



UNIVERSITY OF NAIROBI

PARTICIPATORY COMMUNICATION AND SEDENTARY LIVESTOCK KEEPING IN
WAJIR COUNTY

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT FOR THE
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My project is completely unique, and to the best of my knowledge it has not been submitted to any academic institution for any degree.

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DEDICATION

Thanks to my family's unwavering support via prayer and sacrifice while I was in school, I was able to complete this project.

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ABSTRACT

This study was undertaken to establish the role of participatory communication in influencing the uptake of sedentary livestock keeping in Wajir County. The objectives of the study were to examine the role of participatory communication in the uptake of sedentary livestock keeping; to explore the types of participatory communication strategies used to disseminate information regarding sedentary livestock keeping in Wajir County and to determine the challenges facing participatory communication between sedentary livestock keepers and government workers in Wajir County. The study used qualitative design to a large extent which involved collecting in-depth data using interview schedules and analyzing the data by direct quotation of the respondents interviewed during data collection. Data was collected using both questionnaires and interview schedules. A sample of 30 purposively selected respondents was used to collect data from a population of 1,947. The findings of the study revealed that a significant number of farmers are slowly embracing sedentary livestock farming partially attributable to increased levels of participatory communication in the area. Participatory communication was instrumental in creating more awareness about sedentary livestock keeping among the residents of Wajir. The study established that meetings as well few workshops were the most popular methods of conducting participatory communication during sedentary livestock dialogue. The study recommended that the government should encourage and organize frequent meetings where participatory communication could take place. It also recommends that more local agricultural extension officers should be employed so as to facilitate more and more families to switch to sedentary livestock farming.

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CHAPTER ONE:

INTRODUCTION

1.0 Introduction

This research explores how participatory communication impacts sedentary livestock keeping in Wajir County. Specifically, it focuses on establishing the prevalence of sedentary livestock keeping, the role of participatory communication in the uptake of sedentary livestock keeping and participatory communication strategies used to disseminate information regarding sedentary livestock keeping. It also addresses the challenges facing participatory communication between sedentary livestock keepers, administrators and the development workers in Wajir County. This chapter therefore, addresses the background of the study, statement of the problem, objectives and research questions. Other areas addressed in this chapter include rationale and justification of the study, scope and delimitations, and ethical considerations.

1.1 Background of the Study

There has been a dramatic movement toward sedentary cattle rearing due to economic, political, demographic, and environmental developments, as stated by Ekaya (2005) and Grönvall, (2015). Pastoralists have been forced to reduce their enormous herds and relocate to urban areas as a result of climate change, population increase, political instability, civil wars, ethnic conflicts, and conservation policies. Evidence suggests that there are positive outcomes for the environment, human health, and economic development when livestock are kept in a sedentary setting. Therefore, an increasing number of formerly nomadic pastoralists are being pressured to adopt contemporary methods of sedentary cattle husbandry.

According to Amina (2016), limited involvement and exchanges mismatches in the empowerment process are to blame for the failure of most development efforts to alleviate impoverished. Further, Mwangi and Kubasu, (2022) argue that majority of the people are apathetic to matters that are of concern to them. This implies that for the community to embrace long-lasting sedentary livestock keeping, there is a need for enhanced participatory communication. Changing from nomadic life to sedentary livestock keeping is a habit that requires the community participation through communication in order to harness and integrate local people's knowledge with outside expert knowledge. According to Tufte and Mefalopulos (2009), Participatory Communication can be defined as a strategy to communication that emphasizes discourse as a means of facilitating the exchange of knowledge, points of views, and ideas among different stakeholders. This process ultimately leads to the liberation of these individuals. Participatory communication, therefore, ensures that the views and voices of the sedentary livestock farmers is heard, acknowledged and put into practice. Further, in the Kenya Constitution (2010), it is mandatory for the government to conduct public participation whenever there is a need for development projects.

According to Fratkin et al (2004), sedentarization implies a procedure of earlier migrant populaces subsiding into non-portable networks. In this study, however, word sedentary is the moving away from nomadic lifestyle to settled livestock keeping. This is where the formerly nomadic pastoralists opt out of frequent movement of families with their livestock from one area to another.

Communities known for free range livestock keeping include the Somali, Maasai, Turkana, Borana and the Rendille. These communities keep livestock for different reasons that include: -

- (i) livestock as a sign of wealth that is used in the payment of pride price during marriage
- (ii) payment of fines so as to re-establish social harmony among communities and families

(iii) Offering as sacrifices in crucial rituals as a symbol of peoples' bond with God as well as

(iv) Livestock as a source of food. Above these uses of livestock, Masaai community use animal bones in making of knives and spears (Quilan et al 2016, Scoones et al 2013).

The Somali community predominantly practices nomadic pastoralism where they move from place to place in search of pasture and water for their livestock. They keep cattle, goat, sheep and camels in large numbers often depleting pasture and water within a short period of time. They also move with their herds from parasite infested to safer areas so to avoid diseases and competition (Hudson, 1980). Pastoralism, according to the Ministry of Agriculture (2013) contributes to 10% of the Kenya's Gross Domestic Product(GDP), however, according to Fratkin et al (2004), this contribution could be higher. According to Kenya Population and Housing Census of 2019 report, 9,123 households out of the 82,800 households practice sedentary livestock farming accounting for 11% of the total county household population. This is a significant uptake of sedentary livestock farming compared to how the Somali community who were, according to Hudson (1980), predominantly nomadic livestock keepers.

1.2 Problem Statement

Traditionally, according to Hudson (1980), the Somali Community predominantly practiced nomadic livestock farming. This means that they have been traversing large areas in search of pasture and water for their livestock. However, according to Ekaya (2005) and Grönvall (2015) there has been a sharp shift towards sedentary livestock keeping in the recent past. According to Kenya Population and Housing Census of 2019 report, 9,123 households out of the 82,800 households practice sedentary livestock farming accounting for 11% of the total county household population (Abdirahman, 2016). Unfortunately, these research studies fell short of sufficiently explaining the role of participatory communication in this sharp increase in the uptake of this

innovation. Pastoralism is estimated to contribute 10% of Kenya's total GDP according to the Ministry of Agriculture (2013) but, this contribution, according to Fratkin et al (2004), could be higher if livestock keeping practices such as sedentary farming could be embraced by majority of the farmers. Additionally, under the Kenyan Constitution (2010), it is mandatory for the government to undertake Public Participation whenever it plans development program. In this case, however, it is not clear whether the government administrators conducted public participation in order to convince the farmers to adopt sedentary livestock farming as well as reap its benefits. This study, therefore, sought to bridge the above gaps by focusing on the role of participatory communication in the adoption of sedentary livestock farming. More specifically, the study seeks to investigate the prevalence of sedentary livestock keeping in Wajir County, the role of participatory communication in the uptake of sedentary livestock keeping, types of participatory communication strategies used to disseminate information regarding sedentary livestock keeping. Further, Amina (2016) noted that most development programs failed to overcome poverty due to low participation and communication mismatches in the process of empowerment. Mwangi and Kubasu, (2022), on their part, argue that majority of the people are "apathetic to matters that are of concern to them". This study sought to find out whether the case was different in Wajir by examining the challenges faced in participatory communication between sedentary livestock keepers and the government workers in Wajir County. It also sought to create an understanding of the communication dynamics influencing the transitioning of these nomadic pastoralists to the more modern ways of livestock rearing.

1.3 Objectives of the study

The following were the objectives of the study: -

1. To examine the role of participatory communication in the uptake of sedentary livestock keeping in Wajir County
2. To explore the types of participatory communication strategies used to disseminate information regarding sedentary livestock keeping in Wajir County
3. To determine the challenges facing participatory communication between sedentary livestock keepers and development workers in Wajir County

1.4 Research questions

1. What is the role of participatory communication influence the uptake of sedentary livestock keeping in Wajir County?
2. Which participatory communication strategies used to disseminate information regarding sedentary livestock keeping in Wajir County?
3. What are the challenges facing participatory communication between sedentary livestock keepers and development workers in Wajir County?

1.5 Rationale and justification

Livestock farming is a source of livelihood for millions of livestock farmers living in the arid and semi-arid areas in the country. Nomadic pastoralism has been posing a great challenge to the pastoralists. Such challenges include poverty due to lose of livestock to persistent and frequent droughts and famines, intercommunity clashes and conflicts, school children dropouts and low enrollment. The government on its side, apart from developing many policies that tries to settle the pastoralist, spends millions of shillings in feeding the pastoralists during famines and school feeding programmes in order to keep the children in school. This study, therefore, enumerated the successes realized by adopting sedentary livestock keeping. It also provided useful information

and insights to the government, policy makers and other stake holders so as to help them in their decision-making process.

1.6 Significance of the study

Ekaya (2005) and Grönvall (2015) have seen a significant transition towards sedentary cattle husbandry, which can be attributed to several factors such as economic, political, demographic, and environmental transformations. Pastoralists have been driven to transition from their traditional nomadic lifestyle due to several factors, including prolonged droughts, population increase, political uncertainties, civil wars, ethnic conflicts, and conservation policies. These circumstances have led to a reduction in the size of their herds and necessitated the adoption of settled living arrangements. However, the above researchers did not indicate how individuals communicate the benefits of the settled livestock rearing. This research project aims to address the existing knowledge gap by examining the many ways in which farmers articulate the advantages associated with sedentary livestock rearing.

According to Amina (2016), most development programs failed to overcome poverty due to low participation and communication mismatches in the process of empowerment. This study will resolve the communication mismatch by identifying the best communication method to use so as to spur development and reduce poverty.

Mwangi and Kubasu (2022) argue that majority of the people are apathetic to matters that are of concern to them. This study will, therefore, identify ways of reducing apathy among the farmers in Wajir.

It is mandatory, under the Kenyan Constitution (2010), for the government to undertake Public Participation whenever it plans development program. This study will identify the best method of conducting public participation for the stakeholders, particularly the County Government of Wajir.

1.7 Ethical Consideration

Ethical considerations are the moral principles that guide the conduct of a research. They are the principles that govern the conduct of the researcher. In this study the researcher sought consent from all the participants of the research. The researcher has also assured the participants that the information they give is purely for the purpose of this study and will not be used elsewhere without the written permission of the researcher. Further, the researcher has respected the participants, their values, religion and cultures. The researcher did not start recording the participants using any electronic gadget without their consent.

Wajir county and more so Tarbaj Sub-county borders the Republic of Somalia which is home to al-Shabaab terror group, this group has claimed responsibility of several attacks in the sub-county. Cognizant of this security threat, the researcher sought approval from the local administration to carry out the study. Further, the researcher introduced the study subject and purpose to the village elders so as to ease access to the selected households. Additionally, the researcher took all the necessary precautions to protect the respondent from any harm or negatively affected due to their participation in the research study. The researcher was guided by the principle of objectivity so as to guard against biases that may occur during the course of the study. In order to guard the integrity of the study the researcher has protected the privacy of the respondents. The researcher has also allowed those respondents who become uncomfortable with the interview to withdraw from the responding.

CHAPTER TWO:

LITERATURE REVIEW

2.0 Introduction

In this section, we will discuss the theoretical and empirical works that have been published on this subject. This section focuses on the empirical evidence, which includes findings from other similar studies. The theoretical and empirical evaluation of the sedentary livestock keeping system is presented in these two sections. At the end of the chapter, a conceptual framework is presented to illustrate the interplay among the many factors involved.

2.1 Sedentary Livestock Keeping

Seasonal shifts, or the alternating wet and dry periods, are thought to have contributed to the decline of pastoralist farming and the rise of sedentary cattle rearing. Seasonal implications on livestock management in a sedentary crop-livestock system in Kenya were investigated by Thurania-McKeever, Shaw, Machila, Eisler, Welburn, and Maudlin (2009). The term "seasonality" was used by the researchers to describe the cyclical nature of the seasons and their effects on people's means of subsistence. A smallholder crop-livestock production system in Busia District, western Kenya, was the focus of a two-year longitudinal study that looked at the effects of seasonal fluctuations on livestock rearing. The purpose of the research was to learn how the changing of the seasons affected the management of animal health. The research centered on how people make a living during different times of the year, how much they spend on animal healthcare, how often diseases strike, and how often and where livestock are moved in and out of homes.

Questionnaires and methods of participatory rural evaluation were used to compile the data. According to the results, the study found that disease outbreaks among livestock were more common during the extended rains than during the dry season. The study also found that while more households used veterinarian clinics during the rainy season, more people treated their pets at home. The evaluated research is useful for learning about the effects of seasonality on cattle production at a standstill. In contrast to the current research, which is interested in the function of participatory communication in the keeping of sedentary cattle, the aforementioned study exclusively addressed the health of the sedentary livestock. This research aimed to fill those voids.

Fratkin et al. (2001) found that in Northern Kenya, the rate at which pastoralists settled down to farm increased between the nineteenth and twentieth centuries. Multiple factors, including "environmental stress of drought and famine" (Fratkin, 2001) and poverty among pastoralists (Mc Gahey et al, 2014), have contributed to this trend toward urbanization and suburbanization. Many groups and governments have argued that pastoralists should relocate to urban areas since their way of life is backwards and unsustainable (Fratkin, 2001). Increased marketing access and benefits for sedentary populations, especially women selling milk and agricultural products (Fratkin and Smith, 1995; Little, 1994; Smith, 1998, 1999; Waters-Bayer, 1988), have been the subject of several studies (Ensminger, 1991; Sato, 1997; Zaaland Dietz, 1999). It has been found in other research (Hill, 1985; Nathan et al., 1996; Fratkin et al., 1999; Hill, 1985; DeLuca, 1996; Fratkin et al., 1999) that "better access of settled populations to formal education and health care"

According to Abdirahman's (2016) research, nomads in Somalia are gradually abandoning their nomadic ways in favor of sedentary mixed agricultural practices. However, only 36 out of 9,123 households in Tarbaj Sub-County use the mixed technique of agriculture, as reported by the Kenya Population and Housing Census.

2.2. Participatory Communication and Uptake of Sedentary Livestock Keeping

Talking with the community about the initiative is crucial to its success. Aminah (2016) investigated the use of participatory communication in enacting an empowerment program for small farmers in Indonesia. Data was gathered through in-person interviews, online surveys, and focus groups. We use descriptive statistics to examine the data. The research found that participatory methods of sharing information were rarely used. In order for farmers to share vital information and knowledge, the study suggested improving communication engagement through discourse between farmers and other stakeholders. The evaluated research contributed to the current investigation by highlighting the value of participatory communication in facilitating the exchange of expertise between farmers. However, the focus of that study was on Indonesian rice farmers, whereas the focus of the present study is on Kenyan livestock keepers. These are voids in the literature that this investigation seeks to fill.

Participants' expectations can have an impact on the success of participative communication. Researchers Ajayi, Alabi, and Okanlawon (2018) examined farmers' knowledge and attitudes about ICT use in Ife-Central Local Government Area, Osun State, Nigeria. According to the results, the vast majority of farmers (76.0% in the research) had a limited understanding of and familiarity with ICT. Still another 84.7% of farmers felt negatively about using ICT. This indicates that there was insufficient participation in the communication process, which hampered the sharing of knowledge. This study focuses on sedentary livestock farmers in Kenya, while the reviewed study looked at ICT use by farmers in Nigeria.

Perception, information exposure, and awareness of sedentary farming may all play a role in its uptake. Infuriate, Asult Small-scale farmers in Ghana, Kenya, Mali, and Zambia had their understanding and beliefs about soil fertility studied by Baah-Ofori, Chikopela, Diarra, and Koch

(2019). Several agricultural technologies can help reverse the decline of soil fertility in some areas of Sub-Saharan Africa. Their adoption, however, has lagged behind projections. As a proxy for the likelihood of adopting soil fertility technology, the study measured the perception, knowledge, and information exposure levels of African farmers. The research involved interviewing almost 2,400 small-scale farmers in Ghana, Kenya, Mali, and Zambia. The poll looked into their demographics, media consumption, and how they felt about and understood soil fertility, among other things. The results of the research showed that effective communication is crucial for spreading new agricultural techniques. The research also showed that professional agricultural sources in Mali were under-disseminating information to farmers, leaving the latter frequently uninformed about the most up-to-date soil fertility technology. Farmers relied on the radio more than any other medium to stay informed. The results of the study suggested the importance of implementing measures to raise people's level of education and exposure to farming-related information. However, unlike the current study, which also addresses the effects of sedentary farming, the reviewed study primarily focused on awareness of soil fertility. This research will help to close that gap in the existing literature.

Participatory communication aimed at bolstering livestock keepers' indigenous knowledge can have a significant impact on the farmers' ability to provide for themselves and their families. Joseph and Andrew (2008) looked into the ways in which rural farmers in South Africa could take part in the creation and implementation of ICTS. The research found that farmers' standard of living and their ability to contribute to society and the economy benefited from the usage of a variety of ICTs. Researchers and development professionals can accomplish this through participatory learning and communication, drawing on the indigenous knowledge of farmers.

The research undertaken by Muwanga, Onwonga, Keya, and Komutunga (2020) reaffirms the importance of participatory communication among indigenous farmers in sedentary agriculture, as a means of sharing their expertise. A study was conducted to examine the impact of subsistence farming on soil quality in the semiarid Karamoja region of Uganda. The study primarily examined the Karamoja agro-pastoral semi-arid livelihood zone, wherein it was observed that the Ugandan government has initiated efforts to promote sedentary agriculture. In order to enhance the effectiveness of sustainable land use techniques, a group of researchers conducted an analysis of farmers' perceptions of soil quality in the Karamoja region. Specifically, the study focused on the Iriiri and Matany Sub-counties of Napak district, as well as the Rengen Sub-county of Kotido district. The objective was to establish a local soil knowledge database by identifying the key indicator factors associated with soil quality. A total of forty farmers from the local area were surveyed using a semi-structured questionnaire throughout the months of August and September in the year 2015. The findings of the study revealed that farmers relied on the visual cues of color, depth, and texture of soil as indicators of its fertility. In order to enhance the management of soil fertility and provide more comprehensive insights for policy makers and other relevant stakeholders for the formulation of sustainable land use strategies, a database was created. This database integrates both indigenous knowledge and scientific expertise pertaining to soil quality.

The research findings indicate that agro-pastoral sedentary farmers in Karamoja extensively utilize indigenous soil quality indicators. The individuals possess a comprehensive comprehension of the correlation between crop yields and the terminology pertaining to soil quality (SQ) that adheres to established scientific norms. Soil color, soil morphology, soil depth, crop yields, plant vigor and color, the presence of *Striga hermonthica* (commonly known as witch weed), the existence or lack of macro-fauna such as earthworms, rainfall patterns, and the occurrence of crop wilting following

rainfall initiation are among the key indicators of soil quality that hold significant relevance for farmers. The research concluded that the inhabitants of Karamoja needed more access to educational opportunities and practical experience in farming. In order to improve farmers' management abilities, preserve soil quality, and guarantee sustainable land use, they could participate in small-scale crop production studies. The evaluated research highlights the value of using participatory communication to incorporate traditional farming practices with newer, more efficient ones. However, the emphasis of the present study is on animal farming, while the reviewed study concentrated on crop farming. This research will help to close that gap in the prior research.

2.3 Participatory Communication Strategies

An topic, event, scenario, or audience can all be addressed using well-thought-out communication techniques (Eunson, 2012). As such, they provide the framework for outreach to the general public and relevant parties. According to WHO (2017), audiences benefit from receiving information from a variety of sources, hence WHO recommends spreading messages across many channels. The World Health Organization (2017) sees these three types of communication as the most important. Advertisements can be seen on television, radio, print publications, billboards, public transportation, mailboxes, and websites. Organizational and community channels are created with the goal of reaching subsets of the population based on factors like location or shared interests (like profession). Community radio shows, group newsletters, health fairs, and gatherings at schools, businesses, and places of worship are all examples of possible dissemination avenues. People use the interpersonal communication channel to discuss their problems and seek help from others. They could be members of one's own family, friends, coworkers, educators, counselors, or

religious leaders. These kinds of private conversations are frequently the most reliable sources of health advice.

Before deciding on a method of communication, it is crucial to take into account the specific qualities and preferences of the stakeholders involved. According to Ajayi and Mmutle's (2020) research on enhancing company reputation in South Africa using CSR communication strategy, this is clearly the case. The study's goal was to uncover how and where stakeholder-approving organizations disseminate their messages. Using communication materials from 10 established South African organizations, the research employed a qualitative content analysis methodology. The research found that only three companies focused only on serving society in their CSR communications, whereas seven used both self-serving and society-serving motives. According to the findings, firms primarily use internal, managed channels for CSR communication. This research is instructive because it sheds light on what drives the development of good communication tactics. In contrast to the present research, which focuses on communication techniques for stationary farming, that earlier work focused solely on corporate social responsibility.

Many forms of participatory communication are used by various community projects to facilitate the exchange of ideas and information. Maina (2020) investigated the methods of public water project implementation in Kenya's Murang'a County via the lens of participatory communication. The research emphasized the significance of participatory communication in informing and affecting the behavior of the information recipient. According to the results, the initiative can fail if the community isn't involved. Kinkaid's Convergence Model of Communication served as the theoretical foundation for the research. Descriptive survey methodology was used. The Krejcie

and Morgan sampling formula was used to select a sample of 384 respondents from the target population of 192,589 homes. A questionnaire was used to collect information, which was then analyzed using both descriptive and inferential statistics. The research confirmed the importance of using participatory communication tactics when launching local initiatives. The research urged the use of community organizing, consultation with thought leaders, and a wide range of media including radio, print, television, and outdoor displays.

2.4 Challenges Facing Participatory Communication

Waisbord (2008) researched the difficulties faced by international assistance organizations when implementing participatory communication strategies. By analyzing commonly held beliefs about communication, the study provided an explanation for participatory communication's limited applications. It is argued that different disciplinary and theoretical methods are used depending on the goals and dynamics of the institution. Based on the results, it was determined that institutional variables and expectations are more important than analytical or normative value when deciding which communication strategies to employ. The study also found that these organizations are heavily weighted toward having experts distribute their expertise information to their subjects, and so rarely use participatory methodologies.

The research conducted by Ali and Sonderling (2017) focused on the topic of participatory communication for development in Ethiopia. The present study employed the developmental and aid endeavors of the Amhara National Regional State, specifically the Organization for Rehabilitation and Development in Amhara (ORDA), as a case study to examine the fundamental factors that shape the implementation of participatory communication in development processes. The qualitative methodology employed in this study encompassed in-depth interviews, focus group discussions (FGDs), document analysis, and on-the-ground observations. The results

indicate that there are numerous elements that impact the implementation of participatory development communication by ORDA. The study's findings led to the conclusion that the growth process lacked actual participation, with participatory communication being marginalized. The study highlights the importance of adopting a professional approach in the field of development communication, implementing organizational restructuring measures, and formulating a complete strategy to drive success.

The study conducted by Mosonik (2017) examined the influence of participatory communication on the efficacy of the Constituency Development Fund in promoting accountability and transparency in Kenya's Emurua Dikirr Constituency. The research employed a mixed research methodology, incorporating a sample of 94,105 individuals who were recipients of the Community Development Fund (CDF) as the focal population. This study involved the administration of questionnaires and conducting in-person interviews to gather data from a sample size of one hundred community members and five key informants. Based on the findings, the implementation of open discussion was found to have facilitated more transparency and accountability in the allocation of funds by the CDF. Based on the results obtained, it is evident that enhancing involvement in CDF initiatives necessitates leaders to impart knowledge to their constituents regarding the significance of civic engagement. Leaders should additionally organize forums in which diverse stakeholders can express their concerns and collaborate in order to identify and implement resolutions.

Challenges that hinder participation in communication have been imposed by conventional administrative organizations that prioritize top-down communication. Thomas (2013) looked into the difficulties of participatory development in current Australian development practice. Even

while more donors are adopting participatory approaches, the study found that both donor and recipient organizations still have administrative structures and staff abilities that are more suited to top-down, sequential processes that are rarely favorable to participatory communication. The study found that reforming bureaucratic culture to permit devolution of authority to communities has been challenging. This situation suggests that development professionals and community people are not communicating effectively with one another. Finding and utilizing local knowledge and skills through participatory communication was emphasized as crucial by the study's authors. The study also found that, in order to prevent people from remaining disempowered, participatory communication and development must successfully tackle the underlying structural problems. According to one case study referenced by the study, 40% of Pakistani women borrow money that is then spent by their husbands. This indicates that the lenders ignored the sexist beliefs and practices prevalent in the society.

2.5 Theoretical Framework

This study is informed by the following theories:

a) Diffusion of Innovations Theory

E.M. Rogers created the theory of diffusion innovation in 1962. At the University of New Mexico, he taught courses in communication theory. Previous sociological theories of behavior change were integrated into the Diffusion of Innovation Theory (Dearing & Cox, 2018). The theory borrows from economics, sociology, and communication theory to provide a logical framework for understanding the dynamics of the workplace (Lyytinen & Damsgaard, 1998). Different phases of an idea's acceptance are explained by the theory. Everett Rogers lays forth his thoughts in "Diffusion of Innovation" (1962), a book about how new ideas and technologies spread through communities. He said that the process of dispersion is how new ideas spread through a society. A

new thought is said to be innovative, and diffusion refers to the process through which the idea spreads across a society via predetermined pathways over a period of time. The method of spreading anything uses both the mass media and personal networks of communication. According to this view, spreading new ideas is essential for progress and longevity (Dearing & Cox, 2018).

Rogers proposed the innovation, the communication channel, and the social system as the four aspects of innovation spread. The purpose of the communication channel is to relay messages from one person to another. Word of mouth, SMS, and other means of instantaneous communication are all acceptable. The passage of time represents the period necessary for individuals to adjust to novel concepts. The social system is a network of interconnected groups working together to address pressing social issues. They may decide anything on an individual basis, as a group, or as representatives of the broader social structure (Rogers, 2003).

The decision-making process encompasses a series of five distinct stages that enable individuals to evaluate and make judgments regarding the acceptance or rejection of novel information. A crucial aspect of the innovation-decision process, as outlined by Rogers (2003), is the capacity to mitigate ambiguity surrounding the advantages and disadvantages associated with an innovation.

There is a learning phase, a convincing phase, a deciding phase, an acting phase, and a verifying phase. People in the knowledge phase hear about a new breakthrough but don't care about it because they don't know enough about it. At this point in the persuasion process, the target audience is more receptive to the new innovation and is actively looking for additional details about it. At this point, one must weigh the benefits and drawbacks of the innovation and make a final decision as to whether or not to adopt it. The decision-making process is notoriously challenging. When an innovation is put into practice, its dependability, usefulness, and potential

are evaluated. In the third step, known as "confirmation," a person makes up their mind to fully embrace the invention (Rogers, 2003).

b) Application of the theory to the study

The relevance of this idea to the present investigation is that sedentary farming represents a novel invention among farmers accustomed to pastoralism. However, these farmers are slowly adapting to the new sedentary farming methods. Diffusion of Innovation Theory predicts that those involved in animal production will be among the first to learn about the advantages of sedentary farming. In the beginning, farmers may not be interested since they may not have enough information to take action. Farmers are eventually convinced to try sedentary farming as a result of ongoing participatory communication. The farmers at this point want to know more about inactive farming. Now that they have all the facts, they can decide whether to pursue sedentary farming or to abandon the idea altogether. If they are open to the new agricultural technique, the next step is to put it into practice. At this point, the farmer is looking forward to the potential benefits of stationary cattle. After getting through this point, the next step is to make up your mind to commit entirely to sedentary livestock keeping.

Diffusion Innovation Theory is helpful in describing how people tend to accept new ideas, but it isn't without its detractors. In their analysis of the flaws in the diffusion of innovation theory, Lyytinen and Damsgaard (1998) pointed out that complex technologies do not automatically fit under the diffusion of innovation process, which was found to neglect several crucial aspects. For instance, unforeseen institutional changes are likely to significantly modify the pace and course of any diffusion process, hence prompting redrawing of its borders, redefining involved organizations and adjusting incentives. According to the results of their research, sophisticated IT solutions are

best viewed as objects of social construction and intensive learning that are embraced for a variety of reasons in highly dynamic diffusion environments.

2.6 Conceptual Framework

Figure 1 shows the relationship between independent, dependent and intervening variables.

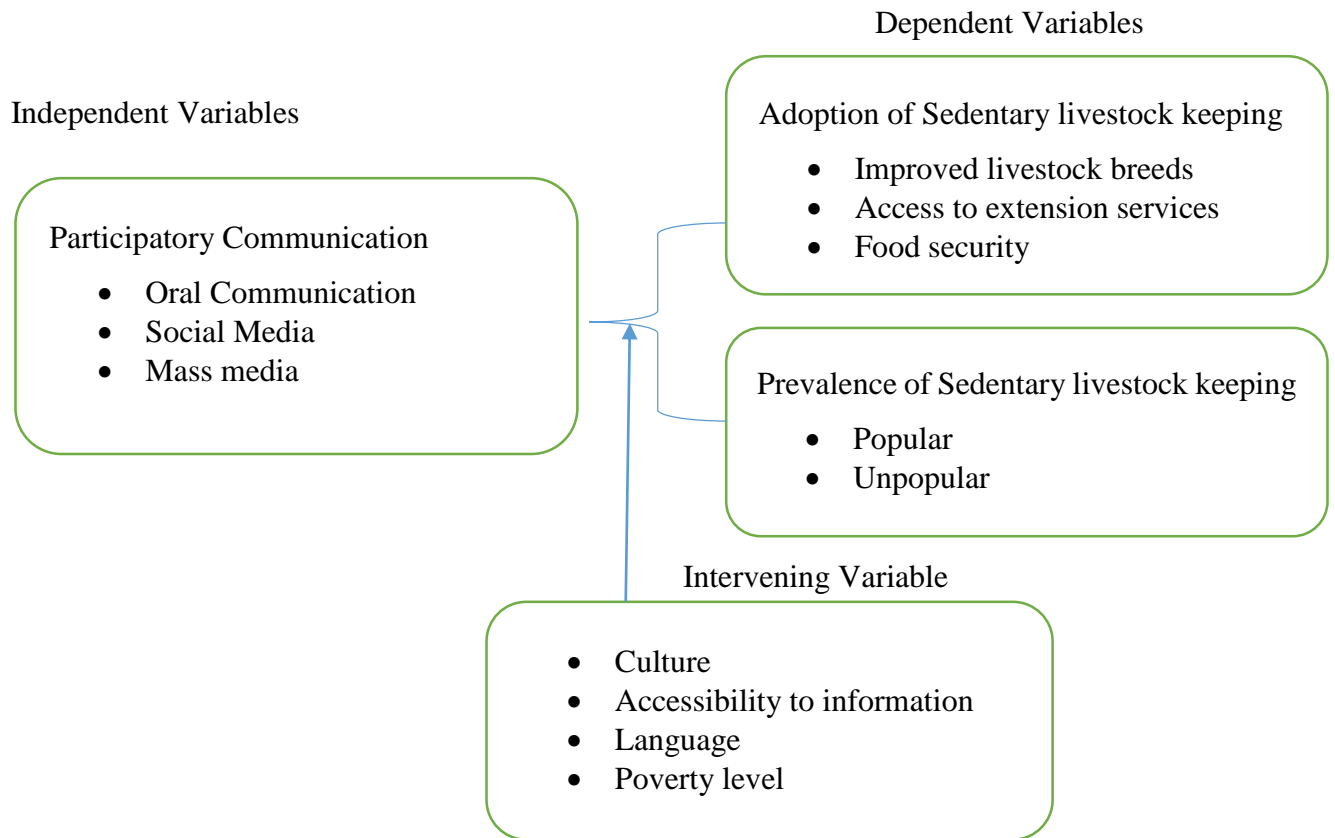


Figure 1: Conceptual framework

Independent variables are stand-alone idea that is not affected by other events or ideas. The independent variables in this study are the various ways of conducting participatory communication which includes oral communication, that is, face to face communication between the farmers and development workers, communication engagement through the various social media platforms and dialogue between the farmers and development workers through the radio (community radios). Dependent varies are the ideas or event that are affected by the independent variables. The dependent variables in this paper are the adoption of sedentary livestock keeping which may lead to improved livestock breeds, access to agricultural extension services such animal vaccination and treatment of animal diseases and improved food security for the families. The

intervening variables are events that affect the proper relationship between the independent and the dependent variables. In this study, the intervening variables are cultural issues among the farmers, accessibility of information by the farmers. This may be hampered by network and radio coverage and language barriers. All these affects either negatively or positively depending on how its handled.

The pastoralists in Wajir depend on effective participatory communication from both the County and the National Government as well as development workers for them to fully transit from the traditional livestock farming which is characterized by constant movement in search of water and pasture and sometimes moving away from disease infested areas to the better, more settled form of livestock farming that promises development and improved livelihoods for the pastoralists. Complete transition, therefore, may be constrained by the lack of or inadequate communication from the government.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.0 Philosophical paradigms

Scholars from different academic backgrounds have provided diverse definitions for the concept of "paradigm". According to Kivunja and Kunyini (2017), the term "paradigm" can be defined as a comprehensive framework or worldview that not only delineates a particular study issue but also significantly influences the cognitive processes and perspectives of the researcher about the subject matter. As per the definition of a paradigm put forward by Fraser and Robinson (2004, p. 59), a paradigm encompasses a collection of beliefs pertaining to the existence of a certain problem, as well as a consensus on the methodologies employed to study these difficulties. Moreover, Guba (1990) defines it as "a compilation of beliefs that function to guide human conduct" (p. 17).

There are a few different approaches to research, the most prominent of which being positivism, interpretivism, and pragmatism. The idea that there is one objective reality out there is central to the positivist worldview. By looking at the phenomenon in an objective manner, the positivist researcher is able to remove his or her own bias from the research being conducted. In addition to this, he or she draws conclusions based on statistical evidence. According to Weber (2004), the ontological tenet of positivism is that reality is distinct from the observer of reality. Questionnaires are a common tool for data collection among positivist researchers. They produce statistical information that can be interpreted through the use of graphs and charts.

Interpretive on the other hand believes that there is no such thing as absolute truth in the world but meaning is made according to the person observing it. Interpretive researchers use surveys and interview guides. They capture the sentiments of the interviewees which are later analyzed thematically. In other words, our subjective characteristics mirror our perceptions of the world

(Weber, 2004). Pragmatism relies on the proposition that researchers should use philosophical approach that gives the best result in a particular study problem that is being investigated (Tashakkori & Teddlie, 1998). This study adopted the pragmatism paradigm since the sample size is small (30) the researcher felt that qualitative data collection and analysis will give the best result.

3.1 Research Design

The study used largely qualitative design which involves small number of respondents with in-depth data collection and analysis. This study used qualitative approach where qualitative research designs were used. According to Rahman, M. S. (2020), qualitative research approach has the advantage of giving deeper insight into the feelings, perception and understanding of the respondents. Quantitative research collects and analyses numerical data in order to describe, explain, predict or control phenomena of interest. Quantitative data in this study is collected to determine the gender, ages, level of education and years of experience in sedentary livestock keeping among the respondents. On the other hand, qualitative research seeks to probe into the research setting to obtain an in-depth understanding about the way things are that way, and how participants in their contextual setting perceive them. This study uses qualitative research design to determine the feelings, perception, understanding as well as the challenges faced by the farmers.

3.2 Population and Sampling Procedure

a) Population

Population in a research study is defined by Blumberg et al (2014) as all the elements that qualify to be included in a study. According to the 2019 Kenya Population and Housing Census, Tarbaj, Dambas and Haragaal had 1,947 households that were practicing sedentary livestock farming. These households therefore formed the potential target population for the study.

b) Sampling Procedure

The study employed purposive sampling method to select the sample. To determine the sample size, the researcher obtained the list of all the 1,947 sedentary farmers in the Tarbaj Sub- County was obtained from the office of the National Bureau of Statistics(KNBS) offices in Wajir. A sample of 10 sedentary farmers from each settlement of Tarbaj, Dambas and Haragaal were purposively selected from the 1,947 sedentary farmers in the entire sub-county of the three settlements. Then quantitative and qualitative data was collected from the 30 purposively selected respondents.

c) Sample Size

According to Robson (2012), a sample is a subset of respondents taken from a larger population for the purpose of conducting a survey. Therefore, in order to make generalizations about the qualities that are being researched within the population that is being focused on, a sample is used. In order to acquire quantitative data from sedentary livestock producers, the research used a sample size of thirty respondents who were purposefully selected. Thirty important informants were interviewed for this study. These informants were from various government institutions as well as village elders. The sample matrix is presented in Table 3.1 as follows:

Table 3.1: Population and Sample Size

Name of villages	Population	Sample Size conveniently selected (Qualitative)
Tarbaj	935	10
Dambas	726	10
Haragaal	286	10
Total	1,947	30

3.3 Methods of data collection

The study used both questionnaires and interview schedules to collect data.

a) Questionnaires for Sedentary Livestock Farmers

The researcher administered questionnaires to gather quantitative data. The questionnaire was subdivided into five sections. Section A sought the demographic information of the respondents. Section B sought information about the prevalence of sedentary livestock keeping. Section D sought information regarding the role of participatory communication on uptake of sedentary livestock farming. Section E was on participatory communication strategies while Section F was on the challenges facing participatory communication between community members, government agencies and development workers.

b) Interview Schedules

The study used interview schedules to collect data. The study gathered comprehensive data from 30 farmers. The interview schedule was divided into five sections. Section 1 sought the prevalence of sedentary livestock keeping in Wajir. Section 2 sought information about the influence of

participatory communication on sedentary livestock keeping. Section 3 sought information regarding the participatory communication strategies used on the uptake of sedentary livestock keeping and section 4 was on the challenges facing participatory communication between community members, government agencies and development workers.

3.4 Data Analysis

According to Kombo and Tromp (2006), data analysis is the process of reviewing the information obtained from a survey in order to draw conclusions and draw inferences from those conclusions. As a result, data analysis is an activity that entails evaluating and interpreting data that has been gathered from the field in order to render it more useful to a user.

a) Analysis of Quantitative Data

Since quantitative data was collected from a small sample size, the data was analyzed using tables, graphs and charts.

b) Analysis of Qualitative Data

According to Braun and Clarke (Byrne, 2021), the six procedures were followed when conducting qualitative data analysis. Reading the data multiple times in order to recognize significance and patterns was the first phase in the process, which required one to become acquainted with the information. In addition, the data were transcribed at this stage. The second step was to create initial codes, which required identifying patterns and meanings with the codes. In the third step, we categorized the topics and grouped those that were most similar together. The fourth step involved reviewing the themes with regard to the authenticity and quality of the data. The fifth step entailed developing and naming the core components of each theme in accordance with the study questions or the goals. In the sixth step, reporting was included, which involved delivering

the story about the data in a convincing manner that was also coherent and logical (Byrne, 2021). As a result, the qualitative information that was gleaned from interviews was subjected to a thematic analysis, after which it was subsequently compiled and presented in the form of narratives and straight quotations.

3.6 Site Description

As indicated in the 2019 Kenya National Population and Housing Census (KPHC), Wajir County has a population of 781,263 households with the age distribution as 0-14 years 51.7%, 16-64 years 45.3% and 65 years and above 3%. The main economic activities of the Wajir residents are livestock rearing, commercial/business and crop farming to a small extent. Bordering Wajir County are Ethiopia on the north, Somalia on the East, Garissa on the south and Isiolo county on the South West. Wajir is characterized as Arid and Semi-Arid area with a mean temperature of 28°C with annual rainfall ranging between 250mm and 400mm.

Wajir County is composed of six sub-counties namely Wajir South, Wajir East, Wajir North, Eldas, Tarbaj and Wajir West. The residents in the county are mainly Somali nomadic pastoralist even though there are few non-Somalis such as Kambas who are mainly construction workers and Ethiopians. The inhabitants of the high altitude areas within the county practice rain fed agriculture to a very small extent. Ground water harvesting is through shallow wells due to the high water table and deep boreholes in some areas. Residents also access surface water through earth pans and dams. Wajir County is endowed with several minerals like limestone and sand. The county also has Solar and wind energy potential.

Settlement in the county follows immigration lineages such that the Degodia community settle Wajir East (especially the Wajir East Rural), Tarbaj, Eldas and Wajir West while the Ogaden settle in Wajir South and the Ajuran clan in Wajir North. The county also hosts combination of smaller

tribes, according to Corner 2003 who make below 10% of the total population of the county residents. It has been observed that there are little livelihood changes in the county while the great majority still hold on the traditional system of livestock rearing and other forms of livelihood.

3.7 Site Selection

The site was selected because it is the centre of all major towns of Tarbaj Sub-County of Wajir County which includes Kutulo, Mansa and Dambas making the area strategic areas for economic, social and political activities. The area has a higher concentration of Somalis who are shifting from the traditional nomadic livestock farming compared to the other sub-counties within Wajir. The area also borders neighboring Ethiopia with high chances of exchange of ideas and practices. This gave the researcher reason to focus on the zone.

The researcher focused on Tarbaj, Haragaal and Dambas villages within Tarbaj Sub- County since they encompass important variables essential for livestock livelihood systems namely strategic water points, high potential of mixed method of livestock and crop farming, since according to 2019 Population and Housing Census, 47.5% of the residents of Tarbaj Sub – County access their water from dams/lakes making mixed farming a possibility.

3.8 Unit of Analysis

According to the theory proposed by Mugenda and Mugenda (2003), a unit of analysis is a unit that is designed for the purposes of aggregating its features in order to represent abstract phenomenon or larger groupings. The specific sedentary livestock farmers in Tarbaj location, Haragaal and Dambas within Tarbaj sub-county in Wajir county served as the unit of analysis for this research study.

CHAPTER FOUR:

DATA PRESENTATIONS, INTERPRETATION AND DISCUSSION OF FINDINGS

4.0 Introduction

In this chapter, the data and findings from the study are presented, interpreted, and discussed. The purpose of this study was to determine whether or not Participatory Communication had an influence on keeping sedentary livestock in Wajir County. The goals of the study will serve as the foundation for the examination of the data. The data that were gathered out in the field were analyzed, as well as displayed, through the use of frequency tables, pie charts, and graphs. The information gathered from interviews was analyzed in terms of recurring themes.

4.1 Questionnaire Distribution and Return Rate

Table 4 1: Questionnaire Return Rate....

Respondent Type	Targeted Questionnaires		Returned Questionnaires	
	<i>F</i>	%	<i>f</i>	%
Quantitative data	30	100	30	100
Qualitative data	30	100	30	100
Total	30		30	

The questionnaire distribution and return rate analysis shows that the study aimed to enlist 30 respondents for both quantitative and qualitative study, of which 30(100%) were able to participate. According to Teresia (2021) a response rate of 70% and above is regarded as very good. This implies that the questionnaire return rate for this study was excellent.

4.2 The Demographic Information of the Respondents

The purpose of the study was to determine the demographic information of the people who participated so that the results could be understood in their proper context. The demographic information consisted of things like age, gender, educational level, and length of time spent engaged in sedentary livestock husbandry.

a) Gender Distribution

The gender distribution is presented in Figure 4.1 as follows:

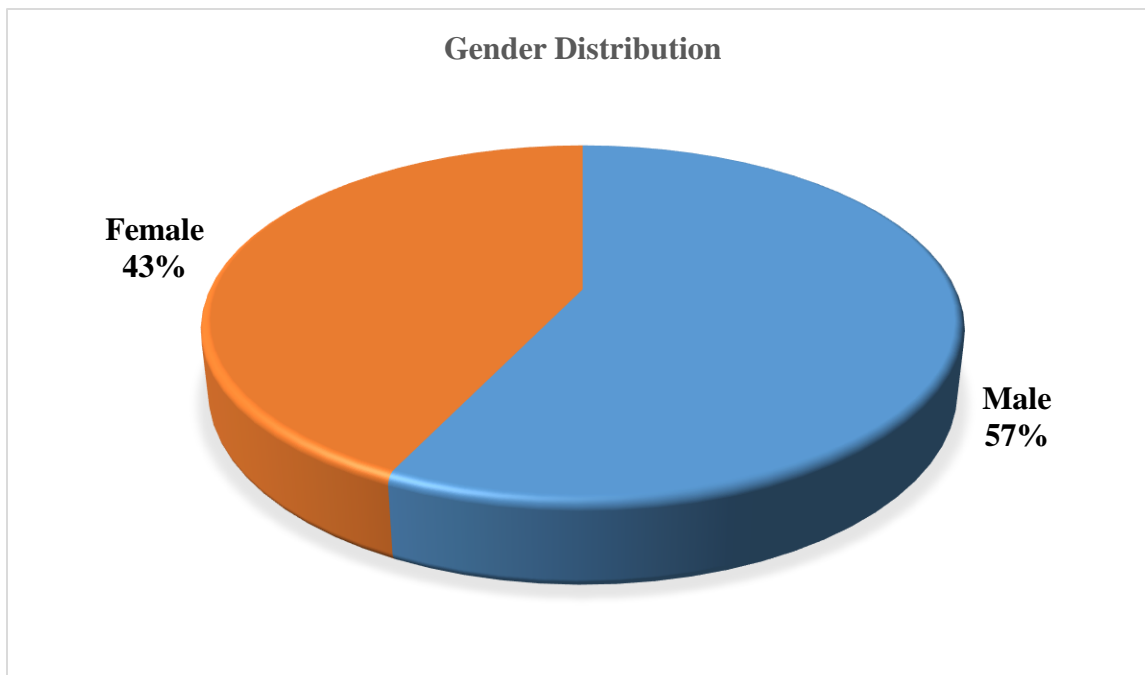


Figure 4.1: Gender Distribution

The study shows that there were more male respondents (57%) as compared to 43% of the female respondents. However, the gender difference did not affect the outcome of the study. Instructively, men are the head of most of the households who are also directly involved in livestock keeping, which is at the core of the current study.

b) Age Distribution

The age distribution of the respondents is presented in Figure 4.2 as follows:

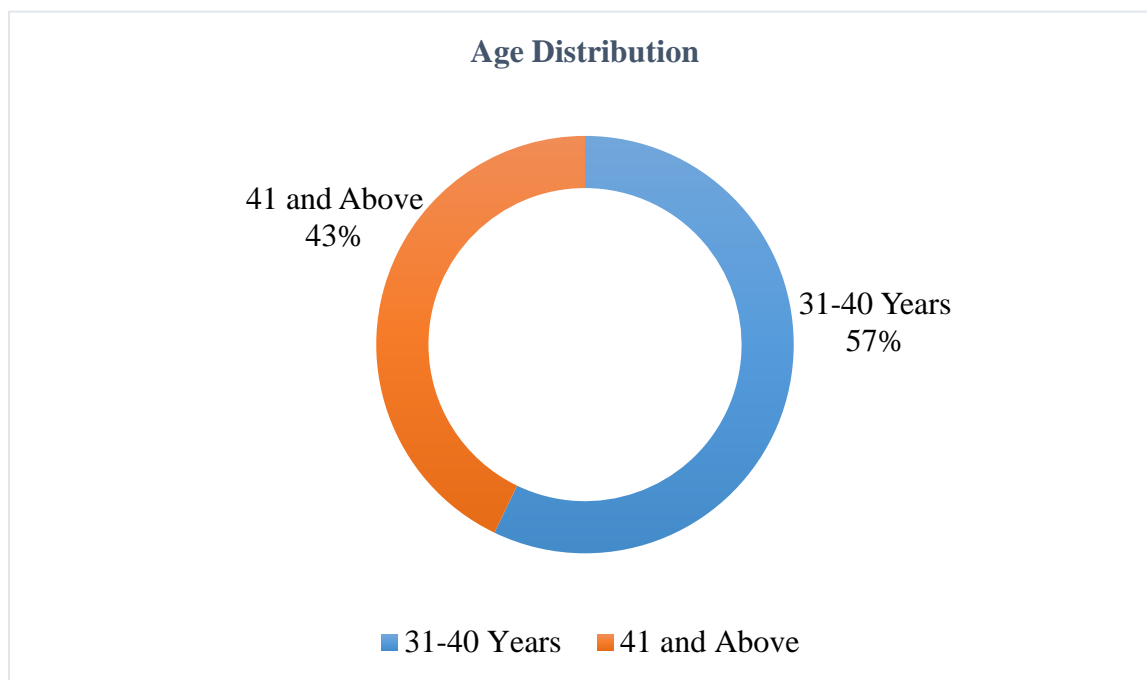


Figure 4.2: Age Distribution

The age distribution indicates that most of the respondents (57%) were aged 31-40 years followed by those aged 41 years and above at 43%. This shows that most of the farmers were mature people who could understand issues of communication participation and sedentary livestock farming.

c) Academic Qualification

The academic qualification distribution of the respondents is presented in Figure 4.3 as follows:

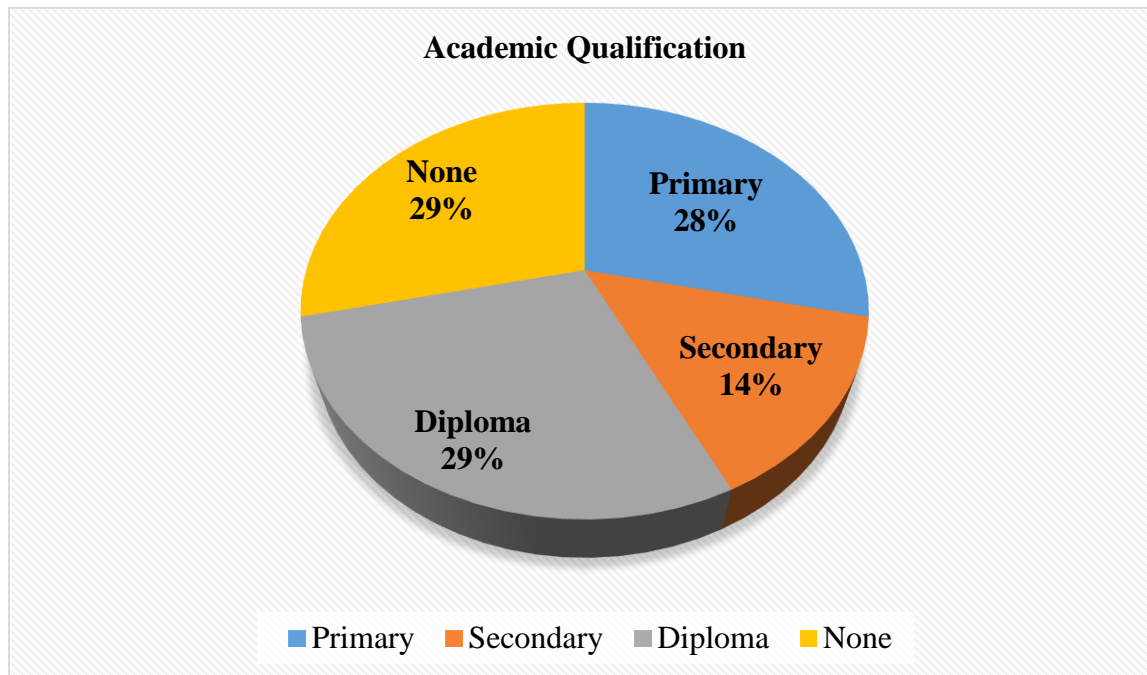


Figure 4 3: Academic Qualification.

The academic distribution shows that 28% of the respondents had primary school education as well as those with Diploma (29%) and those with no education were 29%. Those with secondary school education were the least at (14%). This distribution is a strong indication that most of the farmers had little education. This is likely to be hindering their proper participation in community dialogue.

d) Experience as Sedentary Farmers

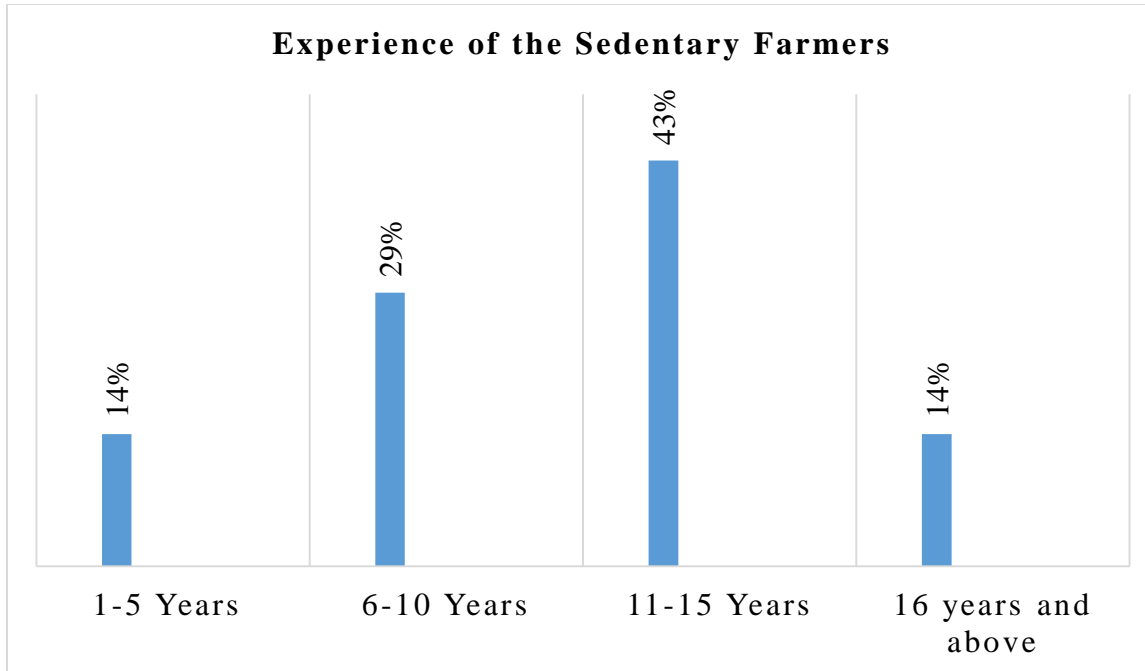


Figure 4 4: Experience as Sedentary Farmers

Regarding respondents' experience as sedentary livestock farmers, the study shows that 43% of them had done it for 11-15 years followed by 29% of the respondents that had done it for 6-10 years while those who practiced sedentary for 16 years and above were 14% as well as those who had done it for 1-5 years (14%). This shows that a significant number of the respondents had practiced sedentary farming for more than a decade. This is adequate experience to be able to respond to the items of the questionnaire.

4.3 Qualitative Data Analysis

The interviews were conducted among the 30 farmers drawn from the three villages of Tarbaj, Haragaal and Dambas. To protect their identity, the participants were assigned some numbers instead of their actual names ensure their anonymity. Therefore, participants were labelled from Number 1 to number 30. The researcher wrote the respondents sentiments on a note book

a) Popularity of Sedentary Livestock Farming

The study shows that 21 respondents concurred that sedentary livestock keeping was gaining popularity as opposed to 9 who had a contrary opinion. Hence, this can be construed to mean that indeed, a significant number of farmers were embracing sedentary livestock keeping, albeit in a slow pace. This could be attributed to increased levels of participatory communication in the area. This finding supports that of Fratkin et al (2001) which had established that pastoralist's sedentarization increased in the 19th and 20th century in Northern Kenya. The reasons for this increase was due to environmental stress of drought and famine as well as poverty among the pastoralists (Mc Gahey et al 2014).

Respondent no.1 had the following opinion on the prevalence of sedentary livestock farming.

Sedentary livestock keeping is not very common. However, it is gaining popularity as more people are getting awareness about climate change and the need to embrace modernity. Keeping huge stocks of cattle is proving untenable. We tend to lose many animals to draught, which ravages this place every now and then. Currently, famers are losing their animals in hundreds. It is not making sense to keep huge number of animals only to lose them in one season. It would make more sense to have a few number of quality breeds that have huge returns and easy to take care of. The government is moving towards that direction (Respondent 1, Interview, 2nd October 2022).

Respondent no. 3 attributed this change of events to sustained efforts by the government agencies and development workers to sensitize the residents about the benefits of sedentary livestock keeping through participatory communication. She opined as follows:

The sustained sensitization by the government and development workers on the importance of embracing sedentary livestock keeping is bearing fruits. People are slowly embracing this sedentary livestock keeping method. If only we could have frequent supply of fodder throughout the year, many more people could easily come on board. Perhaps, we should think about farming in order to sustain the sedentary livestock farming (Interview, 3rd October 2022).

Participant 6 added her voice by indicating the following about the future of livestock farming in the area: -

The sedentary livestock keeping is surely taking shape. It is probably going to become the main form of livestock keeping in the near future in order to help safeguard the negative effects of nomadic livestock keeping to people and the environment. The benefits of sedentary livestock keeping to both the farmer and the environment out way the disadvantages by far (Participant 6, Interview, 2nd October 2022).

b) Inability to practice sedentary Livestock Keeping

There was an agreement among 26 respondents that many households were unable to practice sedentary livestock keeping, as opposed to 4 that had contrary opinion. This implies that many households were unable to engage in sedentary livestock keeping for some reasons. Some of these reasons have said to economic difficulty in feeding the animals and lack of adequate participatory communication where farmers can acquire the needed information about sedentary farming to better their farming skills.

Participant no. 12 who practiced sedentary livestock keeping for 3 years opined the following on the difficulty in practicing sedentary livestock keeping

Sedentary livestock keeping is a bit difficult to practice for many households because drought occurs everywhere in the county and the animals are confined in a small shamba, unlike the free range. The animals, therefore, need to be fed with grass that is extremely scarce almost all the time (participant no.12 interviewed on 3rd October 2022)

Participant no. 17 added his sentiments by saying: -

Since farmers have reduced livestock, there is significant reduction in milk production which is rarely enough for family use let alone it been enough to be sold. This situation forces farmers who are not able to plant grass to buy grass from monies from other sources (participant no.17 interviewed on 3rd October 2022)

Participant No. 13 gave her opinion on the how difficult it was for her and many other farmers and said: -

We were told that sedentary livestock keeping will allow our children to go to school unlike the nomadic pastoralist children, however, even in this new livestock keeping, we still need the children to look after the animals in terms of feeding and watering them (participant was interviewed on 2nd October 2022)

Participant No.21 however refuted the claim by the majority by saying that: -

Many of the villages, since the advent of devolution have had boreholes drilled with plenty of water. The soil also is very fertile as no farming activities have ever been done. This, therefore, means that it is easy to grow grass and hence easy to feed the animals (Participant no.12 interviewed on 3rd October 2022)

c) Scanty Information on Sedentary Livestock Farming

It was evident, from the analyses, that there was scanty information about sedentary livestock keeping as indicated by 21 respondents against 5 that had contrary opinion. Another 4 respondents were however undecided. This implies that indeed, there was scanty information about sedentary livestock keeping. This is also an indication that the level of participatory communication is insufficient.

Participant no. 23 gave his views as follows: -

Information flow between the development workers and the farmers is slow and scanty due to the vastness of the area that limits the development workers reach to the farmers. This means that farmers rarely get opportunity to interact with development partners for a meaningful dialogue. (participant interviewed on 5th October 2022).

On her part, participant no. 5 stated that language is a major hindrance to the proper flow of information about the sedentary livestock farming. This is what she had to say: -

Majority of the information we get concerning sedentary livestock farming is in foreign language such as English and Kiswahili. Majority of us hardly read and write these languages. As a result, our understanding of the information disseminated is low (Participant was interviewed on 3rd October 2022)

Adding his voice, participant no.30 agreed with his colleagues blaming highly on the low literacy among the farmers to the low information flow. He said the following while explaining his position: -

Majority of the farmers have either no education at all or are primary school drop outs. This situation has seriously impacted negatively in the flow of information from the development workers to the farmers (participant no. 30 interviewed on 11th October 2022)

Participant no.26, however, blamed the low information flow to lack or inadequate vernacular radio programs. He expressed his views as stated below: -

Vernacular radio programmes on sedentary livestock keeping are almost non-existent and if there, very insufficient to explain how to successfully run a sedentary livestock keeping. This is due to the fact that non-experts who have little knowledge about the method of farming run such shows if at all they exist (Participant no 26 interviewed on 11th October 2022).

d) Support from the Government and Non-Governmental Agencies

There was an agreement among the 30 respondents where 21 strongly agreed while 9 respondents agreed as well that support from the government and non-governmental agencies can help increase the number of those practicing sedentary farming. This implies that government agencies need to do more of participatory communication to enhance sedentary livestock farming.

Participant no.11 while giving his opinion said: -

Government support with regard to participatory communication is insufficient. Veterinary officers and agricultural extension officers are very few and their services rare. This means that farmers are forced to treat their animals by themselves. Knowledge of better farming methods is also limited.

In addition, participant no.15 gave his views on the government support to enhance sedentary livestock farming as: -

To enhance participation and exchange of knowledge, a common language must be used by all parties. Unfortunately, that is not the case now. The available information is in a language that is not known to many farmers. There is need for better packaging of information by the development partners. In that way, there is going to be exchange of knowledge between the farmers and the development workers. And that will enhance the reaping of the benefits from the new livestock keeping method (sedentary livestock keeping) by the farmers.

Participant no. 30 while agreeing with the other participants gave her opinion as: -

Free flow of information between us (development workers and farmers) is slow due the fact that the area is vast and it is almost impossible for the few government workers to traverse the whole area. Apart from this slow flow of information, there is also lack other support to encourage the nomadic farmers to opt for sedentary livestock keeping. There is inadequate water and veterinary services for the farmers. This forms of support would have increased sedentary livestock farmers in our area. (Participant no. 30 Interviewed on 3rd October 2023.)

Participant no. 14 on his part explained his views as: -

It is obvious that all forms of government support towards settling the farmers will increase sedentary livestock farmers. Farmers in this region are tired of losing their livestock to frequent droughts, famines and diseases. Majority of them are looking for alternatives unfortunately they do not know those alternatives. If the government provides information on better ways of farming, I am certain, sedentary livestock farming will increase significantly. (Participant no. 14 Interviewed on 5th October 2022)

e) The Nomadic Culture discourage and Sedentary Farming

The study shows that 21 of the respondents strongly agreed and 9 agreed that the nomadic culture has been discouraging sedentary farming. Hence, for the sedentary livestock farming to work, the communication participatory needs to sensitize the residents about the disadvantages of nomadic culture.

Participants no.19 had the following on cultural issues: -

My community are stuck with their cultures. They wouldn't like to change it significantly even though some of the people realize that some of the cultural practices are not sustainable anymore. Nomadic livestock keeping is one such cultural practice that is not sustainable. Nomadic farmers keep large herds of animals which is a sign of richness, earning the owner respect. Reducing those

animals and confining them to a small piece of land will be unimaginable to some of the nomadic farmers. This is because they will be seen as destitute people (Participants no. 19 interviewed on 12th October 2022)

Participant 26 who is a young man while narrating how cultural beliefs affects adoption of sedentary livestock keeping: -

Our elderly parents really do not like the idea of reducing the family herds and settling down. This they claim will deny them a proper sendoff when their day comes. Elderly people in this community attach a lot of premium on their sendoffs when a number of animals will be slaughtered during their funerals. Their fear is if the animals are reduced to a large extent, there might be no animals to slaughtered during the funerals (participant No. interviewed on 3rd October 2022)

f) Lack of pasture dissuading many farmers from practicing sedentary farming scored

As to whether lack of pasture discourages farmers from adopting sedentary livestock keeping, 26 participants agreed that indeed lack of pasture discourages nomadic farmers to settle down. three (3) participant was undecided while 1 participant disagreed.

Participant no. 7 shared his views as: -

Wajir county is prone to drought causing lack of pasture. This situation is made worse by the fact that locals do not grow animal feeds. There are also no agrovet shops where we can buy manufactured animals feeds. The cost of animal feeds if bought from other towns is also high Water is also scarce. We the farmers, therefore, think twice before we engage in sedentary livestock keeping (participant no.7 interviewed 3rd October 2023)

Participant no. 27 on his part narrated: -

Sedentary livestock keeping is a tiresome business due to the fact the animals will be required to feed. Napier grass if at all it is found requires someone to cut it into smaller pieces that animals can easily eat. This requires that farmers employ someone to do that job which will not have been the case if the indigenous grass would have been available (Participant No.27 interviewed on 2ndOctober 2022).

4.4 The Role of Participatory Communication in the Uptake of Sedentary Livestock Keeping

The study embarked on establishing the role of participatory communication in the uptake of sedentary livestock keeping. Table 4.3 presents the findings.

Table 4.2: Participatory Communication and Sedentary Livestock Keeping

No	Statement	SA	A	UD	D	SD
1	Participatory communication has created more awareness about sedentary livestock keeping	5	17	0	2	6
2	Most of us are not involved in the dialogue between us and the development workers	9	17	0	4	0
3	The agricultural extension officers are rare to find here	13	4	4	9	0
4	Participatory communication has enabled more farmers to take sedentary farming	13	9	4	4	0

a) Participatory Communication and awareness about Sedentary Livestock Keeping

There was concurrence among 5 of the respondents who strongly agreed that participatory communication played a key role in enhancing awareness about sedentary livestock keeping. This number was followed by another 17 who also agreed that participatory communication has created more awareness about sedentary livestock keeping. This was however contradicted by 2 of the respondents who disagreed and another similar number 6 who strongly disagreed. This implies that participatory communication was instrumental in creating awareness about sedentary livestock keeping among residents of Wajir.

Participant no. 21 had the following to say about the role participatory communication on sedentary livestock farming.

At first the idea of sedentary livestock farming was brought to the county by a few professionals who saw the farming method in other places. They then started the farming

methods and trained few other farmers who were mainly farmers. It was later picked by development agencies and the county government. The development workers with the help of the area chiefs used barazas to educate many farmers who are currently practicing sedentary livestock farming (Participant 21, interviewed on 4th October 2022)

Participant no. 25 also narrated the following:

I, personally did not know anything about sedentary livestock farming. It was after I had about the new method of farming that I sought more information. I was then informed of barazas conducted by agricultural officers and the chiefs that came once in a while to the villagers to educate people of sedentary livestock farming. I got even more curious and made sure that I was there during such meetings. They were informative and that is how I and some of my colleagues opted to settle down (participant no. 25, interviewed on 11th October 2022)

b) Involvement of Sedentary Livestock Farmers in Dialogue with Development Workers

The study shows that a total of 26 respondents were of the opinion that most of the sedentary livestock keepers were not involved in the dialogue between them and the development workers. This was however disputed by 4 of the respondents. This implies that lack of involving these farmers in participatory communication could be derailing efforts to encourage farmers to practice sedentary livestock farming.

Participant no. 10 told the researcher that:

The majority of the agricultural extension officers were non-locals who were not familiar with the local languages. During meetings, therefore, the majority of us rarely understood what the officers were saying. The information pamphlets were also in foreign language. This means that we were lost in the discussion (Participant no.16, interviewed on 11th October 2022)

c) Rare Agricultural Officers

The agricultural extension officers are rare to find according to 20 respondents in comparison with 9 of the respondents who had contrary opinion. However, 1 respondent was undecided. This implies that indeed, agricultural extension officers are rare to find.

d) Participatory Communication and Uptake of Sedentary Livestock Keeping

Twenty-two (22) respondents concurred that participatory communication had enabled more farmers to take sedentary farming, as opposed to 4 that had a contrary opinion while another 4 had no opinion. This underscores the importance of participatory communication in enhancing sedentary farming.

Respondent no. 29 narrated how participatory communication has enhanced the uptake of sedentary livestock keeping: -

Prior to the entry of the agricultural extension officers into the field, not many of us knew any better way of livestock keeping than nomadic lifestyle apart from few farmers who seen this method elsewhere. It is after the agricultural officers conducting barazas that sedentary livestock farming has picked and it is now becoming more and more popular albeit slowly (Respondent 29, interviewed on 11th October, 2022)

4.5 Participatory Communication Strategies Used to Disseminate Information Regarding Sedentary Livestock Keeping

The study embarked on establishing the participatory communication strategies employed to disseminate information regarding sedentary livestock farming. The results of the analyses of the items of this objective are presented in Table 4.4 as follows: -

Table 4 3: Types of Participatory Communication Strategies

No	Statement	SA	A	UD	D	SD
1	Most of the participatory communication is in form of meetings	12	9	0	9	0
2	We have several workshops with development workers about sedentary farming	7	6	0	9	8
3	Mass media is a popular channel for disseminating information about sedentary farming	4	4	0	17	4
4	Social media such as WhatsApp, Facebook, Twitter and Instagram are used to disseminate information about sedentary farming	4	0	26	0	0
5	The agricultural extension officers visit homesteads to offer advice	0	8	0	18	4
6	There is no flow of information on sedentary farming	4	9	0	9	8

a) Use of Meetings in Participatory Communication on Sedentary Livestock Keeping

There was an agreement from 21 respondents who concurred that most of the participatory communication was in form of meetings. This was, however, refuted by 9 of the respondents. Hence, this can be construed to mean that meetings were prevalent when conducting participatory communication during sedentary livestock dialogue.

During the study, respondent no.18 explained the following with regards to the strategies commonly used in the participatory communication

Many a times, the agricultural extension officers conduct a public baraza or small town hall meeting in order to educate the farmers on sedentary livestock farming. Sometimes, even seeking help from the chiefs and other local leadership. These meetings usually attract nomadic livestock keepers some of which will later adopt the new method of livestock keeping (Respondent no. 18, interviewed on 3rd October 2022)

b) Workshops with Development Workers About Sedentary Farming

Workshops were also identified as some of the methods used by the government workers and the residents to dialogue about sedentary livestock keeping as evidenced by 13 of the respondents as opposed to 17 that strongly disagreed. This implies that workshops were not frequently used to conduct participatory communication in between the government workers and the residents about sedentary livestock farming.

Giving his opinion on whether workshops were common way of having a dialogue between the government workers and the farmers, respondent no. 27 had the following to say: -

Workshops are quite rare in this area because the area is a bit far from the town. This might have discouraged the government workers to come and conduct workshops. There are also no facilities that can be used during workshops unlike barazas that residents can sit under trees while having a dialogue on sedentary livestock farming. Additionally, it is expensive for the farmers to invited for a workshop because of their transport allowances (Respondent no. 27 interviewed on 8th October 2022)

Participant no. 11 also narrated the following when he was asked whether he has ever attended a workshop: -

Workshops are common for us who have their farms closer to town centres. We have been invited for workshops on several occasions where we were able to discuss sedentary livestock farming. during such meetings, the farmers are not facilitated to come to the meeting, instead they are invited and they come voluntarily (Respondent 11, interviewed on 8th October 2022)

c) Use of Mass Media for Participatory Communication

The study shows that Mass media was not a popular channel for disseminating information about sedentary farming as noted by 21 respondents. However, 9 of the respondents opined that mass media was a popular channel of participatory communication. This implies that mass media was rarely used during participatory communication between development workers and the sedentary livestock farmers.

Respondent no. 15 explained why mass media was unpopular in disseminating sedentary livestock farming: -

Information on sedentary livestock farming through the mass media is almost non-existent here because radio frequency does not adequately reach here. The few radio stations that do reach here have no information on any better way of livestock keeping. The other stations are like KBC that is broadcasting in English and Kiswahili and also have no program for us farmers here. (Respondents no. 15 interviewed on 7th October 2022)

d) Use of Social Media for Participatory Communication

The study found that majority of the respondents were undecided as shown by 26 out of the 30 farmers who were interviewed. However, 4 opined that social media was being used. This is a strong indication that the farmers are not aware whether social media platforms are used to disseminate information about sedentary livestock farming.

Participant no.12 had the following to say on the use of social media to spread information on sedentary livestock farming: -

We have never taken part in a dialogue on sedimentary livestock farming because majority of us are not able to buy smart phones. Illiteracy is also hampering us to access social media platforms because we do not know how to use the smart phones. Network coverage in the area is also poor (Respondent no. 12 interviewed on 3rd October 2022).

e) Visits by Agricultural Extension Officers regarding Participatory Communication on Sedentary Livestock Farming

The study shows that agricultural extension officers rarely visits homesteads to offer advice as indicated by 22 of the respondents while 8 had contrary opinion. This implies that agricultural extension officers rarely visit homesteads to offer advice about sedentary livestock farming.

The researcher got the following response from participant no. 11 with regards to visit by agricultural extension officers' visit to the farmers' homesteads: -

I was never visited by an agricultural officer or even the area chief on any matter neither were my colleagues and neighbours visited. I think why they never visited is because of we

are dispersed on a vast area and it will be difficult for them to visit each and every homestead. (Respondent no. 11, interviewed on 2nd October 2022)

f) Flow of Information about Sedentary Livestock Keeping

The study shows that there was slow flow of information regarding sedentary livestock farming as evidenced by 17 of the respondents. This was however disputed by 13 of the respondents who expressed contrary opinion. Hence, this can be construed to mean that there is a slow flow of information on sedentary livestock farming.

This finding is in line with the Diffusion of Innovations Theory which posits that innovation is communicated by the process of diffusion through certain channels such as word of the mouth, mass media, social media, SMS among others (Dearing & Cox, 2018).

4.6 Challenges facing Participatory Communication between Sedentary Livestock Keepers and government workers

This objective strived to establish the challenges facing participatory communication between sedentary livestock keepers and development workers. The analyses of the six items of this objective are presented in Table 4.4 as follows:

Table 4 4: Challenges facing Participatory Communication between Sedentary Livestock Keepers and Development Workers

No	Statement	SA	A	UD	D	SD
1	The government workers do not appreciate our culture	0	4	4	13	9
2	The information disseminated is not simple to understand	7	13	4	6	0
3	We are rarely allowed to give opinions	9	7	7	3	4
4	The media used to disseminate information is not user friendly	14	2	12	2	0

5	The agricultural extension officers are rare to find	13	9	4	4	0
6	High illiteracy rates is hampering participatory communication	13	17	0	0	0

a) Appreciation of Residents’ Culture by the Government Workers

The study established that the government workers appreciate the residents’ culture as evidenced by 22 of the respondents. However, 4 were of the opinion that government workers do not appreciate residents’ culture, while another 4 were undecided. This implies that the government workers are sensitive to the cultural values of the residents.

Participant no. 17 explained that: -

Government workers appreciate the farmers’ cultures. As a result, nobody has been coerced to abandon their previous nomadic lifestyle, in fact if a farmer sees fit to go back to the traditional lifestyle, he/she will be allowed practice it. Further, government workers even other cultural/religious practices such as separation of men and women during the public barazas and allowing the elderly men to speak first was respected. They also take farmers opinions seriously (Participant no.17, interviewed on 6th October, 2022)

This was nonetheless refuted by participant no.12 who argued that: -

Majority of the Agricultural Extension officers see the lives we were living while practicing nomadic livestock rearing as primitive and backwardness. Due to this, they push so hard some ideas that the farmers see as foreign. This, sometimes causes rift between the farmers and the agricultural extension workers. An example is Artificial Insemination (Participant no.12 interviewed on 6th October,2022)

b) Simplicity of Information

The study established that the majority of the respondents (20) agreed that the information disseminated was not easy to understand while 6 respondent saw the disseminated information to easily understandable. Four (4) respondents were doubtful. This means that information given to the farmers were not easily understandable.

Respondent no. 18 made the following observation on the information given to the farmers: -

The information that is disseminated to the farmers are, first of all, either, in English or Kiswahili while the bulk of intended recipient are either completely illiterate or semi illiterate, therefore, it was really difficult for the farmers understand written messages Again, there is frequent use of jargons that are unknown to the audience. Reception of Radio in the far flung areas is also poor for the very little information delivered through the Radio.

c) Freedom to give Opinions

The ability of the sedentary livestock keepers to give their opinions during participatory communication was curtailed according to 16 of the respondents as opposed to 7 that had contrary opinion. However, another 7 of the respondents were non-committal. This clearly explains that the opinions of the residents were not adequate.

Respondent no. 17 while giving his views on whether they were able to give their opinions during meetings and workshops said: -

Yes, we were generally allowed to give our opinions about sedentary livestock keeping, its challenges and successes but this was derailed by the fact that most of us illiterate and do not understand Kiswahili or English. We depended on translators who, themselves are not well educated. This was a big challenge to us. For this reason, many farmers kept quiet during meetings and workshops. (Respondent No. 17 interviewed on 4th October 2022)

d) User Friendly Media

There was an agreement among 16 of the respondents that the media used to disseminate information was not user friendly as opposed to 2 that had contrary opinion while 12 were undecided. This implies that somehow, the media was not user-friendly.

Interviewee no. 27 narrated the following: -

The media used to disseminate information was not friendly because of the accessibility of the limited coverage among the FM radio stations. Almost all of us own simple phones but with radio but those radio frequencies rarely reach where we are or are interfered with by noise and therefore are not clear. This seriously renders the media used to disseminate information unfriendly. In the case of face-to-face dialogue, it's the language that makes the medium unfriendly (respondents no. 27 interviewed on 3rd October, 2022)

e) Rare Agricultural Extension Officers

There was show of agreement among 22 of the respondents to the effect that the agricultural extension officers were rare to find as opposed to 4 who disagreed while 4 were undecided. This implies that the agricultural extension officers are not available to provide the skills needed to enhance sedentary livestock keeping practices.

f) Illiteracy Rates Hampering Participatory Communication

There was a show of agreement among all the respondents to the effect that high illiteracy rates were hampering participatory communication. This implies that illiteracy among the residents needs to be addressed in order to help them participate fully in participatory communication

Participant no.23 narrated that: -

Majority of the farmers are not well educated. This makes it quite challenging for the farmers many of things that are discussed during meetings. This, in fact has even made many farmers to lose interest in the whole thing. They therefore resort doing things the way they know best. For instance, they treat and breed their animals on their own instead of consulting the livestock officers or the veterinary doctors (participant No 23, interviewed on 8th October 2022).

g) Challenges facing Participatory Communication

The study noted that participatory communication between sedentary livestock keepers and government workers in Wajir County was facing a myriad of challenges. The challenges identified through the interviews included low literacy levels, high levels of poverty, nomadic life, regular drought and general apathy from some residents. The government workers were also found to be very few. Language barrier was also identified as the main challenge as most of the residents did have poor mastery of English and Kiswahili languages which most of the government workers preferred to use. Participant no.28 narrated his experience as follows:

Illiteracy levels are quite high here. Some of the government workers especially those from outside our community prefer to use English or kiswahili language to communicate.

In such instances, we find ourselves having to look for translators. Our nomadic way of life is also a challenge when it comes to mobilizing the residents to attend meetings. Apathy among the residents is also a challenge especially for those that feels that sedentary livestock keeping is not their thing. This situation is made worse by high poverty levels which make it difficult for the farmers to indulge in sedentary livestock keeping (Participant 28, Interview, 2nd October 2022).

This implies that alleviation of some of these challenges may help to improve participatory communication as well as enhance uptake of sedentary livestock farming.

CHAPTER FIVE:

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Study

The goal of this research was to find out how effective participatory communication can be in encouraging more people to start keeping livestock in Wajir County. The study's goals were to look at what part participatory communication plays in the spread of sedentary livestock keeping, what kinds of participatory communication strategies are used to spread the word, and what kinds of obstacles stand in the way of effective communication between sedentary livestock keepers and development workers in Wajir County.

Diffusion of Innovation Theory served as the study's theoretical foundation. A similar conceptual framework was developed to illustrate the interplay between these two types of variables. In addition, a wide range of empirical studies from the global, regional, and local levels were surveyed for this literature review. Studies helped with context and analysis for this one. However, the current study fills in a few gaps in the aforementioned research.

In-depth data was gathered through interview guides, as the study followed a qualitative design. Therefore, interview guides were used extensively to compile data. Thirty respondents were randomly selected to provide qualitative data, and questionnaires were used to collect demographic information. Graphs, charts, and percentages were then used to display the demographic data.

5.2 Prevalence of Sedentary Livestock Farming

The study established that, although the number of sedentary livestock is low, a significant number of farmers were slowly embracing it. This was partially attributed to increased levels of participatory communication in the area. However, many households were found to be unable to

engage in sedentary livestock keeping for some reasons such as scant information about sedentary livestock keeping, low level of participatory communication which was considered insufficient and participation apathy. Lack of pasture was also found to deter many farmers from practicing sedentary farming.

5.3 The Role of Participatory Communication in the Uptake of Sedentary Livestock Keeping

The study established that participatory communication was instrumental in creating more awareness about sedentary livestock keeping among residents of Wajir. However, there was discontentment among 26 respondents that most of the sedentary livestock keepers were not involved in the dialogue between them and the government workers, which was derailing efforts to encourage farmers to come on board. It was also established that the number of agricultural extension officers was low.

a) Participatory Communication Strategies Used to Disseminate Information Regarding Sedentary Livestock Keeping

The study established that meetings as well as workshops were some of the most popular methods of conducting participatory communication during sedentary livestock dialogues. However, mass media as well as social media were rarely used. The agricultural extension officers were rarely visiting homesteads to offer advice about sedentary livestock farming.

5.4 Challenges facing Participatory Communication between Sedentary Livestock Keepers and Government Workers

The study revealed that development workers were sensitive to the cultural values of the residents. However, the information disseminated was not simple to understand while the media used to disseminate information about sedentary livestock keeping was not user-friendly as well. The study also noted that the agricultural extension officers were not readily available to provide the

skills needed to enhance sedentary livestock keeping practices. Literacy level among the residents was also found to be low which was hampering proper participation in the participatory communication.

5.3 Conclusion

The study concludes that a significant number of farmers are slowly embracing sedentary livestock farming partially attributable to increased levels of participatory communication in the area. Similarly, participatory communication is instrumental in creating more awareness about sedentary livestock keeping among residents of Wajir. The study also concludes that meetings as well as workshops were some of the most popular methods of conducting participatory communication during sedentary livestock dialogue.

The study also concludes that government workers were sensitive to the cultural values of the residents although the information disseminated was not simple to understand while the media used to disseminate information about sedentary livestock keeping was not user-friendly as well.

5.4 Recommendations

This study had the following recommendations: -

For the first objective which was to examine the role of participatory communication in the uptake of sedentary livestock keeping in Wajir County, for this objective the study recommends that the government should encourage and organize frequent meetings where participatory communication can take place.

In the second objective which was to explore the types of participatory communication strategies used to disseminate information regarding sedentary livestock keeping in Wajir County, it is

recommended the government should use more face to face communication and vernacular radio stations.

For the third objective determine which was the challenges facing participatory communication between sedentary livestock keepers and development workers in Wajir County, it is recommended that the government should increase the number of local Agricultural Extension Officers in the county to eliminate the challenge of language barrier.

5.5 Suggestions for further Research

This study only focused on establishing the role of participatory communication in enhancing sedentary livestock keeping in Tarbaj sub-county in Wajir county. This is a small geographical area for generalization. It would, therefore, be more acceptable to extend the study to the entire Wajir County area and beyond for this study to be more generalizable. It may also be appropriate to ground the study on other theories, research designs and research approaches. The following topics are, therefore, suggested for further research:

- a) Participatory communication and pastoralists' economic livelihood
- b) Determinants of the choice of media in participatory communication
- c) Packaging of information in participatory communication

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APPENDIX I: LIST OF ALL THE SEDENTARY LIVESTOCK FARMERS IN TARBAJ SUB-COUNTY

The In charge –Kenya National Bureau of Statistics(KNBS)

Wajir County Office

WAJIR

24th September, 2022

Dear Sir/ Madam,

RE: LIST OF ALL SEDENTARY LIVESTOCK FARMERS IN TARBAJ SUB-COUNTY

My name is Issa Abdi Dagane, an MA in Communication student from University of Nairobi. I am carrying out a research on “Participatory Communication and Sedentary Livestock Keeping in Wajir County.” The research is one of the requirements in our course. I am writing to request for the list of all sedentary livestock farmers in Tarbaj Sub- County. All the information you will give will be treated with utmost confidentiality

Thank you in advance for your cooperation.

Sign:

Issa Abdi Dagane

K50/6956/2017

APPENDIX II: QUESTIONNAIRE FOR SEDENTARY LIVESTOCK FARMERS

TO WHOM IT MAY CONCERN

1st October 2022

Dear Respondent,

RE: DATA COLLECTION

My name is Issa Abdi Dagane, an MA in Communication from University of Nairobi. I am carrying out a research on “Participatory Communication and Sedentary Livestock Keeping in Wajir County.” The research is one of the requirements in our course. Kindly, assist to fill in this questionnaire by either ticking [] or giving a brief explanation in the spaces provided. All the information you will provide will be treated with utmost confidentiality.

Thank you in advance for your cooperation.

Sign:

Issa Abdi Dagane

K50/6956/2017

Demographic Information

1. Gender: Male [] Female []
2. Age: **a).** 21-25 [] **b).** 26-30 [] **c).** 31-40 [] **d).** 41 and above []
3. Academic qualification: Primary [] Secondary [] Diploma [] Degree [] Masters [] Others []
4. Number of years as a sedentary livestock keeper: **a)** 1-5 [] **b).** 6-10 [] **c).** 11-15 [] **d).** 16 and above []

Section B: Prevalence of Sedentary Livestock Farming

Instructions: In this section, please indicate by ticking [√] to what extent you agree with the following statements using: **Strongly Agree {SA}, Agree {A}, Undecided {UD}, Disagree {D}, and strongly Disagree {SD}.**

No	Statement	SA	A	UD	D	SD
1	Sedentary livestock keeping is becoming popular					
2	Many households are unable to practice sedentary livestock keeping					
3	There is scant information about sedentary livestock keeping					
4	Support from the government can help increase the number of those practicing sedentary farming					
5	The nomadic culture has been discouraging sedentary farming.					
6	Lack of pasture dissuades many farmers from practicing sedentary farming					

Section C: The Role of participatory communication in the uptake of sedentary livestock keeping

No	Statement	SA	A	UD	D	SD
1	Participatory communication has created more awareness about sedentary livestock keeping					
2	Most of us are not involved in the dialogue between us and the development workers					
3	Sedentary farming is being forced on us					
4	The development workers are friendly and accommodative about our opinions					
5	The agricultural extension officers are rare to find here					
6	Participatory communication has enabled more farmers to take sedimentary farming					

Section D: Types of Participatory Communication Strategies Used to Disseminate Information Regarding Sedentary Livestock Keeping

No	Statement	SA	A	UD	D	SD
1	Most of the participatory communication is in form of meetings					
2	We have several workshops with development workers about sedentary farming					
3	Mass media is a popular channel for disseminating information about sedentary farming					

4	Social media such as WhatsApp, Facebook, Twitter and Instagram are used to disseminate information about sedentary farming					
5	The agricultural extension officers visit homesteads to offer advice					
6	There is no flow of information on sedentary farming					

Section E: Challenges facing Participatory Communication between Sedentary Livestock Keepers and Development Workers

No	Statement	SA	A	UD	D	SD
1	The development workers do not appreciate our culture					
2	The information disseminated is not simple to understand					
3	We are rarely allowed to give opinions					
4	The media used to disseminate information is not user friendly					
5	The agricultural extension officers are rare to find					
6	High illiteracy rates is hampering participatory communication					

APPENDIX 1II: INTERVIEW SCHEDULE

1. Prevalence of Sedentary Livestock Keeping

a. How common is the practice of sedentary livestock keeping in Tarbai Sub-County, Wajir County?

b. What is your attitude or perception towards sedentary livestock keeping?

c. What is influencing the shift from pastoralist farming to sedentary livestock keeping?

d. How can you rate the livestock farmers' knowledge or information about sedentary livestock farming?

2. Influence of Participatory Communication on Sedentary Livestock Keeping

a. How did you get to hear about sedentary livestock keeping?

b. Are there NGOs or government agencies such as extension officers or chiefs who come to share information regarding sedentary livestock farming?

c. How can you describe your participation in the dialogue between the NGOs or government agencies such as agricultural extension officers on matters of sedentary livestock keeping?

d. How can you describe the level of implementation of community participation for purposes of exchanging and sharing information about sedentary livestock farming?

3. Participatory Communication Strategies

a. Which channels of communication do you receive information from regarding sedentary livestock keeping?

b. Which channels do you find more effective?

c. Who are the main agents of development who are involved in the dissemination of information regarding sedentary livestock farming?

4. Challenges facing Participatory Communication

- 4 What are the challenges facing participatory communication between sedentary livestock keepers and development workers in Wajir County?

- 5 What do you think can be done to improve the participatory communication between livestock keepers and development workers?

