

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Radio is a reliable and efficient mode of communication. This strategy is not only effective but also cost-effective. It has shown to be an effective way of communication in rural areas due to its low cost, ease of use (even for those with no education), and reliance on the native language(s). Seventy percent% of homes in rural areas have a radio that is regularly tuned in. Due to the fact that it is easily available, uncomplicated, and uncomplicated to use, radio is the only source of information for a significant number of the world's poorest people (Buckley et al 2008). Agriculture is Pakistan's primary economic driver, supporting the bulk of the country's people. Agriculture contributes a significant amount to the gross domestic product of Pakistan. The deterioration of agriculture that occurs each year is quite unfortunate. The average yield of significant crops such as rice, wheat, cotton, maize, and sugarcane is extremely low when compared to that of other industrialized countries (Ahmed, 2015). Increases in crop yield have been found to have a strong correlation with the familiarity of ancestors with newly developed agricultural discoveries and technologies. Radio is a useful medium for the dissemination of information that can contribute to the improvement of rural areas and agricultural practices. Radio is an incredible, low-cost medium that can help raise people's awareness. (Farm Radio International, 2007). As a result of the emergence of a program that are specifically centered on agriculture, radio and television in Pakistan have played a vital part in drawing attention to and providing updates regarding the agricultural plenty. The radio has the potential to be one of the most essential tools for communicating with a large number of people for a variety of reasons. Radio transmissions are instantaneous and may readily be modified to accommodate any changes in the environment. It affects an extremely high percentage of the population. Through the incorporation of the comforting sound of a human voice, it is able to circumvent the challenges that are inherent to reading printed text. When it comes to the procedure for adopting a child, radio is particularly effective at generating both awareness and interest (Behrens and Evans, 1984). The most common ways that people get their news and entertainment in Pakistan are through the use of the radio and television. It is highly improbable that printed materials will be able to properly reach residents

of rural areas due to the general lack of literacy. Radios make it possible for people who do not have access to televisions or electricity to still keep up with the latest news in real-time (Ayaz, 1993). Radio is incomparable to any other medium when it comes to the exploratory stage of the learning process. Radio is frequently the quickest, most efficient, and only choice available when it comes to communicating with individuals who live in rural places. Agriculture development largely depends on sharing the data and knowledge concerning new techniques and technologies that are cheap and easy to excess. Nowadays farmers have much need to get information about new technologies and upcoming pesticides, the use of pesticides, and diseases by media (Prathap, 2010). Media inform the formers about the weather, use of pesticides, flood situations, and environmental changes (Mohammad, 2005). According to Sharma (2008), radio is a reliable medium and covers a wider area and can reach a large number of the population. The power of radio as a means of communication its cheap in terms of sending and displaying and portability. Radio plays a vital role in agriculture development, agriculture programs are daily broadcast in which agriculture experts, development officers, and stake holders are teach formers to adopt new methods of agriculture. Agriculture programs are daily broadcast from 8 radio stations daily which includes the season about sowing seeds, and harvesting crops. Tool free Punjab Agriculture helplines (0800-15000 and 0800-29000) are working for the facilitation of formers. Different shows about agriculture development are broadcast to different cities of Pakistan like Zarkhaiz Pakistan from Islamabad, tery hull halwagey from Lahore, UtumKhaiti from Multan, Thallsinghar from Mainwali, Wasderehn Gran from Rawalpindi, Wasde rehn Kisan from Sargodha, Dharti Bakht Bahar from Bhawalpur and Sandhal Dharti from Faisalabad. These radio programs inform them which weather best is for cultivating of the crop. The agriculture experts inform them the time watering the crop. It informs about the use of pesticides and fertilizers and also informs the effect of these pesticides. As due to the change of weather the production level is reduce as many crops need sunlight and water. But due to weather change the formers need the information to cultivate new crops, radio play a vital role to give this information to the formers through which the production level increase.

Radio has the capacity to quickly distribute information about agriculturally relevant technology transfer within the farming community because it is one of the types of mass media that is used the most. It is impossible to contest the conclusions of Okwu et al. (2007), which state that radio programmes that are

focused on agriculture are of great benefit to listeners. Farmers continue to rely heavily on radio communication, particularly those who live in remote areas. Traditional media such as radio and newspapers are still widely used by farmers because of their ability to assist convey information to farmers in distant regions, develop farmers' knowledge and capabilities for the future of agriculture, and eventually raise agricultural productivity (Ani and Cake, 2009). In the same way as radio is one of the simplest ways of disseminating agricultural, technical, and scientific information to farmers, one could argue that the mass media are currently the most important communication instruments that are available (Murty & anomaly, 2012). In developing nations, radio has become an indispensable tool for human interaction. (FOA, 2001) Proper market info is that the basic want of farmers as result of it permits farmers to form relevant and correct selections (Ozowa, 1995; Leroux et al., 2001). Market information enables the farmers to make decision regarding what to produce, how to produce and whether to store the products or not (FAO, 2005). Radio is a strong tool in disseminating the agricultural information. In developing countries market information initiative is the part of agriculture and agro business strategies that government paid attention (Haerah et al., 1979; Lutz, 2006). Hussain (1997) states that radio and TV are the most effective tool of communication. The effectiveness of Radio about agriculture programs cannot be forget, most of formers like to listen agriculture programs (Okwu et al., 2007). The study of (Wedell, 1986) reveals that radio is a dominating tool for change in culture, development, health issues, and for better agricultural development. A study conducted by Atkin (1987) in Canada explore that more than 100 million villagers listen farm based local network radio. Rein (1988) states that regional radio programs are favorite among people because they are in their languages. The study result of (Kelsey and Hearne, 1955) states that the villagers who don't participate in social meetings and rarely use technology meet their informative needs through radio. The study results of (Arokoyo, 2003) conducted in Nigeria proved that video, TV and radio are the major sources of farmers to get information. Information sources for farmer's square measure TV, radio, publications, sensible education, newspapers, agriculture exhibitions and extension employees (Ekoja, 2003). Radio may be a best supply to disseminate data regarding wheat, seed and soil (Fassard, 2005), Saadi et al., 2008). Education and the introduction to fresh concepts are also essential to the development of rural communities. Farmers are particularly well-suited to profit from this information due to their extensive prior experience in the region. The widespread sharing of knowledge, in

conjunction with innovative approaches to farming, will make available to farmers a wealth of fascinating new opportunities (Mohammad Retz Nazn and Hasan Harbullah, 2010, pp. 13-20). The timely and pertinent messages that are broadcast on agricultural radio shows make it simple to communicate with a large number of individuals, whatever their location, socioeconomic standing, or any of the other elements that may be at play (Omenesa, 1994). Radio programs have been utilized in nations both wealthy and less developed to transmit agricultural knowledge with the goal of boosting farmers' productivity. The goal of these programs is to improve farmers' productivity (Enitan, 1988). Farmers still widespread rely on traditional media like radio and television. (Ani& cake 2009). Radio is effective for giving agriculture, technical,scientific info to the formers. (Murty & Allbino, 2012).

Radio plays a vital role in agriculture development. Radio is a very cheap medium for getting information, it is also accessible in rural areas. The main reason to choose this topic is that many researches done research on the role of radio in agriculture development but no research done in the rural areas of Multan. Radio gives information about new agriculture technologies, the researcher conducting research to know the effectiveness of this information and how much people use these technologies.

1.2 Statement of the Problem

The farmers need a considerable quantity of information and services on the supply of inputs, new technologies on farming; early warning related to natural disasters, market supply and demand, its price and the information on competitors and mobile is an important tool of information dissemination. But a few farmers refuse to use these new technologies due to their ignorance and low level of literacy. Ignorance and low level of literacy for which they have to be guided and motivated adequately for the effective use of these techno devices, which ultimately leads to the benefit of farmers.

1.3 Research Questions

From the objectives of the study the following research questions were formulated to guide the conduct of this study.

1. What is the role of agriculture experts in the adaptation of new technologies?
2. What is the role of radio in giving awareness about right use of pesticides?
3. What is the usefulness of agriculture programs to the farmers?

1.4 Objectives of the Study

The broad objective of this study is to examine the impact of radio on agricultural development in Ilorin metropolis, Kwara state.

The specific objectives of the study are:

1. Examine the role of agriculture experts in the adaptation of new technologies.
2. Determine the role of radio in giving awareness about right use of pesticides.
3. Examine the usefulness of agriculture programs to the farmers.

1.5 Research Hypotheses

1. It is more likely that agriculture experts' opinions in agriculture programs of radio play vital role for the adaptation of new agriculture technologies.
2. It is more likely that role of agriculture alerts on radio are useful to prevent the seasonal losses in crops harvesting.
3. It is more likely that agriculture programs are much useful for the farmers

1.6 Significance of the Study

The study on the " impact of radio on agricultural development in Ilorin metropolis, Kwara state" holds significant importance for various stakeholders including, framers, government, entrepreneurs and business owners, economic ecosystem, academicians, policy makers etc., each of whom can benefit in distinct ways.

To the framers, understanding the impact of radio on agricultural development in Ilorin metropolis, Kwara state. This can directly contribute to their sustained growth and success. The

study can provide insights into strategies and practices that improve bootstrapping, leading to better overall performance. Framers often face various challenges, including economic fluctuations and market uncertainties. By identifying the relationship between impact of radio on agricultural development in Ilorin metropolis, framers can develop proactive measures to mitigate risks and adapt to changing conditions effectively.

Entrepreneurs and business owners can use the study's findings to make informed decisions about their organizational structure, resource allocation, and risk management strategies. impact of radio on agricultural development in framing SMEs can guide them in building robust and adaptable business models.

Investors and financial institutions can use the study's outcomes to assess the impact of radio on agricultural development in farm production before making investment decisions. This knowledge can aid in identifying businesses with a higher likelihood of sustained performance and lower vulnerability to economic downturns.

The study can inform government agencies and policymakers about the importance of fostering resilience among farmers. Industry associations and support organizations can use the study to design training programs and resources that focus on enhancing resilience strategy within their business memberships. This can contribute to building a more resilient and competitive farm sector.

To the economic ecosystem, the study's insights can contribute to the overall stability of the economic ecosystem by encouraging farmers. Farming business can act as a buffer during economic downturns, preventing widespread negative impacts on employment and overall economic health.

Researchers and academics can benefit from the study by expanding the existing body of

knowledge on impact of radio on agricultural development. This can lead to further research avenues and a deeper understanding of the intricate dynamics impact of radio on agricultural development in Ilorin metropolis, Kwara state.

1.7 Scope and Limitation of the Study

This study focuses on investigating the impact of radio on agricultural development in Ilorin metropolis, Kwara state, Nigeria. The study specifically targets farm owners operating within Ilorin metropolis, Kwara State, Nigeria. It focuses on farmers because farming has been known to be a business with high rate of death, slow growth and minimal survival especially in a developing country like Nigeria (Olowofeso, & Oyedele, 2021).

The population of this study comprises of 200 farmers within the metropolis Nigeria. Random sampling technique would be used to select 2 local government within the metropolis. Questionnaire “impact of radio on agricultural development in Ilorin metropolis, Kwara state (IRADIM)” would be used to collect data from the respondents while data collected would be analyzed using mean deviation, standard deviation and t-test.

1.8 Clarification of Major Terms and Variables

1. **Agriculture:** is the backbone of the economy of our country. It provides food and raw material. Agriculture provides employment opportunities to a very large percentage of the population. To increase in agriculture production there is a need to give information about new technologies about harvesting, sowing seed, the right use of pesticides, and change in weather to the formers.

2. **Radio:** is easy access to the formers. As in rural areas there is electricity issues, people can't get information from other sources, as solar energy systems are used in radio. It provides information about every aspect of agriculture.

CHAPTER TWO

LITERATURE REVIEW

2.1 Community Radio Broadcasting in Agricultural

2.2 Theoretical Framework

2.3 Conceptual framework

2.4 Appraisal of Literature Reviewed

2.1 Community Radio Broadcasting in Agricultural

Mass communication has generated very vital useful knowledge on agriculture dissemination of information along with new concepts and farming techniques can bring opportunities to the farmers (Mohammad, 2013). Radio has been proved as an important tool for enhancement of agriculture in the rural areas it is powerful and an effective medium to project the information and knowledge related to agriculture. Nakabugu (2014) Sharma (2014) radio is a reliable medium that can cover wider areas and can reach a large number of people. The strength of radio as the medium of communication is that it is cost effective in terms of transmission on presentation and portability. Radio can be a useful medium in educating farmers. It appeals to them with new programs having modern agricultural technologies. However, the literacy of farmers is important to understand such programs and apply them appropriately (Mohammad & Hazbullah, 2013).

As rural farmers themselves participate in the radio programs, they become more interesting and effective because of the feeling of ownership. The message and information related to agriculture can be provided using radio. According to Nakabugu (2014), information on better farming methods, improved seeds, timely planting, agro-forestry, better harvesting methods, soil conservation, marketing, post-harvest handling and diversification. Nakabugu (2014) states that rural radio gives farmers an opportunity to interact with each other and other relevant authorities“ like extension workers, crop and animal experts through format like live talk shows, phone in programs and on location broadcasts. The absence of functional agricultural information delivery system has therefore been identified as a major constraint to agricultural development in least developed and developing countries grapple with insufficient personnel and funding of agricultural extension services (Aina, 2013). Chamala (2013) noted that such a

conversion of new technologies and scientific discourses will depend to a great extent on the speed with which they are transferred from its source to the ultimate unit of its utilization so that the peasant user clearly understands, accepts and supplies it in their day-to-day practices. This in turn demands a suitable and effective communication strategy that will involve the masses to participate in the development issues affecting their lives which later contributes to national development (Agwu, et al., 2015). Agricultural information is a critical ingredient to improving small-scale agricultural production especially among peasant farmers consequently leading to improved rural livelihoods food security and national economies. Improvement of agricultural productivity will be realized when farmers are linked to Agricultural information about farm inputs and markets to their produce.

Kenya's approach to agricultural and rural development is enshrined in its modernization of agriculture plan which calls for a shift from traditional agriculture to a technologically based scope to ensure food security (Nakabugu, 2014). The challenge experienced in achieving this goal centrally lies in its communication strategy as a denominator to cause change. This calls for communication approaches that target and involve the rural communities since they depend on Agriculture for their livelihood. Nazari and Hazbullah (2013) noted that a large number of innovations in farming as well as other areas are being released and commercialized to the rural people particularly the farmers, by different communicators and through a variety of channels. But the effects of such communications have not been quite as pronounced as one might expect (Crouch, 2015). This is evidenced by the rural peoples generally inadequate knowledge, understanding, skills and sometimes negative attitude relating to change. Many subsistence farmers therefore, are not reached with information believed to be of value to them (Hornik, 2014). This makes them either to delay or take no action at all with regard to the suggested

innovation. The increasing number of radio sets and radio stations in developing countries indicates that radio broadcasting can play a strong role in rural development. The effectiveness of this medium can be further enhanced if radio stations are localized and geared to programming that meets the specific interests and needs of their “special audiences (Nazari, & Hazbullah, 2013). However, radio cannot be singly used to reach rural farmers. Projects that depend on a single medium to reach their audiences may find that some parts of the audience is inaccessible, does not understand, nor use the medium as a stimulus for practice change (Nazari, & Hazbullah, 2013). Therefore, there is need to use multiple channels. Since they have a higher probability of success, both because different channels serve different needs. In the knowledge stage, as individuals become aware of an innovation, they rely on mass media such as radio; and as they move toward a decision, they tend to rely on personal sources such as extension services, farm group discussions (Quail, 2012). Agricultural information dissemination therefore is an important aspect in quest to improve agricultural productivity both in Africa and specifically Kenya, and several channels have been used for this purpose. They include; Extension Officers, Pamphlets, field days, Newspapers, TV, Radio and many more (Hawkins, 2018). Vernacular radio broadcasting becomes ideally best placed to provide this kind of information to its listeners, especially subsistence farmers because majority of them live in rural areas, practice agriculture as a source of livelihood, and might not have an in-depth understanding of English and/or Swahili that have been recognized and used in the public domain (Quail, 2015). Millions of livelihoods in majority of the Kenyan rural areas depend highly on agriculture which is in small scale Dey et al (2018). Borabu Sub County is primarily occupied by small-scale farmers whose main enterprise is majorly subsistence crops which serve as the main family food supply with the surplus of tea being sold through complex and unfair marketing chains for income

generation (Srampickal, 2013). As a result, local farmers have suffered the effects of poor communication channels that have been used to reach them with the agricultural information on farm inputs such as fertilizers, approved seeds, weather conditions, market and other important information that are essential in maize productivity. This has contributed to poor farm maize productivity and expansion of investment in agriculture in rural areas (Munyua, 2017). This situation has been so because such information has been disseminated by those FM radios using the national languages that are perceived by rural population as secondary and remote from their immediate needs and daily living, leading to a large section of the citizenry missing much of what is of their benefit (Orao, 2016). The role of agricultural information in maize productivity has been a major concern to rural development stakeholders (The National Policy Vision 2030 Republic of Kenya, 2010). Despite the concerted efforts to implement agricultural strategies, maize productivity still continues to affect this sector. This is because the rural population contributing majorly to agricultural sector has become inaccessible with the relevant information they need, a concept that has not been factored in this National policies. Therefore, there is need to link rural farmers in Borabu with the relevant agricultural information through community Radio in particular Kisima in Nyamira county. A survey conducted by the National Sample Survey Organization in June (2005) revealed that only 40% of farming households have access to information about modern farming technologies. Similarly the cost of delivering information face-to-face in the public sector is very high. This crumbling extension network can be strengthened by the use of vernacular community radio in particular Kisima Nyamira County being the focus area of the researcher. Borabu Sub County presented a different picture from the rest of the county because it is a settlement area. In addition, it presented the least population density. The problem concerned the fact that the division's resource potential was high but their

utilization was relatively low. Maize is a high value cash crop and as far as its production was concerned, it was very low compared to the region's potentials coupled with the population growth rate of 2.16 per cent there would be a considerable strain on the rich agricultural base a factor that could jeopardize future developments. The maize sector in Borabu was studied with the main objective of examining its role in the development of the sub county (Nyamira County Development Profile, 2013).

The study focused on the role of Kisima Community radio on agricultural maize production among rural small scale farmers in Borabu constituency Nyamira County. The choice of Kisima community Radio is informed by two reasons, first Kisima community radio is rural based and runs various programmes in vernacular to help take care of audience needs preliminary research reveals lack of studies on the role of community radio broadcasting in agricultural maize production in rural Kenya in particular Kisima community radio. Second. Numerous cases of lack of enough maize supply have been experienced in Borabu despite it being very fertile in maize farming. The study used descriptive research design which primarily shows the state of affairs as it exists at the present by providing a relatively complete picture of what is occurring at Kisima community radio in any given time in programming, production and scheduling. It again allows the development of questions for further study. The specific objectives of the paper are to; describe the role of community radio broadcasting content in Agricultural maize production in Nyamira County, examine the role of community radio broadcasting producers in agricultural maize production in Nyamira County.

2.2 Theoretical Framework

Radio plays a vital role in giving awareness about agriculture development in rural areas. It gives information about new technologies and techniques about agriculture. In this study the

researcher uses the adaptation or diffusion of innovation. The Diffusion of Innovation (DOI) Theory was conceived of by E.M. Rogers in 1962 and is considered to be among the pioneering works in the field of social theory. Attempts were made in the past to better describe how an idea or a product gradually gains momentum and spreads throughout a certain community or social organization, which is where the term's origins can be traced back to. The most notable results of this dispersion are, among other things, the general acceptance of a new tactic, practice, or product among members of a social group. A person who adopts anything has a fresh perspective towards the thing that they had in the past (i.e., purchase or use a brand new product, acquire and perform a brand new behavior, etc.). The individual must first acknowledge that the concept, behaviour, or thing that is being introduced is new in order for the adoption process to be successful. Because of this, the diffusion process can proceed. In a social system, the adoption of a novel idea, practice, or commodity (hence referred to as "innovation") does not occur simultaneously among all members; rather, it is a process during which some individuals are later adopters of the innovation than others are. In other words, innovation is not something that happens all at once. Researchers have identified a number of noteworthy distinctions between people who try new things right away and those who put off their experimentation for a while. When one is working to improve the pace of adoption of an innovation that requires an associate degree within a specific group of people, it is essential to have a solid awareness of the characteristics that exist inside that group that will either function to quicken or slow down the rate of adoption. The researcher use this theory as agriculture experts on radio give information about new technologies and how to use these technologies and the benefits of these technologies. Radio also provides information about the feedback of early adopters. Radio gives information about new agriculture strategies about agriculture to increase the production.

However, mass media ought to support the participation of masses in the process of initiation, planning and execution of interventions to impact their lives. Davis (2012) media are to be used to stimulate and empower pluralistic groups thereby supporting the growth of cultural pluralism at the grassroots level. Identification process as well as the Democratic participation theory calls for the development of —small media that can effectively be controlled by members of grassroots groups. Kisima Community radio is not left out in making sure the agricultural maize content it airs benefits farmers in Borabu Sub County.

Social Responsibility Theory was first developed in the 1940s by Robert Maynard Hutchins, is yet another school of thought that examines the role of mass media in society. One key assertion of the social responsibility theory is that media professionals have certain obligations to their audience (s). These obligations include high standards of informativeness, truth, accuracy objectivity and balance. Discussing this theory, Baran (2013) argues that media should be pluralistic and therefore reflect the diversity of the society, giving (equal) access to various points of view and rights to reply. Moreover, media should be self-regulating within the framework of the law and established institutions and should avoid whatever might lead to crime, violence or civil disorder or give offense to minority groups within the society. The social responsibility theory challenges media practitioners and professionals to constantly develop creative and new ways of serving their communities. In essence, media should exist to serve the interest of the masses and those who own or control media houses should constantly be identifying new and better ways of using their media houses to highlight and address the present and ever-changing challenges that confront humanity including food insufficiency. This way, the media would be contributing positively towards the socio-economic improvement of their audience (s).

2.3 Conceptual Framework

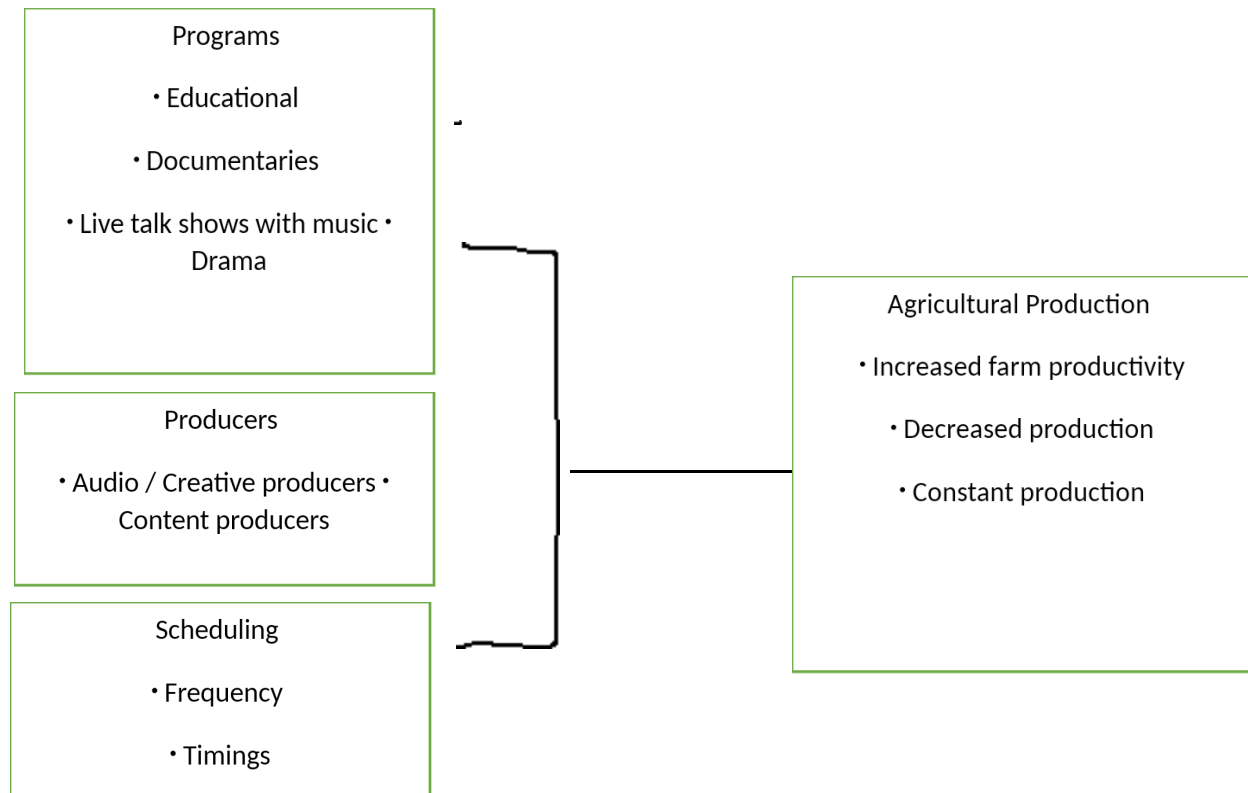


Figure 1: Conceptual framework

2.3.1 Programs

Radio plays a significant role at the grass roots level for rural development. For instance, programmes of poverty, agriculture, gender inequality, education, social problems among others could be the focus for programming. In exploring the importance of sharing information locally and the opening up of wider information networks for farmers in Northern Ghana with reference to vernacular radio programmes, Agwu, et al. (2016) noted that rural radio encourages villagers to take an active part in the development process or even better to take their own initiative to improve the living conditions in their communities. Since most farmers have not been to school, rural radio acts as a substitute for formal education.

Rural radio enables communities to articulate their experiences and to critically examine

issues and policies affecting their lives for example a community can use the radio to highlight new agricultural policies. These policies can be debated upon and discussed using the radio and immediate feedback can be given for relevant authorities to take action. In cases where extension workers may not be able to reach, rural radio takes on that role (Chakraborty, 2014). Here a community can be given a recording on cassette to substitute the extension worker who has not been able to reach that community. Vital information for agricultural development can be passed on through the use of radio for example information on better farming methods, improved seeds, timely planting, agro-forestry, better harvesting methods, soil conservation, marketing, post-harvest handling and diversification. According to Chakra borty, (2014) since rural radio targets a specific community, geographical area or interest, then the language of choice can be used to ensure that the message is clearly understood.

Therefore rural radio gives you the option of using the prevalent language. Rural radio gives farmers an opportunity to interact with each other and other relevant authorities e.g. extension workers, crop and animal experts through formats like live talk shows, phone-in programmes and on location broadcasts. Radio demystifies the scientific jargon. It is able to explain the research in simpler and ordinary language that people understand. Since rural radio is community based, it can be used to mobilize people towards community development work e.g. construction of valley dams, protected wells and immunization of animals (Mbeke, 2013).

Radio is a unique and effective tool in passing out information. Chapman et al. (2016) noted that the growth of rural radio stations reflects both the improvements in livelihoods and Education through in information technologies and the shifting of development paradigm towards a more participatory style of information and knowledge transfer. It promotes culture and Local Governance. Kumar (2014) identified radio as an avenue for participatory

communication and as a tool relevant in both economic and social development by sharing information. Community radio is a type of radio service that offers a model of radio broadcasting beyond commercial and public service. As an entertainment and cultural tool, community radio broadcasting serves geographic communities and communities' interest through income economic activities (White, 2018).

The content of broadcasting is largely popular and relevant to a local/specific audience but which may often be overlooked by commercial or mass-media broadcasters. It is a social cohesion tool. Community radio stations are operated, owned, and driven by the communities they serve. Community radio is not-for profit and provides a mechanism for facilitating individuals, groups, and communities to tell their own diverse stories, to share experiences, and in a media rich world to become active creators and contributors of media (White, 2018). In many parts of the world today, community radio acts as a vehicle for the community and voluntary sector, civil society, agencies, NGOs and citizens to work in partnership to promote community development and role of scheduling of the programs in Agricultural maize production in Nyamira County. Radio in this regard provides a set of participatory communication techniques that support agricultural extension efforts by using local languages to communicate directly with farmers and listeners' groups. Using the Most Significant Change (MSC) process, Walters et al (2011) assessed the impact of community radio in Indonesia and concluded that effective radio activities can make a significant change in a community life.

The MSC methodology has its origins in community health development debates. It has recently been applied to community radio impact evaluation. By the MSC process, community members provide feedback in the form of stories describing the desirable change in their life as a result of the activities of the radio (White, 2018). Through media skills training and access to the

airwaves, a community radio facilitates a number of capacity building activities. Unlike in the case of the mainstream media, rather than merely talking about the community, the people themselves make the programmes. This strengthens local culture with the recognition that this is their station; it becomes a forum for a wide diversity of local opinions and views. OECD (2001) stated that economic theory postulates that Community Radio, to a large extent, if effectively organized, performs three main significant functions at the grass root level for rural development. Firstly, it promotes issues of agriculture, gender equality, education, trade and commerce, disaster, weather, natural calamities, poverty and social problems. Community radio is usually for the people, run by the people and owned by the people. Secondly, it enhances the capacities of local people to work together to tackle a range of social problems, including poverty and exclusion through radio. Lastly, it contributes to nurturing of the creative talents of the community and providing a forum for a diversity of opinions and information.

2.3.2 Producers

Radio producers need to be able to generate original ideas and to think creatively about how to communicate them to audiences, have excellent writing and storytelling skills with the ability to tailor and adapt content for different audiences and platforms (Mbeke, 2012). They also need to have knowledge of the radio market, different station and programme styles and audience demographics, be able to learn how to use a variety of recording equipment and to operate different radio studios have excellent communication skills, complemented by diplomacy, empathy and patience, along with the ability to build rapport and draw information from people (Quail, 2015) and be able to coach and develop others have the confidence and tenacity to pursue information, overcome obstacles and pitch ideas to senior colleague. Possess a comprehensive knowledge of the subjects relevant to the radio genre.

Radio producers have a role in shaping the values and beliefs in the society. Its many advantages are unequalled by any other medium, namely, its production immediacy with instant replay in the field (Mcquail, 2015), to check on shooting details, its ability to add on commentary in local languages, its ease of editing, and its „show anywhere, anytime“ flexibility using battery or generator operated playback equipment where electricity is lacking (Nazari, & Hazbullah, 2013). During extensive long-term projects in Peru, Mexico and Mali, FAO has perfected a complete learning package that combines radio with discussion, simple printed materials, and practical fieldwork (Quail, 2015). Often referred to as a model for international reference, the efficiency of the methodology has been evaluated by the World Bank in terms of both training costs (ranging from 1/3 to 1/5 the costs of traditional training; and high internal rate of return. More recent examples include training for women farmers in Jamaica where radio was combined performances, oral testimonies and printed material (Myers, 2018).

The Centre has carved out its principal aim as „facilitating people’s participation at all levels of the development effort to identify and implement appropriate policies, programs and technologies to prevent and reduce poverty in order to improve people’s livelihood in a sustainable way“ (Anyaeibunam et al., 2014). The experience gained from many projects and studies related to people’s livelihood, has demonstrated the fact that radio is one of the most effective (and not very costly) means of communication for development in people’s livelihood, especially in society, as well as of social participation, of information and advice on literacy, health, child care, improved agricultural methods, vocational training and protection of the environment which are key (Myers, 2018). Also growing number of development specialists and agencies argue that appropriate use of Information Communication Technology (ICTs) for accelerating the dissemination of researchbased recommendations, blending them with

indigenous practices, and rendering them locally useable through media adaptation, and especially radio, may well provide part of the solution towards reducing the chronic food deficits and reducing poverty (Nazari, & Hazbullah, 2013).

2.3.3 Timing

The frequency of radio programs scheduling and time duration in agriculture information through regular transmission gives valuable information about new farming methods. Therefore the researcher would look forward to crosscheck how appropriate the programmes were, time taken on air and effect of days allocated whether enough or not (Mbeke, 2012). The programs provide farmers with the opportunity to speak and be heard on all matters. They are centered on encouraging smallholder farmers to name their concerns, discuss them, and organize to act on them (Khanal, 2013). The programs provide farmers with the information they need, and when they need it. Programs should be broadcast consistently and conveniently, on a reliable, regular basis, at least weekly, at a time when farmers can listen. The programs are entertaining and attract large number of farmers. There is no excuse for boring farm radio programs (Vijay Cuddeford, Farm Radio International, 2012).

Farm Radio International's voice standards for farmer programs: Farm Radio International, with the help of many farm broadcasters across sub-Saharan Africa, has identified important characteristics that should be reflected in radio programming that serves smallholder farmers. The characteristics are summed up in the acronym "VOICE." The VOICE Standards are a work in progress and are regularly revised in light of new learning. The programs value smallholder farmers, both women and men (Khanal, 2012). They respect farmers for their hard work producing food for their families and the markets, often in the face of major challenges. They reach out to farmers to understand their situation, and are dedicated to supporting them in

their farming work At different times of day there are different proportions of listeners at home, driving or working. To reach as large and wide a section of your community as possible, you need to decide how you will organize your output. At breakfast more people listen to the radio between 7am and 10 am than at any other time of day (Gathigi, 2013). If you can attract listeners with your breakfast show then you should have a good chance of keeping them through the day. Your breakfast show presenters have the most important and prestigious job of all your broadcasters. Just what makes good breakfast radio is a highly debatable question however. There is a fine line between an energized and energizing host, who puts smiles on faces and makes everyone glad to have got out of bed, and an irritating git who yells and giggles constantly. Lunchtime is another switch-on time for many listeners. As at breakfast time, they mostly don't want to be overly challenged or provoked over their sandwiches, so again a mainstream approach to your programming is probably desirable – light chat, popular tunes and a friendly attitude. Although you may struggle to keep drivers tuned in for long, there are so many people listening to the radio in their cars between 4pm and 6pm that you can reach a lot of people and that is immensely important for your public profile (Gathigi, 2013).

A good drive-time show should be a mix of the informative and the entertaining, and be designed with the listenership in mind. They will probably be listening closely to what you play and say, so there is some scope for thoughtful features and intelligent discussion, but bear in mind that listeners will be tuning in and out on a regular basis so keep everything short, snappy and varied (Gathigi, 2013). Later in the day listeners are more likely to be looking for programmes that reflect their specific tastes and interests. Listeners tend to be younger and fussier. They are also likely to be listeners who will not hear your station at other times of day. A broader range of specialist programming in the evenings will broaden your reach to your

community. This leaves plenty of hours free for the types of community programming (schools, community action, health and issues programming. which make up such an important part of your role as a community radio station. Radio listeners have different habits at home, at work and in the cars switch on at key times of the day (Khanal, 2012). It is your task to ensure that this programming is as entertaining, fascinating and useful as possible to try to keep your listeners switched on and tuned in from morning to night. Try to avoid creating „switch-off“ points when your scheduling lurches suddenly from mainstream pop radio to death metal hour or a serious political debate (a station broadcasting in one main language would find the same effect by switching languages). Your scheduling should flow naturally and smoothly through the day and the week (Khanal, 2012). The relative importance of community issues and radio production issues is a continual and healthy source of tension in community radio. Radio is a wonderfully democratic medium, a presenter and producer with the most basic equipment and minimal budget can sometimes make programmes as inspiring and polished as any BBC-produced, Sony Award winning production. Assuming the talent is at your disposal, often the only obstacle is the time and effort required for training, education, research and preparation (Chakraborty, 2017). Of course you want your broadcasts to sound as good and professional as possible. But never let that override your other commitments.

There are three aspects to programming at a community radio station. Quality of process how much benefit is there to individuals and groups who are making these programmes (Agwu, 2013). The volunteers who will gain most from making radio may not be the volunteers who will make the slickest broadcasts. Likewise the programmes with the greatest community impact may be presented by radio veterans who have learned as much as they will ever want to learn about creating radio and for whom „self-improvement“ is a non-issue (Gathigi, 2013). At every

community radio station there will be a slightly different attitude to the relative importance of each factor, and even within stations there will be enormous differences between shows.

2.4 Appraisal of Literature Reviewed

Radio has formed a key component in improving agricultural production by creating awareness among farmers about agricultural information and the availability of markets for their produce. However, local farmers' access to agricultural information has for long time remained very poor at various phases of the rural development as a result of the language radio uses to reach them. The use of vernacular radio stations like Kisima community Radio which uses Ekegusii to reach local farmers with the information they need would, provide the opportunity for improving farm production. This study explored the ways in which Kisima a vernacular community broadcasting Radio contributes in the improvement of farm productivity of its audience.

However, studies concluded that radio programmes in indigenous languages play a crucial role in agricultural development, the study also highlighted the urgent need for more support for these programmes, particularly in partnerships with agricultural sector organisations for technical and financial support. The study drives a crucial political debate on the role of media in rural development, the promotion of indigenous languages, support for agricultural policy, and political influence, including creating more inclusive and community-focused policies and increased engagement between government, media organisations, and agricultural stakeholders.

Radio is potential for knowledge dissemination. This study investigated the usage of radio and television as sources of agricultural knowledge among rural farmers. Radio and television were among the seven sources of agricultural knowledge among rural farmers. Radio

sets were more accessible and owned by more farmers than television sets. Researches indicate that majority of farmers who used radio and television as sources of agricultural knowledge preferred to listen and watch agricultural programmes respectively during evening and night. Accessibility of radio and television sets, language, number of agricultural programmes broadcast and awareness of the broadcasting time of agricultural programmes were among the factors influencing their usage as sources of agricultural knowledge. For improving the accessibility of agricultural knowledge radio and television stations should perform agricultural knowledge needs and enhance timely dissemination of needed knowledge.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter is concerned with the research methodology used in the course of this study.

The following sub-headings discussed in this chapter;

1. Research Design
2. Population of the Study
3. Sample size and Sampling Technique
4. Methods of Data collections (Instrumentation)
5. Method of Data Analysis

3.1 Research Design

The research design that was used for this study is the descriptive research of the survey type. This research deals with conditions that exist, practices that prevail and sometimes with how and what is or what exists in relation to some preceding events that have influenced or affected a present condition or event. Descriptive survey research will be adopted based on its appropriateness for large population sample. The survey involves the use of researcher-designed questionnaire to elicit information on impact of radio on agricultural development in Ilorin metropolis, Kwara state.

3.2 Population of the Study

The population of this study comprises all farmers within Ilorin Metropolis, Kwara State.

3.3 Sample size and Sampling Technique

Sampling technique is defined as a systematic process employed to select a required proportion of the target population (Daramola, 2007). A multi-stage sampling procedure will be employed to draw the sample for the study; the procedure for sample selection will involve three stages.

The first will involve the use of purposive sampling technique to select two local government among others within the metropolis. Frankel and Wallen (2003) asserted that purposive sampling technique enables researchers to use their personal judgment to select a sample that they believe, based on prior information, adequate knowledge of a population and specific purposes of the research to generate the data they need.

3.4 Methods of Data collections (Instrumentation)

The instrument used for this research will be a questionnaire developed by the researcher based on established procedures in literature.

The instrument for this research will be a researcher designed questionnaire. The questionnaire has the title “impact of radio on agricultural development in Ilorin metropolis, Kwara state. (IRADIM). The questionnaire will consist of two sections A and B. Section A contained demographic data which include the respondents’ age, sex and working experience. Section B will contain responses that provide answers to each of the research questions. The responses options in the questionnaire will be a likert-type mode of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

Data will be collected by direct administration. Firstly, permission will be gotten from the researcher’s supervisor. The instrument will be administered to the respondents and retrieved immediately after been answered by the respondents. This is to ensure hundred percent return of the instrument. The purpose of the questionnaire will be carefully explained to the respondents to

avoid mistake.

3.5 Method of Data Analysis

The data collected for this study will be subjected to appropriate statistical analysis. Section A which entails the demographic data of respondents will be analyzed using descriptive statistics of frequency counts and percentage, while inferential statistics of Pearson Product Moment Correlation (PPMC) will be used to test the null hypotheses at 0.05 level of significance.

CHAPTER FOUR

4.0 DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and results of the data collected for this study. The data were collected from 100 framers within Ilorin metropolis. The demographic data of the respondents were analysed by using percentages. Descriptive statistics of mean and standard deviation were used to answer research questions while the hypothesis was tested using PPCM and T-test statistics.

4.1 Demographic Data

This section presents the results of the demographic data obtained from the respondents in frequency counts and percentages.

Table 1: Percentage Distribution of Respondents Based on students' Gender

Gender	Frequency	Percentage
Male	73	73.0
Female	27	27.0
Total	100	100

Table 1
indicates that
respondents
participated in

the study out of which 73 (73.3) were males, while 27 (27.0) of the respondents were females.

This implies that there were more female respondents in the study.

Table 2: Percentage Distribution of Respondents Based on Religion

Religion	Frequency	Percentage
Christianity	36	36.0
Islam	64	64.0
Total	100	100

Table 2 indicates that respondents participated in the study out of which 36 (36.0) were Christians, while 64 (64.0) of the respondents were females. This implies that there were more Islam respondents in the study.

4.2 Answering Research Questions

In response to this question, the respondents were asked to indicate the impact of radio on agricultural development in Ilorin metropolis, Kwara state on several statements listed in the questionnaire. Mean responses of 3.50-4.00 were considered very high; 2.50-3.49 were considered high; 1.50-2.49 were considered low and 1.00-1.49 were considered very low. The classification of mean responses as very high, high, low and very low was done/carried out using the interquartile range. The overall mean score of 3.48 and SD 0.84 in Table 3 revealed that agriculture experts in the adaptation of new technologies, role of radio in giving awareness about right use of pesticides, and usefulness of agriculture programs to the farmers is at high level. However, the mean score for the three categories on impact of radio on

agricultural development were calculated and ranked.

Table 3: *Mean and Standard Deviation of research questions and usage.*

S/N	Items	Mean	SD	Level	Rank
What is the role of agriculture experts in the adaptation of new technologies					
1	I believe radio is an effective medium for learning about pesticide use	3.73	0.59		
2	I have learned something new about pesticide use from listening to the radio.	3.71	0.56		
3	Radio programs have helped me understand the risks associated with pesticide use	3.55	0.72		
4	I have changed my pesticide use habits after listening to a radio program.	3.39	0.83		
5	I prefer learning about pesticide use through radio rather than other media	3.38	0.83		
	Average mean	4.25	0.85	Very High	1 st
What is the role of radio in giving awareness about right use of pesticides					
1	How important is the role of agriculture experts in adapting new technologies	3.51	0.72		
2	How often do agriculture experts influence farmers' decisions to adopt new technologies	3.49	0.77		
3	How necessary is training and support from	3.45	0.81		

	agriculture experts for farmers to effectively use new technologies				
4	Agriculture experts evaluate the effectiveness of new technologies for farmers	3.39	0.84		
5	How optimistic are you about the future role of agriculture experts in adapting new technologies	3.51	0.76		
Average Mean		3.47	0.92	Very High	2 nd
<hr/>					
What is the usefulness of agriculture programs to the farmers?					
1	Agriculture programs have improved my farming skills	3.46	0.78		
2	Agriculture programs have increased my crop yields	3.49	0.75		
3	Agriculture programs have improved my access to markets and buyers	3.48	0.76		
4	I find agriculture programs to be useful and beneficial to my farming business	3.45	0.79		
5	Agriculture programs have helped me to adopt new technologies and innovations				
Average Mean		3.47	0.77	Very High	3 rd
<hr/>					
Overall Mean		3.73	0.84	Very High	
<hr/>					

Table 5 shows a higher mean score of males ($M= 115.96$, $SD = 13.64$) while a lower mean score was observed for female ($M= 113.21$, $SD = 15.55$). This implies that male obtained higher level of impact of radio on agricultural development towards collaborative framing than their female counterparts.

4.3 Testing of Hypothesis

Hypothesis One: There is no significant difference in agriculture experts' opinions in agriculture programs of radio play vital role for the adaptation of new agriculture technologies based on gender.

Table 5: *T-test Analysis of the agriculture experts' opinions in agriculture programs of radio play vital role for the adaptation of new agriculture technologies based on gender.*

Gender	N	Mean	Sd	df	Cal. t-value	Calp-value	Decision
Male	73	13.21	15.55	98	2.23	.02	Rejected
Female	27	15.96	13.64				

Source: Field study, 2025

Table 5 reveals that the calculated t-value was 2.23 while its calculated significance value is .02, of df 98 at alpha level of 0.05. On this basis, null hypothesis one was therefore rejected. This means that there was a significant in agriculture experts' opinions in agriculture programs of radio play vital role for the adaptation of new agriculture technologies based on

gender. The reason was that the calculated significance value (.02) was less than 0.05 alpha level ($.02 < 0.05$).

Hypothesis Two: There is no significant difference in the role of agriculture alerts on radio are useful to prevent the seasonal losses in crops harvesting based on religion.

Table 6: *t-test Analysis of significant difference in the role of agriculture alerts on radio are useful to prevent the seasonal losses in crops harvesting based on religion.*

Religion	N	Mean	Sd	df	Cal. t-value	Calp-value	Decisio n
Christianity	36	28.15	4.72	98	.28	.003	Rejected
Islam	64	28.77	7.01				

Source: Field study, 2025

Table 6 showed the calculated t-value was .28 while its calculated significance value is .003, of df 98 at alpha level of 0.05. On this basis, null hypothesis two was therefore rejected. This means that there was no significant difference in the role of agriculture alerts on radio are useful to prevent the seasonal losses in crops harvesting based on religion. The reason was that the calculated significance value (.003) was less than 0.05 alpha level ($.003 > 0.05$).

Hypothesis Three: There is no significant difference in agriculture programs are much useful for the farmers.

Table 7: Analysis of the difference in agriculture programs are much useful for the farmers.

	N	Mean X	SD	r-value calculated	Df	r-critical	Remark
Between Group		16.65	3.67				
	100			0.72	98	0.11	Rejected
Within Group		20.94	6.51				

Source: Field study, 2025

Table 7 showed the calculated t-value was .72 while its calculated significance value is .11, of df 198 at alpha level of 0.05. On this basis, null hypothesis three was therefore rejected. This means that there was no significant difference in agriculture programs are much useful for

the farmers. The reason was that the calculated significance value (.11) was less than 0.05 alpha level ($.011 > 0.05$).

4.4 Discussion of Findings

The following can be summarized from the findings of this study:

1. There is no significant difference in agriculture experts' opinions in agriculture programs of radio play vital role for the adaptation of new agriculture technologies based on gender.
2. There is no significant difference in the role of agriculture alerts on radio are useful to prevent the seasonal losses in crops harvesting based on religion.
3. There is no significant difference in agriculture programs are much useful for the farmers

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the discussion of findings, the conclusion derived from the discussion, the recommendations as well as suggestions for further studies on the study.

5.1 Summary of Findings

This study investigated examine the impact of radio on agricultural development in Ilorin metropolis, Kwara state on the basis of adaptation of new technologies, role of radio in giving awareness about right use of pesticides, and usefulness of agriculture programs to the farmers as moderating variables. Findings from this study revealed that agricultural development and Kwara State government initiative is at high level. This finding correlates with Sumandal (2023) who

conducted a study on agricultural development.

5.2 Conclusion

Based on the results and findings of this study, it was concluded that there is no significant difference in agriculture experts' opinions in agriculture programs of radio play vital role for the adaptation of new agriculture technologies based on gender. There is no significant difference in the role of agriculture alerts on radio are useful to prevent the seasonal losses in crops harvesting based on religion. There is no significant difference in agriculture programs are much useful for the farmers

5.3 Recommendations

Based on the findings from the study, the following recommendations were suggested:

- i. It is recommended that farmers seek out opportunities to have technological knowledge and skills in real-world contexts. This may involve participating in internships, practicums, or other hands-on experiences that allow them to improved their productive.
- ii. It is recommended that farmers adopt a approach to supporting business in their efforts to utilize agriculture loan scheme for farming to run effectively.