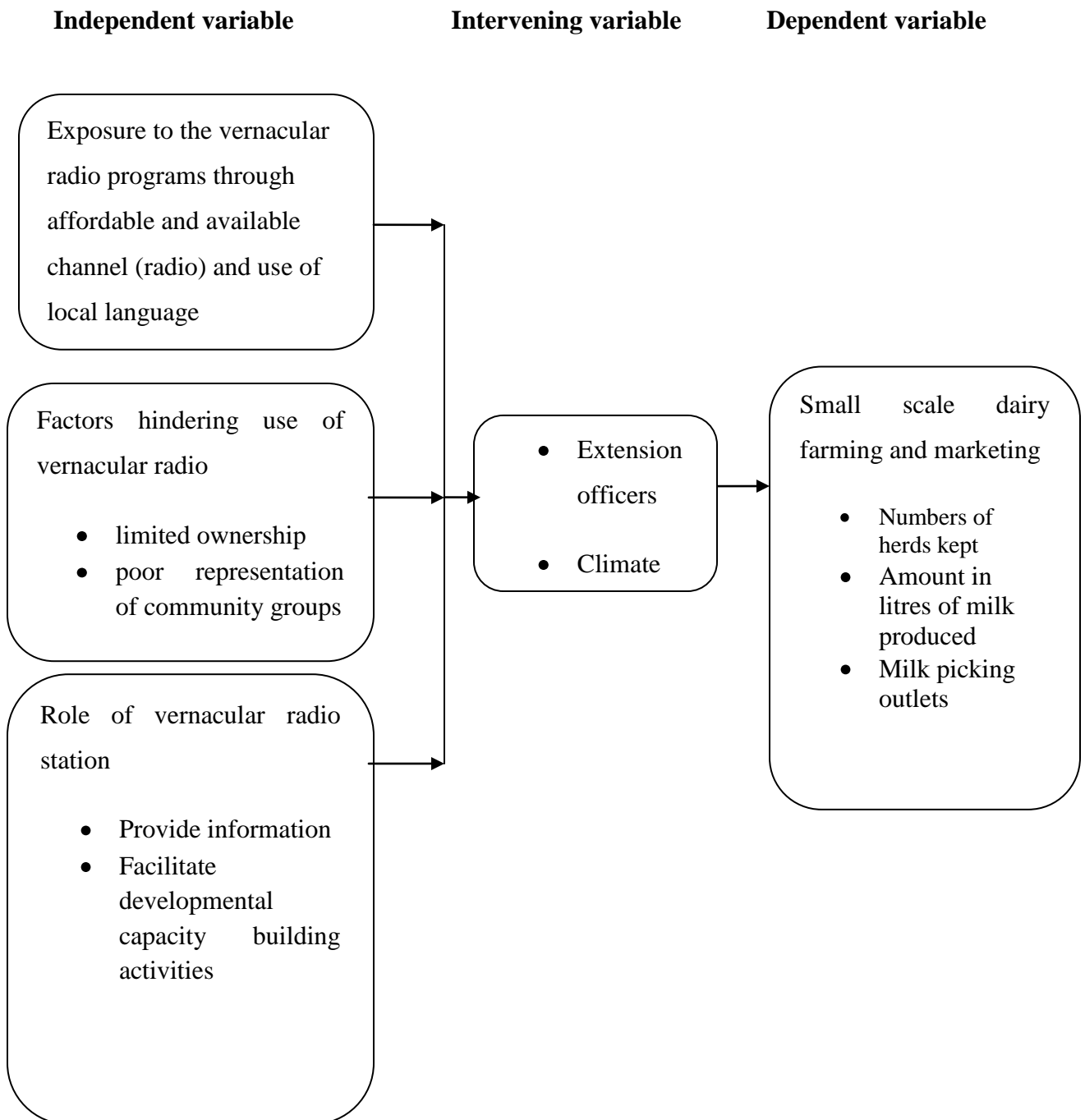
This study’s literature review covered one theory, the agenda setting theory. The Agenda Setting-theory presumes that the media have the ability to set the public agenda. Agenda setting which is a causal hypothesis suggests that media content influences the public perception of the importance of issues (Severin and Tankard, 2001). Leon (2003) posits that the media shape the public space and citizenry itself as a result of the discussions on development and particularly agriculture creates room for debate on important issues affecting citizens. 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 indicates that for issues which farmers have direct experience, agenda-setting effects of media are minimal. On the contrary, for issues that are unobtrusive, agenda-setting effects of media are strong. This is due to the fact that for issues that members of the public do not have experience, orientation needs to be done to expose farmers to the issues before discussions can be conducted (Thomson, Dininni, 2005).

Studies have shown that media presentations impact on public perceptions on issues that are relevant to the audience. Additionally, people's perception is also affected by the importance of the issues discussed. Consequently, the content and the way media presents a given topic is critically evaluated by the public. Priming provides benchmarks for the audience to evaluate critical issues about government and leaders performance. As a result, priming is part of agenda setting. This is because of the role played by memory-based models in information processing. The theory of memory-based models suggest that people's attitudes on given issues are noticeable through the decisions that they make (Hastie & Park, 1986). Additionally, the formation of judgment and attitude is affected by the ease of creating associations in the mind of the audience (Tversky & Kahneman, 1973, p. 208). Some researchers have also postulated that priming critical to goal setting since it provides the theoretical foundations upon which associations can be created (Iyengar & Kinder, 1987). Mass media has the ability to make issues salient in the minds of the audience. Consequently, mass media is critical to shaping the way people make judgments about their leaders or government (Journal of communication 2007).

## 2.3 Conceptual framework

Figure 2.1: Conceptual framework



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Overview**

This chapter describes the methods and tools that were used in collecting the available data. It includes the research design, sampling design, data collection methods and instruments, data processing and analysis.

#### **3.2 Research Design**

A research design is the scheme, outline or plan that is used to generate answers to research problems (Dooley, 2007). This research was conducted through a descriptive survey design (DSD) where things have been presented as they are in the field. In a descriptive design, focus was placed on the formulation of the objectives of the study, methods of data collection, sample collection, collecting the data, processing the data and reporting of findings. This study was concerned with obtaining information by interviewing or administering questionnaires to a sample of respondents and at the same time conduct interviews using interview guides thus making it a descriptive survey.

#### **3.3 Target Population**

A population can be defined as the entire group of persons or set of objects and events the researcher wants to study (Collins et al 2000). The population contains all the variables of interest to the researcher. The target population of this study was small scale farmers aged between 25 to 65 years in Githunguri sub-County. These farmers engage in mixed farming and own no more than five acres of land. According to Kiambu County

Integrated Development Plan 2013 – 2017 (2013), Githunguri sub-County had a population of 147,763 out of which 77,657 people aged 25 – 65 years in this county.

### **3.4 Sample and Sampling Technique**

#### **3.4.1 Sample Size**

Sampling is the process of selecting units from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen (Chakraborty, 2009). The sample that is chosen for a particular study is a subset of the entire population and it should be representative of the targeted population. Therefore, the sample size which was used in this study considered the farmers in Githunguri sub- County.

There were five wards in Githunguri sub-county but the research study was carried out in three which were: Ikinu, Ngewa and Githunguri wards. These three wards were chosen through simple random method of sampling. A total of 150 small scale farmers were selected from the three wards, with 50 coming from each constituency. Since there was no sample frame of farmers in the constituency from which a sample could be drawn 50 cases from each of the three wards were selected conveniently to represent the entire population.

#### **3.4.2 Sampling Techniques**

This research study used purposive sampling technique. This is a technique that allows the researcher to use cases that have the required information with respect to the objectives of the study. Moreso purposive sampling is a representation of a set of varying non-probability sampling methods. Purposive sampling is also known by the name judgmental sampling method. The sampling method (purposive) 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 (Mugenda and Mugenda 1999). A criterion for choosing particular cases applied where only those who were farmers, listened to the agricultural programs on Coro FM-Muhua wa urimi, Kameme FM-Kayu ka murimi and Inooro FM-Mugambo wa Murimi and were between the ages of 25- 65 years were selected.

### **3.5 Data Collection Methods**

The study relied on two data collection methods in this study. These were questionnaires and interview guide. These two research instruments were prepared based on the research questions. Polonsky (2010) argues that the researcher has to ensure that the data collected is focused towards answering specific research questions.

The questionnaires were both closed and open ended to allow respondents greater depth of response and not limit them to particular answers. As Mugenda and Mugenda (1999) points out, open ended questions can stimulate a person to express what he considers to be most important. However a few questions in the questionnaire were close ended. The questionnaire was issued to the farmers while the interview was done with the producers. The Interview was administered orally. The interview has many advantages which include the fact that it can be flexible and the interviewer can get as much information as possible and respondents can give more complete and honest information (Mugenda and Mugenda 1999).

### **3.6. Pilot Study**

Prior to the conducting of the main reaserch, there was pre-testing of the instrument with a purpose of enhancing its reliability and validity. With refence to this, a sample of five

farmers (5) was chosen from the population. In this research, several farmers and producers, were chosen to contribute and were not included in the sample chosen for the study. The main focus of this undertaking was to improve the instrument's reliability and validity aspects through making of necessary corrections that were experienced before the undertaking of the main and actual research process.

### **3.6.1 Validity**

The study adopted content validity to indicate whether the test items actually represented the content that the test was intended for. With regard to the pilot study, it aided towards the determination of the instruments accuracy, suitability and clarity. More so, it helped to identify and classify ambiguous and scarce items such that, items that failed to evaluate the variables intended were modified. In order to maintain validity, the supervisor examined the instrument to be used in the study.

### **3.6.2 Reliability**

Reliability determine the level at which a data collection instrument is consistent in the measures taken. It is established through repeated trials (Gay 1992). In the current study, reliability of the data collection instrument was established using test-retest method. The test was conducted in two dissimilar points (a difference of two weeks) The test-retest reliability is based on the assumption that no change occurs in the components of the data collection instrument used to carry out the measurement. In order to determine the degree of consistency, a Cronbach's correlation Coefficient alpha was calculated. It was determined that the instrument produced similar responses every time it was administered.

### **3.7. Data processing and Analysis**

In order to analyze the data, descriptive statistics method was employed. The data was coded and entered into SPSS software and the output produced in form of frequencies and percentages. The study findings were shown on tables and graphs. The data was then interpreted through discussions and various explanations provided for the trends observed in the data.

### **3.8 Ethical Consideration**

The issue of privacy and security is sensitive and requires some precautions and measures put in place to safeguard the welfare of respondents. Before completing the questionnaire, (See appendix I) and conducting the interviews (See appendix II) the respondents were briefed on the purpose of the research and were requested to participate in the study. Only those who gave their consent were included in the actual data collection.

The study was properly authorised by the University after a research proposal defence with a certificate of field work (appendix III). There was utmost confidentiality in handling the data collected and anonymity was afforded to the respondents. The data collected was strictly used for academic purposes only. The project was duly defended and corrections made, after which a certificate of corrections was issued (appendix IV). The work was checked for plagiarism at the school of journalism and a plagiarism report was issued (see appendix V). Having passed all these ethical checks the researcher signed a declaration of originality attached as appendix VI.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION

#### 4.1 Overview

This section of the study presents that analysis of the data that was collected. Quantitative data was analyzed by using descriptive statistics. Each variable was analyzed and the findings displayed using tables. Consequently, the implications of the data were also described.

##### 4.1.1 Response Rate

**Table 4.1: Response Rate**

| No. of questionnaires Returned | Target No. of respondents | Response Rate (%) |
|--------------------------------|---------------------------|-------------------|
| 123                            | 150                       | 82%               |

The response rate that was achieved was 82 percent as described in the Table 4.1. This percentage was deemed sufficient to allow the researcher to proceed with analysis consistent with Mugenda and Mugenda (2003). Additionally, respondents' queries were appropriately addressed during data collection. The researcher was also careful not to cause any bias on the data that was collected. The use of questionnaire also reduced the impact of language barrier thus enabling the researcher to attain a considerably high response rate.

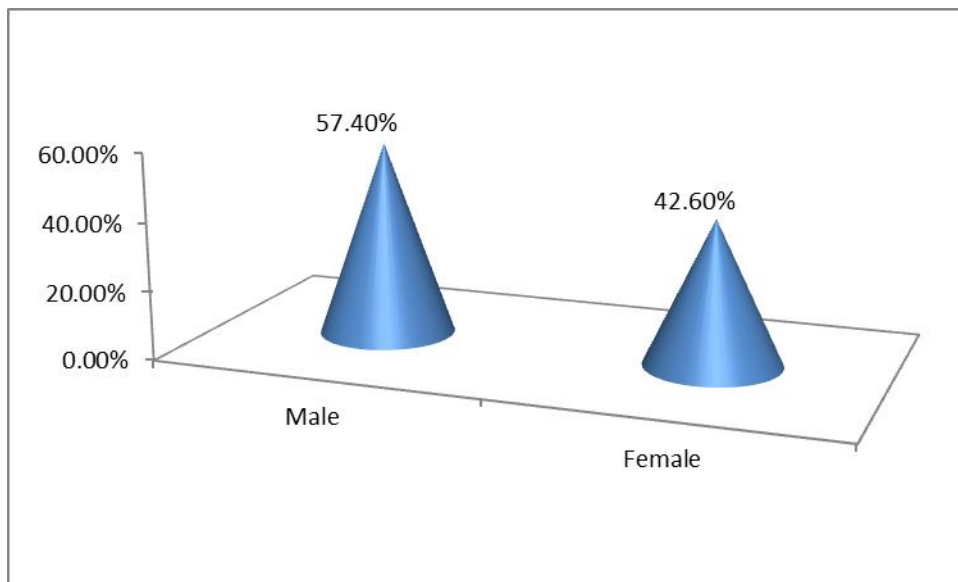
## 4.2 Demographic Information

This part of the study focuses on the demographic features of the respondents that participated in the study. Critical demographic data that was collected included age, gender, highest education level. The outcomes are presented as shown below:

### 4.2.1 Distribution of respondents by gender

In this section the researcher sought to establish the gender of the respondents. Their responses are shown in Figure 4.2 below

**Figure 4.2: Distribution of respondents by gender**



With reference to the respondents of this study, one distinctive feature is that, the number of men was high than that of women, i.e. (57.4%) and (42.6%) respectively. This is in turn represented in figure 4.2 above. From this information about the number of men and women who participated, it is clear that, the information collected gave a representation of both genders, as both men and women were given chances to give their views with reference to how the local vernacular stations have contributed towards the improvement of their farm production.

#### 4.2.2 Age of the Household Head

In farming, age has often been used as a measure of farmers experience with regard to the use of farm technology. However, young farmers may be well informed when it comes to new practices not to mention they may be more willing to bear the risks that come with the adoption of the new practices. However, with the older farmers, they may possess more experience and resources which allows them to decide effectively and positively when it comes to adoption and use of new technology in the farming sector. The researcher sought to know the age group of the respondents and the figures were as shown in Table 4.2

**Table 4.2: Distribution of Respondents by their Age bracket**

| <b>Age</b>     | <b>Frequency</b> | <b>Percent</b> |
|----------------|------------------|----------------|
| Below 25 years | 8                | 7%             |
| 25-35 years    | 15               | 12%            |
| 36-45 years    | 21               | 17%            |
| 46-55 years    | 53               | 43%            |
| 56- 65 years   | 26               | 21%            |
| <b>Total</b>   | <b>123</b>       | <b>100%</b>    |

From the table 4.2 above, 53 (54.3%) of the respondents were between 46-55 years of age were the majority, those of the age between 56- 65 years with 30 (26%), those with ages between 36-45years were 21 (13.8%), those with ages between 35-25 years were 18 (13.8%) while below 25 years were 8(26%). This implies that majority of the respondents were between 46-55 years of age. The study results indicate that there is a possibility of

the farmers in Githunguri sub-county to change their attitudes towards farming especially in adoption of new farming ideas as over 65.8% of the respondents were aged 45 years and below. An age deemed to change if they are provided with adequate and convincing information as to why they should adopt the new behavior.

#### **4.2.3 Respondents' Level of Education**

Farmers' education level is more often a key factor that is associated with how they use technology in their practice. With reference to PEU/PEC (2001), rural education is beneficial to the farmers especially when new technologies are being adopted and introduced into the agriculture sector. It is therefore important to improve the quality of rural farmers' education which in turn would positively contribute to increased productivity. This is due to the fact that, education provides farmers with the ability to perceive, understand, interpret and respond to new information faster compared to uneducated farmers or with no formal education.

**Table 4.3: Respondents' Level of Education**

| <b>Level of Education</b> | <b>Frequency</b> | <b>Percent</b> |
|---------------------------|------------------|----------------|
| No education              | 27               | 21.94%         |
| Primary education         | 51               | 41.36%         |
| Secondary education       | 27               | 21.70%         |
| College education         | 12               | 10%            |
| Undergraduate             | 6                | 5%             |
| <b>Total</b>              | <b>123</b>       | <b>100.00%</b> |

As per the results in the Table 4.3 above, it is clear that; majority of respondents (41.36%) had received some basic form of education i.e. attended primary schools. We can in turn draw the conclusions that, having attained basic education i.e. to be able to read and write are a positive sign of the population since they are better placed to be able to process information and search for solutions to alleviate their production constraints. However, 21.94% had no education. Notably, 21.7% of the respondents attended secondary schools with only a few (10%) of the respondents who received some form of college education. This probably indicates that there was a lower transition rate from secondary to college schooling in the sub-county. The study also found that only 5% of respondents had received undergraduate education. 63.3% of the respondents' primary and below level of education indicate the high illiteracy levels which have a correlation with the adoption of best dairy farming practices. The use of official languages of Kiswahili and English in the radio or any other medium to pass agricultural messages will not have any impact to a section of such a group who are largely subsistence farmers. This is supported by Orao (2009) who stated that in most parts of the African continent, the "officially ignored" indigenous languages are spoken by the majority of those with lower levels of education or no education at all. To create agricultural impact on this kind of audience then requires utilization of a medium that uses a language that they can understand and obviously this language is their mother tongue.

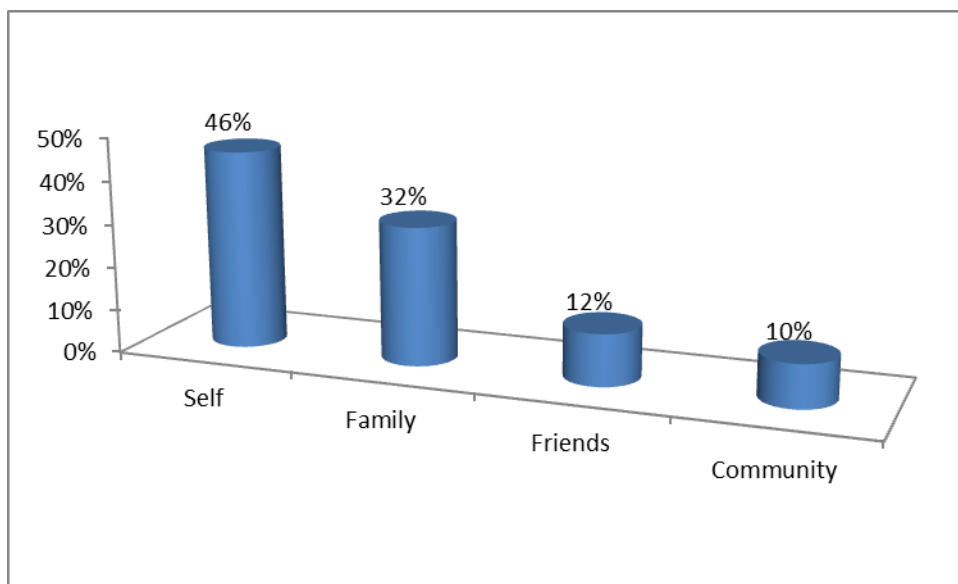
### 4.3 Factors influencing awareness of the role of vernacular radios in enhancing small scale dairy farming

The study sought to establish the factors influencing awareness of the role of vernacular radios in enhancing small scale dairy farming. The study findings are as presented in subsequent subheadings:

#### 4.3.1 Ownership of the Radio

The researcher sought to establish the owner of the radio that respondents listens to. The study findings are as shown in Figure 4.3 below

**Figure 4.3: Ownership of the Radio**

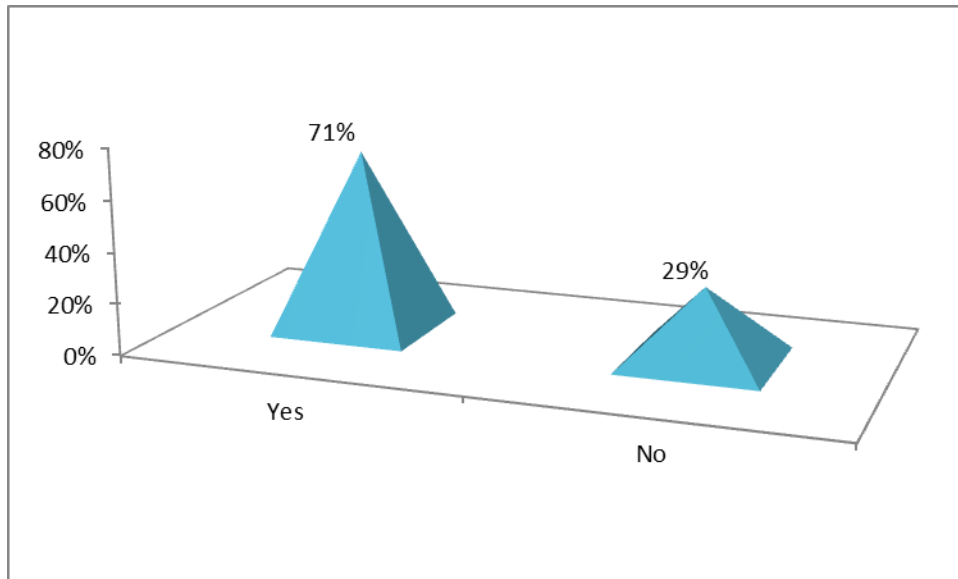


The findings reveal that majority of the respondents (46%) owned radio, 32% indicated that the radio they listened was owned by the family, 12% indicated friends, while 10% indicated community. This implies that most of the people in Githunguri sub-county owned radio and thus had higher chances of listening to farming programs.

### 4.3.2 Addressing Needs on Small Scale Dairy Farming

The study sought to establish from the respondents whether the topics that are presented in their vernacular radios address their needs on small scale dairy farming. The study findings are as shown in Figure 4.4 below

**Figure 4.4: Addressing Needs on Small Scale Dairy Farming**



The study established that majority of the respondents (71%) agreed that the topics that are presented in their vernacular radios address their needs on small scale dairy farming while the rest 29% felt that the topics that are presented in their vernacular radios do not address their needs on small scale dairy farming. This implies that the topics that are presented in their vernacular radios address their needs on small scale dairy farming. The respondents further indicated that vernacular radios give those more insights on modern ways of dairy farming and get inspired by other farmers who have made it in dairy farming. Similar to the study findings, Srampickal (2006) echoes the same by stating that media such as radio, television, print and the internet can provide information creating a clear understanding of what development is and can inform a large mass of people about

developmental concepts, programs and issues. He further states that the mass media provide a vast reservoir of knowledge and information serves as a tool for development and complements other development approaches.

#### **4.3.3 Agricultural Information/Topics on Small Scale Dairy Farming**

Respondents were asked to indicate agricultural information/topics on small scale dairy farming that they would like to be included in the agricultural programs. They identified agricultural information/topics on small scale dairy farming among those that should be included in the agricultural programs are messages on marketing like; where to market livestock products, prices of livestock products, Livestock feeds and how to feed the animals, livestock management practices as well as messages on livestock diseases and their control.

#### **4.3.4 Other Source of Agricultural Information on Small Scale Dairy Farming**

Respondents were asked to name other source of agricultural information on small scale dairy farming other than the radio. The study revealed that other source of agricultural information on small scale dairy farming are other farmers, traders, television, agricultural extension officers, from chiefs' baraza, magazines and newspapers. The study also found that other respondents were using information they learnt from their parents others were getting farm information from their neighbors. This was because such information from their neighbors was still relevant to them.

#### **4.4 Factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-county**

The study sought to establish the factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-county. The study findings are as presented in subsequent subheadings

##### **4.4.1 Challenges Encountered When Listening to the Radio**

The study sought to establish from the respondents whether they encountered any challenges when listening to the radio. The study findings are as shown in table 4.4 below

**Table 4.4: Challenges Encountered When Listening to the Radio**

| <b>Challenges Encountered When Listening to the Radio</b> | <b>Frequenc<br/>y</b> | <b>Percen<br/>t</b> |
|---|-----------------------|---------------------|
| Yes   | 82                    | 67%                 |
| No  | 41                    | 33%                 |
| <b>Total</b>  | <b>123</b>            | <b>100%</b>         |

Majority of the respondents (67%) agreed that there are challenges encountered when listening to the radio while the remaining 33% were on the contrary opinion. It was established that vernacular commercial radio stations being driven by profits, cannot afford to air their own sponsored agricultural programs at prime time, which is taken up by paid sponsors who broadcast sponsored programs beneficial to them. The station sponsored agricultural programs are broadcasted during off pick hours that attract few listeners hence less impact. Another major challenge for the vernacular media is the demand for more entertainment by the audience and the risk of excluding programming

on development issues. The need to make a profit rather than meet their social responsibility is a big distraction to the budding radio stations whose full positive impacts are far from being realized. The other challenge is poor signal leading audiences to tune to other radio stations broadcasting in other languages that they may not understand.

#### **4.4.2 Participation or Contribution to the Programs on Marketing of Dairy Products**

Respondents were further asked to indicate whether they participate or contribute to the programs on marketing of dairy products. Respondents' unanimously disagreed that they participate or contribute to the programs on marketing of dairy products.

However, one of the Key respondents indicated that

*“Their ongoing market research, for instance, affords the farmers the knowledge to create targeted programs and promotions designed to build the dairy categories, and that their marketing activities are extensive and varied. They are also proud to offer excellent training and knowledge acquisition programs that have been created to meet the needs of grocery store chains across the country”*

#### **4.4.3 Improvement on Marketing of Dairy Products Programs**

The study sought to establish respondent's opinion on what makers/ producers of the program can do to improve on Marketing of Dairy Products programs. Respondents were on the view that marketing of dairy products programs should be broadcasted from 7.30pm to 9.00pm because majority of the farmers are women and by 7.30 pm they are done with the house chores after days farm work and at such a time they can concentrate

listening to radio. Some of the farmers start their farming activities from 9.00am so they would wish the agricultural programs broadcasted from 7.00am to 8.30am.

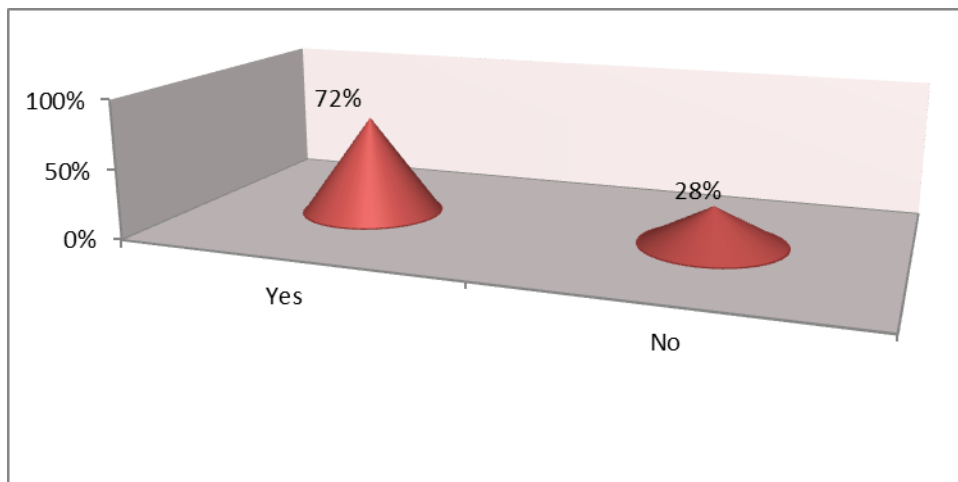
#### **4.5 Role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County**

The study sought to establish the role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County. The study findings are as presented in subsequent subheadings

##### **4.5.1 Vernacular Radio and Communicating Development Messages to Rural People**

It was the interest of the researcher to establish whether the vernacular radio is used to pass on development messages to rural people. The study findings are as depicted in Figure 4.5

Figure 4.5: Vernacular Radio and Passage of Development Messages to Rural People



Majority of the respondents (72%) agreed that the vernacular radio is used to pass on development messages to rural people, while the remaining 28% were on the contrary opinion. This implies that the vernacular radio is used to pass on development messages to rural people.

Further, when asked about what informed the radios decision to start an agricultural feature program on dairy farming, one of the radio programs indicated that

*“We have learnt from farmers who listen to our program that agricultural officers have become inaccessible locally, and therefore farmers prefer listening to them on radio whenever we invite them for a talk during the expert sessions”*

#### **4.5.2 Time allocated to dairy farming programs**

Respondents were kindly requested to indicate their opinion on whether the time allocated to dairy farming programs is enough. The study findings are as tabulated in the table 4.5 below

**Table 4.5: Time allocated to dairy farming programs**

| <b>Time allocated to dairy farming programs</b> | <b>Frequency</b> | <b>Percent</b> |
|---|------------------|----------------|
| Yes   | 48               | 39%            |
| No  | 75               | 61%            |
| <b>Total</b>                                    | <b>123</b>       | <b>100%</b>    |

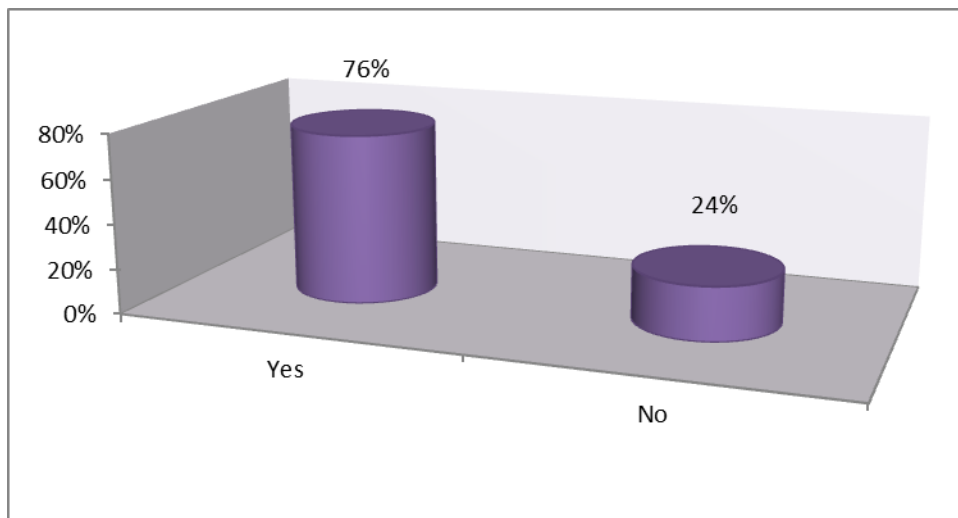
Based on the study findings, majority of the respondents (61%) were on the opinion that the time allocated to dairy farming programs is not enough while only 39% the time allocated to dairy farming programs is enough. Among the respondents who indicated that the time allocated to dairy farming programs the time that they would like to be allocated to dairy farming programs. Most of the respondents were on the view that,

instead of the long time dedicated to music and political analysis on the most of vernacular radios, farming programs should be given priority, and allocated about two to three hours of discussion on the matter. They indicated that this will enable farmers to participate in asking questions in order to clarify more on some of the issues discussed.

#### **4.5.3 Improvement of Dairy Farming Practices**

The study sought to establish whether the farmers have been able to use information from the programs to improve their dairy farming practices. The results of the findings are as shown in Figure 4.6 below

**Figure 4.6: Improvement of Dairy Farming Practices**



Based on the study findings, most of the farmers as indicated by 76% have been able to use information from the vernacular radio programs to improve their dairy farming practices while only 24% had contrary opinion. This implies that information from the vernacular radio programs with regards to dairy farming practices has really dairy farmers in boosting their farming skills and have seen the fruits of implementing what they learn.‘ From the findings, the farmers indicated that farmers were informed of the appropriate dairy farm input and outputs that help increase production, it educated

farmers on how to plan in dairy farming; it provided solutions to disease related problems and it made farmers aware about new methods of dairy farming, diseases and pests.

#### **4.5.4 New Methods of Small Scale Dairy Farming Learnt**

Respondents were kindly requested to indicate new methods of small scale dairy farming that they have learnt from the vernacular radio programs. The study established that most of farmers in Githunguri sub-county have been able to learn new dairy farming methods from vernacular radios. The farmers indicated that as a result of vernacular radios, they have been able to practice dairy organic farming whereby majority of them operate, establish and maintain livestock living conditions that accommodate the health and natural behavior of animals including: Daily access to the exercise areas, shade, outdoors, shelter, exercise areas, fresh air, direct sunlight and fresh air. Access to pasture outdoor especially in winter, shelter designed for easy maintenance, opportunity for exercise and dry bedding as well as air circulation and appropriate ventilation.

One of the key informants was quoted saying that

*“Vernacular radio programs have been very beneficial to the dairy farmers by educating them on how the animals must be able to obtain a significant portion of their daily feed intake from pasture during the grazing season”*

Additionally, vernacular radio programs have played a critical role in dissemination of critical information on appropriate animal health practices. Proper animal care requires the farmer to provide nutritious feed and forage. Livestock should be kept in a low stress environment. The researcher argues that awareness is critical to improved livestock

health. In addition, farmers must be taught on how to keep records on the health of livestock as well as treatments given.

One of the producers reported that

*“Since 2006 when one of the vernacular programs started, farmers had formed networking organizations such as farming welfare forum (FWF), where they visited each other. Secondly, they used this forum to exchange information about markets and to seek expert advice to enhance farming”*

This is an indication that since initiation of vernacular programs, small scale dairy farming in Githunguri sub-county has been able to learn more of the modern methods of small scale dairy farming which have led to the increased outputs as well as improving their status of livelihood. Further, the farmers have been enlightened about the marketing of their dairy produce which has greatly improved their farming.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Overview**

This chapter presents a summary of the key study findings, conclusions and recommendations. It also makes suggestions for further research. The findings are summarized in line with the objectives of the study which was to examine the role of vernacular radio in enhancing small scale dairy farming and marketing in Kenya: a case of Githunguri sub-county. The study sought to determine the factors that influence awareness of the role of vernacular radio programs in enhancing small scale dairy farming in Githunguri sub-County, to examine factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-County, and to examine the role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County

#### **5.2 Summary**

##### **5.2.1 Factors influencing awareness of the role of vernacular radios in enhancing small scale dairy farming**

The first objective of the study was to determine factors influencing awareness of the role of vernacular radios in enhancing small scale dairy farming. The study established that most of the people in Githunguri sub-county owned radio and thus had higher chances of listening to farming programs. In addition, it was established that the topics that are presented in dairy farmers' vernacular radios address their needs on small scale dairy farming and that vernacular radios give them more insights on modern ways of dairy farming and get inspired by other farmers who have made it in dairy farming.

The study found that agricultural information/topics on small scale dairy farming that should be included in the agricultural programs are messages on marketing like; where to market livestock products, prices of livestock products, Livestock feeds and how to feed the animals, livestock management practices as well as messages on livestock diseases and their control. The study also revealed other source of agricultural information on small scale dairy farming to include other farmers, Traders, television, agricultural extension officers, from chiefs' baraza, magazines and newspapers. In tandem with the study findings, Girard, (2001) opined that the strength of rural radio in enhancing small scale dairy farming and marketing is regarded to depend on the ability to provide information on agriculture to illiterate farmers in a local language and accent. However, reading technical information alone is not sufficient compared to dissemination of radio in local dialect. Radio communication is effective in organizing for programs where farmers discuss their various issues about dairy farming in their communities. Additionally, radio communication contextualizes problems in the cultural and ecological environments. On the other hand, other methods of disseminating information such as extension services have been widely criticized for their ineffectiveness in contextualizing content especially in developing countries. Vernacular radio not only reach a large number of listeners but also disseminates information that is relevant to the listeners. Consequently, programs can be designed to be participatory and contextualized on the local ecological and cultural environment.

### **5.2.2 Factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-county**

The second objective of this study was to examine the factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-county. The study established that vernacular commercial radio stations being driven by profits, cannot afford to air their own sponsored agricultural programs at prime time, which is taken up by paid sponsors who broadcast sponsored programs beneficial to them. The station sponsored agricultural programs are broadcasted during off peak hours that attract few listeners hence less impact. Another major challenge for the vernacular media is the demand for more entertainment by the audience and the risk of excluding programming on development issues. The need to make a profit rather than meet their social responsibility is a big distraction to the budding radio stations whose full positive impacts are far from being realized. The other challenge is poor signal leading audiences to tune to other radio stations broadcasting in other languages that they may not understand. In tandem with the study findings Girard, (2001) revealed that vernacular radio broadcasting has been overshadowed by players who do not belong to the community broadcasting category. These usually have more financial muscles, often protected by the strong political backings owing to their ownership or loyalty to the government, have more broadcasting flair because they can afford the latest broadcasting technology and use local languages, thus winning the very audiences that community broadcasters are trying to reach. Seemingly, this has muted true community broadcasters and forced them to play second fiddle in a very competitive broadcasting market.

In addition, the study found that marketing of dairy products programs should be broadcasted from 7.30pm to 9.00pm because majority of the farmers are women and by 7.30 pm they are done with the house chores after days farm work and at such a time they can concentrate listening to radio. Some of the farmers start their farming activities from 9.00am so they would wish the agricultural programs broadcasted from 7.00am to 8.30am.

### **5.2.3 Role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County**

The third objective of this study was to examine the role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County. The study found that the programme explained well the modern techniques to farmers, educated farmers on better farming methods, helped the farmers to know more about issues they did not understand and this improved the quality of their production. It was also established that instead of the long time dedicated to music and political analysis on the most of vernacular radios, farming programs should be given priority, and allocated about two to three hours of discussion on the matter. In addition, the study revealed that information from the vernacular radio programs with regards to dairy farming practices has really helped dairy farmers in boosting their farming skills and have seen the fruits of implementing what they learn.‘ Farmers were informed of the appropriate dairy farm input and outputs that help increase production, it educated farmers on how to plan in dairy farming; it provided solutions to disease related problems and it made farmers aware about new methods of dairy farming, diseases and pests. Similarly, Mwangi (2014) carried out a study titled; Radio and agricultural development: An influence assessment of the program Mugambo

Wa murimi on farming practices of farmers in Gatanga constituency had many benefits to farmers. The researcher found that farmers had adopted new farming practices suggested in the program-‘ Mugambo wa murimi’ which included; storage of folder, artificial insemination, horticulture, green house farming, grafting of fruit trees, growing cabbages using sacks, fighting crop pests and diseases among others.

It was also noted that as a result of vernacular radios, dairy farmers have been able to practice dairy organic farming whereby majority of them operate, establish and maintain livestock living conditions that accommodate the health and natural behavior of animals .Further, it was noted that vernacular radio programs have been effective in educating the farmers on livestock health care practices. Other two similar studies by Ronoh (2013) and Chemwaina (2014), using Kass FM, as their case study found that the station was of benefit to rural farmers in rift valley as they could get information through the agricultural programs initiated by the station as well as sponsored ones by different institutions, NGOs and the government departments. Such benefits included updates on market prices, new crop varieties, market demand for certain farm produce, beneficial farm produce for both household consumption and sale, information on crop insurance and agricultural loans.

### **5.3 Conclusions**

In connection to factors influencing awareness of the role of vernacular radios in enhancing small scale dairy farming, the study concludes that most of the people in Githunguri sub-county owned radio and that the topics that are presented in dairy farmer’s vernacular radios address their needs on small scale dairy farming. The study also concludes that agricultural information/topics on small scale dairy farming that

should be included in the agricultural programs are messages on marketing like; where to market livestock products, prices of livestock products, livestock feeds and how to feed the animals, livestock management practices as well as messages on livestock diseases and their control.

With regard to the factors hindering use of vernacular radios in enhancing marketing in Githunguri sub-county the study concludes that vernacular commercial radio stations being driven by profits, cannot afford to air their own sponsored agricultural programs at prime time, which is taken up by paid sponsors who broadcast sponsored programs beneficial to them. The station sponsored agricultural programs are broadcasted during off peak hours that attract few listeners hence less impact. Another major challenge for the vernacular media is the demand for more entertainment by the audience and the risk of excluding programming on development issues. The need to make a profit rather than meet their social responsibility is a big distraction to the budding radio stations whose full positive impacts are far from being realized. The other challenge is poor signal leading audiences to tune to other radio stations broadcasting in other languages that they may not understand.

With regard to the role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County, the study concludes that the programme explained well the modern techniques to farmers, educated farmers on better farming methods, helped the farmers to know more about issues they did not understand and this improved the quality of their production. In addition, the study concludes that information from the vernacular radio programs with regards to dairy farming practices has really helped dairy farmers in boosting their farming skills and have seen the fruits of implementing what they learn.’

Farmers were informed of the appropriate dairy farm input and outputs that help increase production, it educated farmers on how to plan in dairy farming; it provided solutions to disease related problems and it made farmers aware about new methods of dairy farming, diseases and pests.

The study concludes that the government should offer support in broadcasting of agricultural programs in different commercial vernacular radio stations. This can be done through offering subsidies or tax waiver to those media houses broadcasting agricultural programs so that they can broadcast these agricultural programs at the appropriate time for the listeners. County governments should facilitate extension so as to supplement the information already delivered through radio to farmers in different parts of their wards. This should be done by having transport allowances being allotted in the budget allocations.

#### **5.4 Recommendations**

Based on the findings of the study, the following recommendations were made: This study established that some farmers were not comfortable with the time the programme was aired. This study therefore recommends that the programme time should be prolonged, to allow time for question and answers

Radio stations should bring out the extension service by organizing agricultural field days accompanied by experts in various fields of profession to demonstrate practically what they broadcast on radio issues that could be more complex to farmers.

Farmers should be exposed to a wide variety of information sources to help them get information about improved technologies so as to enhance the adoption of new

innovations. The KDB, other research institutions should work together to ensure information reaches the farmers. This would lead to increased yield.

#### **5.4 Recommendations for Further Studies**

There is need for further research to critically analyze other factors affecting the adoption of technologies among smallholder dairy producers. This will provide further solutions to low technology adoption among smallholder dairy farmers which has led to a wide gap between research and actual farm yields.

## REFERENCES

- Anam, C. (2013). *The Role Of Vernacular Radio In Peace Building In Kenya: Case of Radio Mayienga in Kondele Kisumu* (Doctoral dissertation, University of Nairobi).
- Baran, S. (2006) *Introduction to mass communication* (fourth edition). Mcgraw Hill
- Buckley, S. et al. (2008) *Broadcasting Voice and Accountability: A public interest approach to policy, law and Regulation*. University of Michigan Press. USA
- Butunyi, C. (2011). Curse or Blessing? Radio Industry chew over Technological Changes. Daily Nation Newspaper, August 6, 2011. Printed by Nation Media Group Limited, Nairobi, Kenya
- Chadra, R. (2004) *Communication media and Social Changes*. Insha Books. India
- Chakraborty, D. (2009) *Research Methodology*. Lotus Press, New Delhi, India Chapman, R., Blench, R., Kranjac-Berisavljevic" , G. & Zakariah, A.B.T. (2003).
- Dennis, E & Defleur, M. (2002) *Understanding mass communication – Aliberal arts perspective*. Houghton Mifflin Company. USA.
- Gathigi, G. (2009) *Radio listening habits among rural audiences*. Ohio University an Ethnographic Study of Kieni West Division in Central Kenya. Ohio University
- Girard, B. (2001). *The challenges of ICTs and rural radio*. In First International Workshop on Farm Radio Broadcasting (pp. 19-22).
- Githethwa N., (Ed), (2008). *The way forward for community Radios in Kenya*. Nairobi; Econews Africa.

- Githiora, L. W. (2015). *Factors influencing the growth of small-scale dairy farming: a case of Githunguri constituency, Kiambu County, Kenya (Doctoral dissertation, University of Nairobi).*
- GoK. 2010. Kenya 2009 Population and Housing Census Highlights FAO (2011).  
Government of Kenya (2008). *Sessional Paper of the National Livestock policy Interdisciplinary Journal, 5, 2011, ISSN*
- Khanal, S. R. (2013). Role of radio on agricultural development: A review. *Bodhi: An Interdisciplinary Journal, 5(1), 201-206.*
- Kiplang'at, J. (2004). *Diffusion of information and communication technologies in communication of agricultural information among agricultural researchers and extension workers in Kenya (Doctoral dissertation).*
- KNBS (2013) Ratified Report on National Assembly Constituencies and County Assembly Wards order.
- Mbugua, D.K. et al (2012). *Information access and rating of delivery pathways by smallholder dairy farmers in central Kenya.* KARI, Naivasha
- McKenzie, R. (2006). *Comparing Media From Around the World.* Boston: Pearson.
- McLeish, R. (2005). *Radio Production.* 5th ed. Amsterdam: Focal Press
- Mefalopulos (2003) *.Participation. The New Tyranny?* London: Zed Books
- Mody, B. (2011). *Designing Messages for Development Communication.* New Delhi, India: Sage Publications.
- Mugenda, O & Mugenda, A. (1999) *Research Methods.* Acts Press Nairobi

- Mwangangi, M. (2012). *Commercial vernacular radio stations and food security in Machakos County: a case of Musyi FM* (Doctoral dissertation, University of Nairobi).
- Myers, M. (2008) *Radio and Development in Africa*. A concept paper: Prepared for the International Development Research Centre (IDRC) Canada
- Nazari, M & Hazbullah, A. (2010) Radio as an Educational media: impact on agricultural Development. *The Journal of the South East Asia Research Centre for Communication and Humanities* (SEARCH) Vol 2, 2010 pp13-20
- Nazari, M. R. & Hassan, A. (2010). Radio as an Educational Media: Impact on Agricultural Development. *The Journal of the South East Asia Research Centre for communication and humanities*. Vol. 2. pp.13
- Odira, R. A. (2014). *The role of radio broadcasting in enhancing farm production in rural Kenya: a case of radio Nam Lolwe in Kakelo location, Homa Bay County* (Doctoral dissertation, University of Nairobi).
- Okigbo, C. (1996) *Development Communication Principles*. Icipe Science Press. Nairobi, Kenya.
- Olowu, T.A and Oyedokun, O.A (2000).’ *Farmers’ Accessibility of Agricultural Marketing Information: The Case of Oyinladun Radio Programme’ Rural Development*. Vol. 14, No. 1, pp.109 – 125
- Orao, J. (2016). *The Kenyan indigenous languages and the mass media: Challenges and opportunities*. Stellenbosch Papers in Linguistics PLUS, 38, 77-86.
- Polonsky, M. (2010) *Designing and Managing a Research Project*. SAGE, India

*Rural Radio in Agricultural Extension: The Example of Vernacular Radio Programmes on Soil and Water Conservation in Ghana.* Agricultural Research and Extension Network Paper No. 127. (DFID), London.

SDP Smallholder Dairy Project, (2005). *The Uncertainty of Cattle Numbers in Kenya.* Policy Brief Number 10. Smallholder Dairy Project. Nairobi

SDP Smallholder Dairy Project. (1996) ILRI/KARI/MoALDM, Pilot Survey of Household and Dairy Production Systems Characteristics in Kiambu District, Kenya

Strampickal, J. (2006) *Development and Participatory Communication.* A Quarterly review of communication research. Volume 25. Rome. Italy

Steeves, H. & Melkote, S. (2001) *Communication for Development in the third world.* SAGE. India

Tufte, T. & Mefalopulos, P. (2009). *Participatory communication.* A research practical guide. Working paper N0. 170. Washington, DC: The World Bank

Van den Ban, A.W, and Hawkins, F.A (1992). *Agricultural Extension,* Longman Sci Technical, England

Wekesa B. (2009) *Radio, radio everywhere.* *The Media Observer.* The Media Council of Kenya, (November-December 2009).

Williams, K. (2003). *Understanding Media Theories.* London; Arnold publishers

## APPENDICES

### APPENDIX 1: RESEARCH QUESTIONNAIRE

Dear Respondent,

I am Kamande Martin Ndungu, a postgraduate student at The University Of Nairobi carrying a research on impact of vernacular radio in enhancing small scall dairy farming and marketing in Kenya: a case of Githunguri sub-County. The research is for academic purpose and all the information provided will be treated with utmost confidentiality.

**Instructions:** Place a tick (/) in the bracket in front of the most appropriate response.

Where explanation is required, use the space provided. **DO NOT WRITE YOUR NAMES ANYWHERE IN THIS DOCUMENT.**

#### SECTION A: GENERAL INFORMATION

##### 1. Gender

Male [ ]

Female [ ]

##### 2. Please indicate your age bracket

Below 25 years [ ]

25-35 years [ ]

36-45 years [ ]

46-55 years [ ]

56- 65 years [ ]

3. What is your highest level of education?

No education [ ]

Primary education [ ]

Secondary education [ ]

College education [ ]

Undergraduate [ ]

4. How often do you listen to the radio?

.....

## **SECTION A**

### **Factors influencing awareness of the role of vernacular radios in enhancing small scale dairy farming**

5. Who owns the radio set that you listen to?

a) Self [ ]

b) Family [ ]

c) Friends [ ]

d) Community [ ]

6. Do you think the topics that are presented address your needs on small scale dairy farming?

Yes [ ] No [ ]

If yes please explain.....

.....

7. What agricultural information/topics on small scale dairy farming would you like to be included in the agricultural programs?

.....  
8. Apart from radio which is your other source of agricultural information on small scale dairy farming?  
.....

**SECTION B**

**Factors hindering use of vernacular radios in enhancing marketing in Githunguri-sub County**

8. Do you encounter any challenges when listening to the radio?

Yes [ ] No [ ]

If yes what are the challenges encountered.....

9. Do you participate or contribute to the programs on marketing of dairy products?  
.....

10. What do you think the makers/ producers of the program can do to improve on these programs?  
.....

**SECTION C**

**Role of vernacular radios in enhancing small scale dairy farming in Githunguri sub-County.**

11. Is the vernacular radio used to pass on development messages to rural people?

Yes [ ] No [ ]

12. Do you think the time allocated to dairy farming programs is enough Yes [ ] No [ ]

If no how long would you like it to be.....

13. Have you been able to use information from the programs to improve your dairy farming practices?

Yes [ ] No [ ]

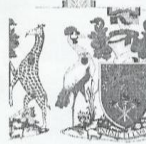
14. Which new methods of small scale dairy farming have you learnt from the programs?

.....  
.....

**APPENDIX II. INTERVIEW GUIDE FOR PRODUCERS OF THE  
AGRICULTURAL PROGRAMMES**

1. What informed your decision to start an agricultural feature program on dairy farming?
2. When does the program go on air and why did you choose that particular transmission time?
3. How do you decide on what content to present to the farmers every day?
4. Who are the resource persons in the program?
5. How do you think the program has helped farmers to improve their dairy farming and marketing practices?

**APPENDIX III. FIELDWORK CERTIFICATE**



**UNIVERSITY OF NAIROBI  
COLLEGE OF HUMANITIES & SOCIAL SCIENCES  
SCHOOL OF JOURNALISM & MASS COMMUNICATION**

Telegram: Journalism Varsity Nairobi  
Telephone: 254-02-3318262, Ext. 28080, 28061  
Director's Office: 254-02-2314201 (Direct Line)  
Telex: 22095 Fax: 254-02-245566  
Email: [director-soj@uonbi.ac.ke](mailto:director-soj@uonbi.ac.ke)

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 8<sup>TH</sup> JULY 2016 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: K50/74077/2014

Name: KAMANDE MARTIN NDUNGU

Title: THE ROLE OF VERNACULAR RADIO IN

ENHANCING SMALL SCALE DAIRY FARMING AND MARKETING  
IN KENYA: A CASE OF GITHUNGURI SUB-COUNTY

Dr. Neeth Neeth  
SUPERVISOR

MM  
SIGNATURE

11.8.2016  
DATE

Dr Samuel Sinngi  
ASSOCIATE DIRECTOR

[Signature]  
SIGNATURE

11.8.2016  
DATE

Dr. Neeth Neeth  
DIRECTOR

[Signature]  
SIGNATURE/STAMP

12.8.2016  
DATE

**APPENDIX IV. CERTIFICATE OF CORRECTIONS**



**UNIVERSITY OF NAIROBI  
COLLEGE OF HUMANITIES & SOCIAL SCIENCES  
SCHOOL OF JOURNALISM & MASS COMMUNICATION**

Telegram: Journalism Varsity Nairobi  
Telephone: 254-02-3318262, Ext. 28080, 28061  
Director's Office: 254-02-2314201 (Direct Line)  
Telex: 22095 Fax: 254-02-245566  
Email: [director-sol@uonbi.ac.ke](mailto:director-sol@uonbi.ac.ke)

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

**REF: CERTIFICATE OF CORRECTIONS**

This is to certify that all corrections proposed at the Board of Examiners meeting held on 29/11/2016 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: KSO/74077/2014

Name: WAMANDU MARTIN NDUNGU

Title: ROLE OF VERNACULAR RADIO IN ENHANCING SMALL SCALE DAIRY FARMING AND MARKETING IN KENYA IN GITHUNGURI SUB-COUNTY

|     |                          |                 |                   |
|-----|--------------------------|-----------------|-------------------|
| for | <u>Dr Samuel Sirangi</u> | <u>Sirangi</u>  | <u>14/11/2016</u> |
|     | SUPERVISOR               | SIGNATURE       | DATE              |
|     | <u>Dr Samuel Sirangi</u> | <u>Sirangi</u>  | <u>14/11/2016</u> |
|     | ASSOCIATE DIRECTOR       | SIGNATURE       | DATE              |
| for | <u>Dr Samuel Sirangi</u> | <u>Sirangi</u>  | <u>14/11/2016</u> |
|     | DIRECTOR                 | SIGNATURE/STAMP | DATE              |

# APPENDIX V. PLAGIARISM REPORT

11/10/2016

Turnitin Originality Report

Turnitin Originality Report

ROLE OF VERNACULAR RADIO IN ENHANCING SMALL SCALE DAIRY FARMING AND MARKETING  
IN KENYA IN GITHUNGURI SUB-COUNTY by Martin Kamande Ndungu

From Project Final & Corrections (MA Communication theory)

- Processed on 07-Nov-2016 08:33 EAT
- ID: 733221057
- Word Count: 11347

Similarity Index

9%

Similarity by Source

Internet Sources:

8%

Publications:

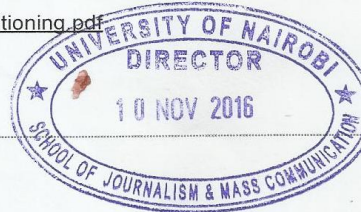
1%

Student Papers:

5%

## sources:

- 1 1% match (student papers from 20-Nov-2014)  
[Submitted to Napier University on 2014-11-20](#)
- 2 1% match (Internet from 11-Apr-2015)  
<http://www.managementparadise.com/dharmikmoni/documents/23181/research-project-on-effectiveness-of-internet-advertising-on-consumer-behaviour/>
- 3 1% match (Internet from 21-Feb-2013)  
<http://www.questia.com/library/1G1-148565540/development-and-participatory-communication>
- 4 < 1% match (Internet from 27-Aug-2014)  
<http://rana-bcdairy.blogspot.ch/>
- 5 < 1% match (Internet from 16-Jan-2015)  
<http://chss.uonbi.ac.ke/sites/default/files/chss/STEPHEN%20ODHIAMBO%20WORD%20DOCUMENT.doc>
- 6 < 1% match (Internet from 18-Nov-2006)  
<http://www.nofavt.org/programs/dairy-transitioning.pdf>
- 7 < 1% match (Internet from 08-Jun-2015)



# APPENDIX VI. DECLARATION OF ORIGINALITY

## 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 KAMANDE MARTIN NDUNGU

Registration Number K50174077/2014

College OF HUMANITIES & SOCIAL SCIENCES

Faculty/School/Institute JOURNALISM & MASS COMMUNICATION

Department SOJ

Course Name M.A COMMUNICATION

Title of the work ROLE OF VERNACULAR RADIO IN ENHANCING SMALL SCALE DAIRY FARMING AND MARKETING IN KENYA IN QITHUNGURI SUB-COUNTY

### DECLARATION

1. I understand what Plagiarism is and I am aware of the University's policy in this regard
2. I declare that this PROJECT (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 [Signature]

Date 14/11/2016

