UNIVERSITY OF LUSAKA

School of Postgraduate Studies

Investigating the Effectiveness of Coordination Mechanisms among Stakeholders in Agricultural Extension in Katete District of Eastern Province, Zambia.

A dissertation submitted to the school of postgraduate studies, University of Lusaka in partial fulfilment of the award of the Master of Arts in Development Studies

BY

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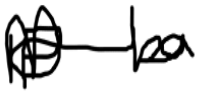
DECLARATION

I, Patrick Chikomba, hereby declare that this dissertation is a true representation of my own work and has never been submitted for any certification at this or any other university. Furthermore, I confirm that a list of references has been included with every published work that has been cited in this study.



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Supervisor's signature ……..Date: 02.04.2024

DEDICATION

This entire work is dedicated to my family and friends for their unwavering moral and financial support during the period of great effort for this degree. Their contribution towards my success is much appreciated.

ACKNOWLDGEMENT

My heartfelt and sincere regards go to my supervisor Mr Brian Mwiinga who was not only patient and understanding but also guided me and gave me great support throughout. I am sincerely grateful for his time and openness as he attended and offered clarifications to my queries.

I wish to acknowledge those who participated in responding and openly share their time, expertise and knowledge during the data collection process. Without their collaborative efforts and desire to share their understandings, this this study would have short of substantial content. I am appreciative of their contribution and the critical and important data they provided.

I am also grateful to pass my gratitude to my fellow graduate students for being there and making the experience much more worth having.

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LIST OF ACRONYMS

AES	Agricultural Extension Service
DACO	District Agriculture Coordinator
ICT	Information Communication Technology
MAL	Ministry of Agriculture and Livestock
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
NGO	Non-Govermental Organization
PACO	Provincial Agriculture Coordinator
PEA	Participatory Extension Approach
SAO	Senior Agriculture Officer
UN	United Nations

ABSTRACT

Stakeholders in Agricultural Extension Service (AES) acknowledge the importance of coordinating their activities to achieve the outcome of the interventions to improve food security and livelihood. Although stakeholders have recognized the importance of coordinating extension service little research has addressed the existing coordination mechanisms and their effectiveness in the agricultural extension service. The purpose of the study sought to understand and establish the effectiveness of the coordination mechanisms of stakeholders involved in agriculture extension service in Katete district. The study employed descriptive survey research design. Target population was a total of 219 respondents which comprised of 3 senior agriculture extension staff, 16 senior representatives of the private sector, 50 extension officers and 150 Agricultural Farmer Community Volunteers. Purposive sampling was employed to select respondents with knowledge and experience working in the extension service.

The study was guided by the following objectives: to establish the existing coordination mechanisms among stakeholders in the delivery of AES in Katete district, to establish the effectiveness of the stakeholder coordination mechanisms in place are in the delivery of AES to the farmers within Katete district and to identify the key challenges experienced by stakeholders in the coordination of extension delivery in Katete district. With regard to existing coordination mechanisms, the study established that there was the presence of mechanisms in the extension service for coordination of stakeholders. Data from interview undergwent thematic content analysis to extract key themes, issues, and narratives and excel was used to generate the figures. However, it evidently established that the mechanism revolved around joint meetings and workshops. About 46.7% and 32.1% of the respondents felt the mechanisms were ineffective and effective respectively**.** Based on the in-depth interviews with key informants, the study deduced that funding, inadequate technical capacity, lack of clear operational framework for guidance and absence of the coordination structure among others were challenges noted. Limited use of ICT posed a challenge for information sharing. The study recommends that the coordination mechanisms be designed to integrate activities at all levels, use of ICT and M&E to ensure information sharing and development and strengthen a clear operational framework to ensure active participation of all stakeholders and facilitate the

harmonization and alignment of intervention to avoid duplication of activities and conflicting extension service messages to the farmers.

CHAPTER ONE

1.0 Introduction

Agriculture remains the lifeblood of many rural communities in Zambia, driving both food security and economic stability. Within the multifaceted realm of agriculture, the role of agricultural extension services is pivotal. These services act as the bridge between research, knowledge, and rural farming communities, fostering the dissemination of crucial agricultural information, technologies, and best practices. GACSA (2016), elaborated that Agricultural extension and advisory services are essential for facilitating access to technology and information for smallholders and businesses. Yet, the delivery of these services is a complex endeavor, characterized by a myriad of stakeholders, each with distinct roles, interests, and strategies (Zwane, 2012).

In the Eastern Province of Zambia, the dynamics of agricultural extension services have evolved over time, transitioning from a traditional top-down approach to a more pluralistic system, where government agencies, non-governmental organizations (NGOs), private sector entities, and international partners actively participate (MAL, 2012). This transformation has ushered in a new era, rich with opportunities, yet fraught with challenges. Among these challenges, one stands prominently - effective stakeholder coordination. Despite the increased interest in many stakeholders delivering extension services to the agricultural producers, production remains relatively low amidst huge potential.

1.1 Research background

Agricultural extension and advisory service delivery embody the infusion of novel perspectives and scientific insights into farming practices, accomplished through comprehensive farmer training programs. Beyond this, agriculture extension encompasses a suite of initiatives designed to simplify the access of farmers, their organizations, associations, and other market participants to a wealth of knowledge, information, and cutting-edge technologies (Adeyemi, 2023). This multifaceted approach facilitates robust communication channels between farmers and various stakeholders, including researchers, educational institutions, agribusiness entities, and other integral groups within the agricultural ecosystem. The overarching objective is to enhance farmers' capabilities by fostering the development of their technical, organizational, and

management skills and practices. The transformative impact of agricultural advisory and extension service delivery is evident in the profound alterations it brings about in farmers' knowledge, attitudes, skills, and aspirations, as underscored by Petro et al. (2022).

The evolution of agricultural extension services in Zambia reveals a transformative journey, reflecting a shift from a top-down directive model to one characterized by participation and collaboration. In the pre-independence era, extension services followed a military-style approach, where farmers were dictated on crop choices and provided with advisory services tailored to these mandates (Livune, 2020) As time progressed, the agricultural landscape of Zambia underwent significant changes, and it became evident that a more pluralistic approach to extension services was necessary. This transformation led to the advent of the Participatory Extension Approach (PEA). PEA represented a paradigm shift, emphasizing community participation and collaboration.

This transition expanded the pool of stakeholders involved in extension services, including government agencies, non-governmental organizations (NGOs), private sector enterprises, and international partners, all actively contributing to the provision of extension services. The 1990s saw the government start the process of economic liberalization, and since then, other extensions and consulting service providers have joined (Petro et al, 2022). Indeed, Farrington et al. (2002) highlighted the proliferation of local NGOs and the active engagement of International Organizations in Zambia have undergone rapid expansion in recent decades. However, this growth necessitates the establishment of coordinated and harmonized mechanisms for the effective delivery of extension services. Emphasizing this need, Ferris et al. (2014) underscored that the coexistence of various extension service providers requires diversity not only in the organizations offering services to farmers but also in the models and services at their disposal. Organizations, as noted by Somanje et al. (2021), employ a range of extension tactics to fulfill these objectives. Recognizing the critical role of a unified pluralistic extension service, it becomes imperative to ensure that farmers receive ideal merit for their endeavors. Consequently, the Zambian Government bears the responsibility of facilitating coordination, harmonization, and cooperation among the diverse array of extension service providers, as outlined by the Ministry of Agriculture (MoA, 2012).

The significance of private sector engagement in the delivery of agricultural extension services, aimed at enhancing the well-being of rural communities, it is important to note that NGOs and other private entities have gained renown for their contributions, both to governmental bodies and farmers, in advancing agricultural extension efforts. Their role in bolstering the productivity and overall development of the agricultural extension sector, with a direct positive impact on the welfare of farmers, is well-established. Adebayo's insights underscore this role, as articulated in Adebayo (2004), where it is emphasized that agricultural extension agencies, through the provision of advice, information, training, financial support, and related services, serve as critical agents in the perpetual advancement of agriculture, the enhancement of extension service delivery, and the well-being of farmers. However, the influx of these players exposed a pressing issue: the absence of effective coordination (Mulema et al., 2021). This void resulted in the delivery of sometimes contradictory and confusing information to the very farmers it was intended to benefit, leading to disagreements about expanded delivery strategies, with some service providers even going so far as to offer farmers financial incentives to enhance their participation in extension programs. Beyond mere confusion, this lack of coordination had significant implications for the efficiency of resource allocation and, more importantly, for the sustainability of extension services. In recognition of this challenge, the Ministry of Agriculture and Cooperatives initiated a concerted effort to coordinate extension service providers in 2011. The objective was to enhance the synergy among these stakeholders. Yet, the effectiveness of these coordination mechanisms and their true impact on local farmers and the agricultural sector remain areas ripe for exploration. As per Livune's observations in 2022, there has been a notable rise in both the number of farmers and the demand for agricultural extension services. This is in accordance with Ministry of Agriculture who stated that the number of small and medium scale farming households has increased to K2,534,311 from K1,756,340, recorded in the 2021/2022 agricultural season (MoA, 2023). However, this surge has not been met with a corresponding increase in the number of extension workers deployed in the fields. Furthermore, there exists a constraint in financial capacity on the part of the state to sufficiently fund the evolving requirements of extension services. This limitation encompasses the provision of essential equipment, such as motorbikes, and other necessary tools vital for the work of extension staff, as well as the execution of capacity

development programs tailored for the enhancement of the skills and expertise of extension personnel.

This research project aspired to unravel the intricate dynamics of stakeholder coordination in Katete District. Through a comprehensive assessment of the current state of coordination mechanisms, a descriptive of their practical implementation, and an examination of their tangible outcomes, this study aims to provide insights that transcend the realm of mere academic discourse. It aspires to inform policy and practice, empower local farmers with knowledge and resources, and ultimately catalyze economic development and sustainable growth in the Eastern Province of Zambia.

1.2 Statement of the problem

Collaborative governance is widely used in literature. It is a governance arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative, with the aim of making or implementing public policy or managing public programmes or assets.

Given the limitations of the public extension system alone, there has been growing efforts by the extension providers (both public and private) in Zambia, including Katete district to collaborate more in the delivery of AES. Currently, several organizations including public institutions, NGOs, private companies and other private extension service providers, are working with farmers in order to improve their livelihoods. In light of multiplicity of players in the agricultural extension service, one of the major challenges identified is the poor coordination of stakeholders. This agrees with MACO (2012), among challenges faced with the agriculture extension service in Zambia is ineffective coordination of stakeholders. This resulted into the duplication of agricultural interventions, contradictory or conflicting messages and poor communication among stakeholders. Similarly, IFPRI (2012) and Petros et al (2022) argue that ineffective coordination between government and private sector extension service providers resulted in duplication of activities, contradiction and conflicting messeges. Mwanje et al (2002), argues that effective coordination of stakeholders in agriculture extension service requires stable and functioning coordinating structure, mechanisms and effective coordination with technical and administrative capacities to harmonize the programmes and activities under implementation.

The study sought to understand and establish effectiveness of the coordination mechanisms of stakeholders involved in agriculture extension service in Katete district.

1.3 Research objectives and questions

1.3.1 Objectives

The main objective of this study was to investigate the effectiveness of the Coordination Mechanisms of the stakeholders in Agriculture Extension service delivery in Katete district.

1.3.2 Specific objectives

The specific objectives for this study were:

1. To establish the existing coordination mechanisms among stakeholders in the delivery of AES in Katete district.
2. To know how effective the stakeholder coordination mechanisms in the delivery of AES to the farmers within Katete district.
3. To identify the key challenges experienced by stakeholders in the coordination of AES delivery in Katete district.

1.3.3 Research Questions

The following listed below are the research questions:

1. What are the existing coordination mechanisms among stakeholders in the delivery in agricultural extension service in Katete district?
2. How effective is the stakeholder Coordination Mechanisms in the delivery of agriculture extension service within Katete district.
3. What are the challenges experienced by stakeholders in the coordination of the agricultural extension service delivery in Katete district?

1.4 Significance of study

The significance of this research can be noted by the potential benefits it offers. The findings of this study will contribute to relevant knowledge of both public and private agricultural extension service providers regarding the effective coordinated extension service and its contribution to improved extension delivery. The study will yield positive economic benefits for Zambia and African at large by contributing to the efficient allocation

of resources within the agricultural extension department sector. Enhanced coordination among stakeholders can lead to more judicious resource management, reducing wastage and the duplication of efforts. This, in turn, can result in cost savings for both government agencies and private sector entities involved in agricultural extension services. In addition, the study may also provide information for policymakers on the need to create policies or standards to ensure coordination among all the stakeholders in the agriculture extension service.

1.5 Scope of the study

This research focused on investigating effective coordination mechanisms among stakeholders in agriculture extension in Eastern Province, Zambia will encompass the following specific aspects:

1.5.1 Geographical Scope

This research geographically was confined to Katete districts, situated within the Eastern Province of Zambia. These districts are renowned for its agricultural diversity and rural communities, serves as an ideal microcosm for the investigation of stakeholder coordination challenges and opportunities within agricultural extension services.

1.5.2 Stakeholder Involvement

The research primarily concentrated on stakeholders involved in agricultural extension services within Katete. These stakeholders encompass a broad spectrum, including government bodies, non-governmental organizations (NGOs), private sector entities, and international partners. The study will assess their roles, interactions, and coordination mechanisms in delivering extension services to local farmers.

1.5.3 Extension Service Delivery

The research will investigate the various components of extension service delivery, encompassing the dissemination of agricultural knowledge, information, technologies, and advisory services to farmers. It will examine how coordination, or the lack thereof, influences the effectiveness of these services and their impact on agricultural practices and outcomes.

1.5.4 Coordination Mechanisms

The study will delve into the specific coordination mechanisms currently in place among stakeholders in the three districts. It will further explore how these mechanisms are structured and implemented, and their impact on the overall efficiency and cohesiveness of extension service delivery. In conclusion, this study will seek to provide valuable insights and contribute to the enhancement of agricultural extension services by assessing stakeholder coordination within Katete, Sinda and Petauke districts, Eastern Province, Zambia, while acknowledging the specific scope and limitations of the research.

1.6 Definition of key terms

Extension service: is defined here as systems that should make it easier for farmers, their organizations, and other market participants to access knowledge, information, and technologies; facilitate the interaction with partners in agribusiness, research, education, and other relevant institutions; and help them build their own operational, managerial, and organizational skills.

Coordination mechanisms: implies focusing on areas that complement each other in order to have the extension plans working together to achieve the main strategic objectives, to improve standard of living for the small sale farmers. (Jona,2016).

Stakeholders: Any individual or organization that is interested in any decision or activity of an organization.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction to Literature Review

Agricultural extension services play a pivotal role in fostering sustainable agricultural development worldwide. These services aim to bridge the gap between scientific research and on-the-ground farming practices, facilitating the dissemination of knowledge, technologies, and best practices to enhance productivity. This literature review critically examines the global landscape of agricultural extension services, with a specific focus on Zambia. It delves into the challenges faced by these services, the mechanisms for stakeholder coordination, and the consequences of coordination challenges. Additionally, it explores government initiatives aimed at enhancing coordination and identifies existing gaps in the literature.

2.2 Evolution of Agricultural Extension Services Globally

Agricultural extension services have undergone a significant evolution, mirroring shifts in agricultural practices, technological advancements, and a growing awareness of the importance of sustainable and inclusive approaches (Pretty & Chambers, 1993; Khodamoradi & Abedi, 2011; Benson & Jafry, 2013; Klerkz, 2020; Madan & Maredia, 2021; Olayemi et al., 2021; Rivera & Schram, 2022; Sahu et al., 2023). The literature reveals that the traditional one-way technology transfer models, where information flowed unilaterally from research institutions to farmers, have transformed into more dynamic, participatory, and inclusive frameworks. Historically, agricultural extension services were characterized by a top-down approach, often likened to a "transfer of technology" paradigm (Swanson, 2008). Experts or researchers would disseminate knowledge and practices to farmers, expecting them to adopt these recommendations without active involvement in the decision-making process. This model, although well-intentioned, had limitations, leading to a re-evaluation of extension strategies globally (Nhongonhema, 2010).

The recognition of the limitations of traditional models prompted a paradigm shift towards more participatory and inclusive approaches (Pretty & Chambers, 1993; Cook et al., 2021). Governments, international organizations, and development agencies increasingly acknowledged the need to involve farmers directly in the development and dissemination

of agricultural knowledge (Thornley, 1990; Birner, & Anderson, 2007; Kau & Kau, 2018). This shift was motivated by the understanding that farmers are not just passive recipients but active contributors with valuable local knowledge and insights. Participatory extension models emphasize the engagement of farmers in the decision-making processes related to their agricultural practices (Neef & Neubert, 2011; Meijer et al., 2015; Taylor & Bhasme, 2018). This involvement ranges from the identification of challenges and opportunities to the co-creation of solutions and the adaptation of technologies. The aim is not only to transfer knowledge but to empower farmers with the skills and information necessary to make informed decisions, enhancing their agency in sustainable agricultural practices (Sumane et al., 2018).

Across the globe, countries have increasingly recognized the pivotal role of effective extension services in supporting farmers and fostering agricultural innovation (FAO, 2019). Governments, in collaboration with international organizations, have invested in strengthening extension systems to address the diverse needs of farmers. The United Nations' Sustainable Development Goal 2 and 12 (UN, 2015), underscore the importance of robust extension services in achieving food security and sustainable agricultural practices. Extension services are acknowledged not only as a conduit for disseminating agricultural technologies but also as a means of addressing broader challenges such as climate change adaptation, resource conservation, and the promotion of resilient farming systems and alleviating poverty (Maulu et al., 2021). In this holistic approach, extension services become instrumental in promoting sustainable and regenerative agricultural practices that align with global agendas for environmental stewardship.

Agricultural extension services today are seen as platforms for empowering farmers with the knowledge and skills needed for sustainable and resilient farming systems (Swanson, 2008). Farmers are not mere recipients of information; they are active participants in the co-creation of knowledge. This empowerment is essential for building adaptive capacity, enhancing resilience to climate change, and ensuring the long-term viability of agricultural systems.

2.3 Agricultural Extension Services in Zambia

Evolution of agricultural Zambian extension services represents a dynamic shift from historical command-type approaches to contemporary, participatory models, aligning with global trends favouring inclusivity and community involvement (Burrow et al., 2017; Chavula & Yali., 2022). This transformation is a response to the recognition of the limitations of traditional top-down methods and a proactive adjustment to the changing dynamics of the agricultural sector. Zambia's government has been instrumental in shaping the trajectory of agricultural extension services, emphasizing the significance of pluralism and embracing a diverse array of stakeholders, such as Non-Governmental Organizations (NGOs), private sector entities, and international development partners (Chavula et al., 2022; Copestake & Wellard, 2023). This inclusive approach underscores the understanding that effective agricultural extension necessitates collaboration and coordination among various actors within the agricultural ecosystem (Somaje et al., 2022).

A pivotal paradigm within Zambia's extension services is the adoption of the Participatory Extension Approach (PEA), introduced by the Ministry of Agriculture and Livestock (MAL) in 2000 (MAL, 2013). PEA is characterized by its emphasis on community involvement in the planning and implementation of extension activities. This approach signifies a departure from traditional command-type methods, placing paramount importance on engaging farmers at the grassroots level. PEA seeks to empower rural communities by involving them in decision-making processes, recognizing their local knowledge, and fostering a sense of ownership in the agricultural development agenda. In recent years, Zambia's commitment to pluralism in extension services has been reaffirmed by Chavula et al. (2022), emphasizing the government's active engagement with various stakeholders to ensure a robust and diversified approach to agricultural extension. This contemporary landscape reflects a nuanced understanding of the need for flexibility and adaptability in extension strategies to cater to the diverse needs of Zambia's agricultural communities.

2.4 Challenges in Agricultural Extension Services

Despite global efforts to reform agricultural extension services, persistent challenges hinder their effectiveness. A central concern is resource constraints, notably inadequate funding and limited human resources (Rivera & Sulaiman, 2009). Financial limitations curtail the capacity of extension services to invest in crucial resources, infrastructure, and training, creating a bottleneck in delivering quality services to farmers. The shortage of human resources exacerbates the challenges. The demand for agricultural extension services has outpaced the recruitment and retention of qualified personnel, creating an imbalance between the needs of the farming community and available expertise (Davis & Nkonya, 2008). This disparity adversely affects the quality and reach of extension programs, impeding their ability to address the diverse and evolving needs of farmers.

Additional hurdles revolve around the timeliness and relevance of information. In the rapidly evolving agricultural landscape, farmers require up-to-date and pertinent information to make informed decisions. The delayed dissemination of knowledge or provision of outdated information undermines the efficacy of extension services, as farmers may miss out on adopting best practices or incorporating innovative technologies (Kalusopa, 2005; Mulilo, 2012; Liu et al., 2018). A critical challenge is the mismatch and duplication of efforts among various stakeholders, contributing to confusion within the farming community. Ferris et al. (2014) emphasize that a lack of coordination can lead to contradictory recommendations, hindering farmers' ability to discern the best course of action. This confusion undermines the credibility of extension services and impedes overall progress towards sustainable agricultural practices.

Addressing these challenges necessitates a comprehensive and collaborative approach involving policymakers, extension service providers, and other stakeholders. This collective effort is essential to strategize solutions that ensure the resilience and effectiveness of agricultural extension services.

2.5 Stakeholder Coordination Mechanisms in Agricultural Extension Services

In the dynamic and ever-evolving realm of agricultural extension services, the imperative of effective coordination among stakeholders cannot be overstated, especially in addressing the complex challenges facing the sector. This collaborative effort entails forging a harmonized partnership among diverse entities, ranging from government agencies and NGOs to private sector players and various relevant organizations (Pannell et al., 2006; Ahmad et al., 2010; Benson & Jafry, 2013; Dyer et al., 2013; Prabhakar et al., 2019; Copestake & Wellard, 2023). Such collaborative synergy serves as the bedrock for streamlining activities, preventing duplication, and nurturing a unified and comprehensive approach to the delivery of extension services. Critical to this collaborative landscape are workshops, pivotal platforms where stakeholders converge to share insights and collectively strategize on the way forward (Defrancesco et al., 2008). These interactive events play a significant role in facilitating a mutual understanding of each stakeholder's role, minimizing conflicts, optimizing the utilization of resources, and establishing the groundwork for sustained cooperation. The participatory nature of workshops cultivates a sense of shared responsibility and commitment among stakeholders, fostering an environment conducive to effective coordination.

Another integral mechanism, collaborative planning, engages stakeholders in joint decision-making processes to align their objectives and activities (Davis et al., 2012; Kuster et al, 2018; Evans & Baker, 2021). This participatory approach not only cultivates a shared vision but also mitigates the risk of disjointed efforts, thereby augmenting the overall impact of extension services. The involvement of stakeholders in decision-making fosters a sense of ownership, promoting a more cohesive and effective coordination framework that resonates with the unique needs of the agricultural landscape (Neef & Neubert, 2011; Bhattacharyya et al., 2021). The role of information-sharing platforms remains pivotal in keeping stakeholders well-informed about ongoing initiatives and best practices (Rivera & Alex, 2004; Mulilo, 2012). In today's context, these platforms encompass a spectrum of digital systems, regular meetings, and publications, constituting a dynamic knowledge-sharing network. This network not only enhances the efficiency of extension service delivery but also ensures the timely communication and dissemination of critical information to stakeholders, promoting a well-informed and empowered agricultural community.

The concept of coordination mechanisms underscores the need for a systematic and collaborative approach to navigate the intricacies of agricultural extension services. In an ever-evolving agricultural landscape, fostering synergy among stakeholders becomes paramount to create a cohesive and impactful extension service environment that can effectively meet the changing needs of farmers.

2.6 Coordination Challenges and Consequences

In the intricate landscape of agricultural extension services, coordination challenges persist, casting shadows on the efficiency and impact of the sector (Nettle et al., 2017; Lamm et al., 2020). One prevalent challenge is the emergence of conflicting information. This occurs when different stakeholders provide divergent advice and recommendations to farmers, causing confusion and uncertainty. For instance, a farmer may receive contradictory guidance on crop management practices, leading to a dilemma in decision-making and potentially impacting crop yields (Ferris et al., 2014). Duplicated efforts represent another dimension of coordination challenge. Multiple stakeholders may independently undertake similar initiatives, resulting in redundant activities and inefficient resource utilization. For example, two NGOs operating in the same geographical area might independently conduct training sessions on sustainable farming practices without knowledge of each other's efforts. This duplication not only wastes resources but also dilutes the potential impact of these initiatives on the farming community (Somanje et al., 2021).

Furthermore, wasteful competition among service providers exacerbates coordination challenges. In a scenario where NGOs or private sector players vie for the attention and participation of farmers, financial incentives may be offered to attract farmer engagement. This not only diverts resources away from more impactful interventions but also introduces an element of competition that can hinder collaborative efforts among stakeholders (Mulema et al., 2021). The consequences of these coordination challenges are profound. Farmers, faced with conflicting information and redundant initiatives, may struggle to adopt and implement best practices. This hampers the overall efficiency of extension services and compromises the sustainability of agricultural practices. Moreover, the potential negative impacts on farmers' livelihoods, such as reduced yields and income, highlight the urgency of addressing coordination challenges in agricultural extension services (Ferris et al., 2014). The literature emphasizes the need for a

concerted effort to streamline coordination mechanisms. Ferris et al. (2014) advocate for a unified pluralistic extension service that ensures seamless collaboration among diverse organizations. This collaborative approach not only mitigates immediate challenges but also fosters an environment where stakeholders collectively contribute to sustainable agricultural development.

2.7 Government Initiatives for Coordination

Governments globally recognize the pivotal role of effective coordination among stakeholders (Swanson 2008). Zambia, in particular, has witnessed proactive measures undertaken by the Ministry of Agriculture to enhance collaboration and optimize the impact of extension services, including farmers e-Extension (MoA, 2023). One prominent initiative spearheaded by the Zambian government is the organization of workshops. These workshops serve as dynamic platforms that bring together representatives from diverse entities, including government agencies, non-governmental organizations (NGOs), private sector entities, and other relevant organizations. During these interactive sessions, stakeholders engage in discussions, share valuable insights, and align their objectives. For instance, discussions might revolve around the identification of shared goals, strategic planning, and the allocation of responsibilities. The participatory nature of these workshops like elsewhere (eg. Defrancesco et al., 2008), fosters a mutual understanding of each stakeholder's role, cultivating a collaborative spirit and establishing a robust foundation for effective coordination.

Furthermore, the Ministry of Agriculture has implemented coordination mechanisms designed to harmonize approaches and activities among the diverse array of stakeholders involved in extension services. These mechanisms, aim to address challenges such as duplication of efforts, conflicting messages and conflicts of interest. By establishing a structured environment for collaboration, these mechanisms facilitate the sharing of knowledge, resources, and best practices (MoA, 2023; MAL, 2013). These government-led initiatives underscore a commitment to creating a conducive environment for effective collaboration. Through workshops and coordination mechanisms, the Zambian government seeks to foster a culture of knowledge-sharing, enhance communication channels, and ultimately elevate the overall impact of agricultural extension services. This collaborative synergy aligns with global efforts to address the

complexities of modern agriculture and underscores the importance of coordinated action for sustainable and resilient farming systems.

2.8 Empirical Literature

Global perspective

A research paper by Iftikhar ahmed et al (2010) examined the coordination status between public sector and stakeholders in extension service. The study used a both qualitattive and quantitative approaches for data collection and analysis, including a survey questionnaire administered to farmers in union councils of Pakstan. Results showed the opinion of the farmers about duplication in the advice of public sector and NGO. About 73.33% (220) farmers responded that NGO and public sector overlaps the suggestions for different activities. Resultantly, affects the creditability of both the institutions and create confusion among the farming community about application of recommendation. This also shows the lack of coordination among these two institutions or organization. The 26.67% farmers were in the opinion that we had never felt any duplication in the suggestion of both the institutions.

The study further reviewed that a large majority of the farmers were of the view that a high coordination between public and NGOs is of great benefit to the farmers. About 91.1% farmers supported strong coordination in the activities of these agencies. The 52.33% farmers were in the opinion of medium coordination, the 20% stated low level of coordination. At the same time 80%farmers opposed any type of coordination between public sector and NGOs. Based on their findings, the authors recommended that both public sector and NGO should support the activities of each other by participating in each other programmes.

In another study by Ismail (2019), the researcher focused on the poposed mechnism for coordination between agricultural extension, research organization and agricultural organizations operating in the governorate (administrative division of a country that is headed by a governor) of holy karbala, Bagdad to investigate the solutions to challenges faced by the parties based on the results of the data and information research community. The study used the descriptive approach and applied a random sampling to select the samples within the farming communities. A random sample of 24 % of the research Community, which was composed of 524 respondents thus the research sample became

126 respondents. Ismail established that the agriculture extension service had the coordination mechanisms in place. requires an effective coordination mechanism to improve the agriculture sector for food security and increased income for farmers. .

Mamun-ur-Rashid et al.'s (2018) study looked at the quality of multiple public and private agricultural extension service providers in Bangladeshi. Interviews were conducted with 318 respondents overall from nine carefully chosen companies. Key informant interviews, focus groups, and informal interviews were also employed in the study. Study results showed that on all five service quality dimensions—tangibles, assurance, responsiveness, assurance and reliability—all of the chosen organizations, had a significantly negative difference between perceived and expected ratings. In Bangladesh, 74.6% of the variation in client satisfaction with the extension service and could be explained by the five service quality criteria that were chosen. A few of the main problems preventing high-quality services included inadequate logistical support, a lack of funding for actual extension activity, The researcher recommended that a wellcoordinated extension service is obligatory for the survival of extension organizations and improved livelihood of the farmers in a changing context.

Regional perspective

The paper " Malawi’s experiences with the implementation of pluralistic, demand-driven and decentralised agricultural extension policy" by Masangano et al (2017) assessed the effectiveness of four of the seven principles in ensuring user access to quality AEAS. The study used a mixed methods approach which included action research, focus group discussions, key informant interviews and review of various documents. The results indicated that the four key guiding principle which included, demand-driven services, coordination, pluralism and user participation in extension financing had some potential for a positive influence on increasing access to quality AEAS. Particularly, the study found that coordinating the activities of different organisations having a wide diversity of mindsets and worldviews was a major challenge. Poor coordination of the activities of most service providers was therefore identified as one of the major challenges affecting the quality of extension and advisory service provision in the country.

In another study conducted by belay (2002) whose main objective was to identify constraints to agricultural extension work in Ethiopia, particularly specific constraints that

extension agents face in discharging their day-to-day duties and to identify the most important areas of intervention which deserve the immediate attention of policy makers so as to improve the effectiveness of extension work. The survey employed a structured questionnaire with both open-ended and pre-coded types of questions. The data and information for this study were collected from a total of 103 extension agents (86 males and 17 females) who were randomly selected from ten of the eleven regions of the country. The data revealed a number of constraints facing the extension stuff including overload of work for extension officers, lack of logistic support (motrobikes, fuel and other materials and notably was conflicting extension approaches and messages to the farmer. The conflicting approaches and messages were linked to poor coordination of the extension services by the stakeholders (Singh, 2011).

Mwanje, Düvel and Mangheni (2002) conducted a study focussing on investigating the extension staffs' perceptions of factors affecting co-ordination and partnerships in agricultural extension services in rakai district of uganda. The study applied descriptive and explanatory survey was used to describe and analyse factors affecting co-ordination of public and private agricultural extension programmes in Rakai District. Semi-structured questionnaires were used for data collection from all agricultural extension staff working in the district - from the public and private sectors (N=173). Respondents were invited to attend data collecting meetings that were organized in various parts of the district. Each respondent had completed the instrument individually based on his or her perceptions of factors affecting coordination. used a model to design a survey instrument to determine factors affecting coordination of agricultural extension services in the district. Results, from 149 respondents (86% response rate) were revealed that the means of coordination that were used by extension organizations in the district included (a) working with farmer development committees (b) involving politicians in planning (c) strengthening relevant associations and (d) coordination mechanisms at the district level. However, the study did not investigate the effectiveness of the means for effective coordnation.

Local perspective

Petros et al (2022) conducted a study focussing on a quick overview of Zambia's agricultural extension and advisory services delivery. The study indicated that in order to promote participatory multi-stakeholder innovation processes, extension and advisory services are progressively tying together significant stakeholders including producer

organizations, research institutions, higher education, agribusiness, and lone producers. As noted by the study, there are three different categories of service provider models: integrated market models, service provider models, and information-focused models with main agricultural service providers in Zambia being the private sector, non-governmental organizations, international development partners, and farmer organizations, such as the Zambia National. The study further established that the agricultural extension and advisory services are hindered by several issues, including field extension workers' inadequate comprehension of participatory extension methodologies, planned extension programs' focus on non-operational value chains, insufficient and underperforming livestock service and farmer training centers, poor extension planning, reporting, and feedback cultures, and insufficient in-service and refresher training for front-line extension workers. However, it is clearly observed that the study did not tuckle the coordination as an issue, particularly the coordination mechanisms of stakeholders and their effectiveness**.**

In another study by Somanje, Mohan and Osamu (2021), presented the present state and the support of agricultural extension services for farmers and indicates the potential solutions for the ideal effectiveness of these services. As a result, we look into the key factors affecting farmers' perceptions of using agricultural extension services in Zambia and Ghana. The study, we used a mixed-method research analysis of data from a household survey of 240 farmers and 8 key informant interviews in the Upper West Region of Ghana and the Southern Province of Zambia. Resultantly, the significant factors affecting the association of agricultural extension officers with farmers are regular meetings, demand for services and productivity, and the adoption rate of technology. Understanding the critical determinants will provide potential solutions to national agricultural research institutes, private research entities, and policymakers to scale-up the effectiveness of agricultural extension services, particularly in Ghana and Zambia. The research recommended to delve into looking at enhancing public–private partnerships in the delivery of agricultural extension services. The collaboration among, agricultural research, and technology providers could be of significant value in providing better pluralistic agricultural extension services to most small-scale farmers. This necessitated to dive into the understanding the coordination mechanisms in the extension

service within which the stakholders will collaborate effectively for improved extension service delivery.

Studies have been conducted in Africa, particularly in Zambia regarding the agriculural extension and adivory services, however, little is known about coordination mechanisms and their effectiveness as means for harmonization of agricultural activities and facilitate effective collaboration and communication among the service providers in extension delivery. Therefore, this study intends to explore that gap.

2.9 Gaps in Existing Literature

Despite the wealth of literature on agricultural extension services, notable gaps persist, warranting focused attention to enhance our understanding of stakeholder coordination mechanisms. These gaps become particularly evident when examining specific regions, such as the Eastern Province of Zambia. The nuances of stakeholder coordination in this specific context remain underexplored, creating a knowledge void that hinders the development of targeted and context-specific interventions. The existing body of literature, while comprehensive in many aspects, has not investigated deeply into the intricacies of stakeholder coordination especially focussing on the effectiveness of the coordination mechanisms at the local level, particularly in regions characterized by unique socioeconomic and agricultural landscapes. Eastern province, being a microcosm of such regional specificity, demands closer investigation to uncover the specific challenges and opportunities that shape stakeholder interactions in the delivery of agricultural extension services. The literature gap becomes a critical concern when considering the need for tailored interventions. Generalized insights from broader studies may not adequately address the localized dynamics at play in the province. Unravelling these dynamics requires a clearer understanding of how stakeholders collaborate, communicate, and navigate challenges specific to the region. Addressing these gaps is imperative for advancing both theoretical and practical dimensions of agricultural extension services. There is a need to focus on generating context-specific knowledge that goes beyond overarching principles. By acknowledging and addressing the gaps in the existing literature, this study aims to contribute valuable insights that can inform targeted strategies, policies, and interventions to enhance stakeholder coordination in Eastern Province of Zambia and potentially serve as a blueprint for similar agricultural contexts.

3.0 Concluding Insights: Bridging Knowledge Gaps for Enhanced Agricultural Extension

In conclusion, this literature review serves as a panoramic exploration of agricultural extension services on a wider scale, with a focused lens on the Zambian context. Through a systematic examination, it unveils the factors and challenges affecting the stakeholder coordination mechanisms. However, amidst this wealth of knowledge, identifiable gaps persist, particularly in the clear understanding of stakeholder coordination at the local level. The gaps in the literature become the impetus for the current research endeavour, poised to investigate the effectiveness of coordination mechanisms among stakeholders in the realm of agricultural extension services within Eastern Province, Zambia. As this study sets its course, it draws inspiration from the comprehensive foundation laid by the literature review. It acknowledges the complexities inherent in stakeholder interactions, the persistent challenges that echo globally, and the proactive governmental measures aimed at fostering coordination. The reserach seeks to empower stakeholders, inform policymakers, and ultimately enhance the efficiency and impact of extension services in Eastern Province. In doing so, it aligns with the broader goal of advancing agricultural practices, improving farmer livelihoods, and fostering sustainable development in Zambia.

3.1 Theoretical Framework

Imenda (2014) mentioned that a theoretical framework is a collection of ideas, presumptions, and connections that serve as the foundation for comprehending a specific subject or occurrence. It offers a methodical approach to approaching a research subject and aids in the arrangement and elucidation of the researcher's thoughts. This paradigm is important because it aims to increase the generalizability, relevance, and acceptability of research findings within the research field. The essential theories that would be applicable to this research comprise the Resource Dependence Theory and Systems Theory and Governance.

3.1.2 Systems Theory and Governance

Bertalanffy, (1962) “a theory of emergents - actions and outcomes at the collective level emerge from the actions and interactions of the individuals that make up the collective. He further pointed out that the systems theory of governance “provides an analytical framework for viewing an organization in general through synergy” & “interdependence”.

In addition, Hartman (2010) notes that all organizations use internal and external systems and subsystems to process inputs and outputs. This observation is useful for giving a functional overview of any organization. Coordination of Agriculture extension service require a operational system to oversee the extension delivery effectively and efficiently. According to Kuhn (1974), systems require to be managed as one system's failure might cause another's to fail as well. Effective governance frameworks are necessary for the coordination of extension services in order to guarantee cooperation, openness, and communication. According to this theory, organizations are social systems made up of people who collaborate within a set structure, pooling their resources—people, money, and other resources—to create goods. Delivery of agricultural extension services shall be managed effectively and efficiently with the support of good governance. Systems theory and Governance influenced the independent variable of this study (communication and collaboration). This theory explains the important function that collaboration and communication play in a whole system.

3.1.3 Relational coordination Theory

Relational coordination can be explained as “a mutually reinforcing process of interaction between communication and relationships carried out for the purpose of task integration” (Gittel, 2002). The concept looks at coordination as being comprised of three attributes namely: shared goals, knowledge, and respect among collaborating partner (Gittell, 2012). Gittel (2011) further described the shared goals as being superior to functional goals of each player, while shared knowledge was described as the ability for the players to see the relationships in existence between specific roles and the input that constitutes the whole progression. Lastly, mutual respect serves as the precursor for overcoming challenges or obstacles that may prevent individuals from appreciating and valuing the contributions of others. As such relational coordination is “measured as a network of communication and relationship ties among workgroups engaged in a common work process” (Thistlethwaite et al, 2013). Extension, as a service delivery enterprise, requires effective integration of interdependent tasks to ensure provision of services that are useful and meet the demands of the customer (Gittel, 2002). The presence of multiple service providers with varying levels of extension expertise necessitates the need for frequent and high-quality communication among the service providers and clientele through appropriate coordination structures (Gray & Reid, 2010 and Pretty, 1995). These needs

must be buttressed by shared knowledge and goals as well as mutual respect to effectively address farmers' needs (Gittel, 2011). Despite the importance of these antecedent conditions, coordination and collaboration in service delivery is a challenge facing many African countries, especially those in decentralized and pluralistic environments (Hanyani-Mlambo, 2002; Shiferaw et al., 2014). For this study, relational coordination theory and Systems Theory and Governance are the two major theories chosen to guide this research.

3.2 Conceptual framework

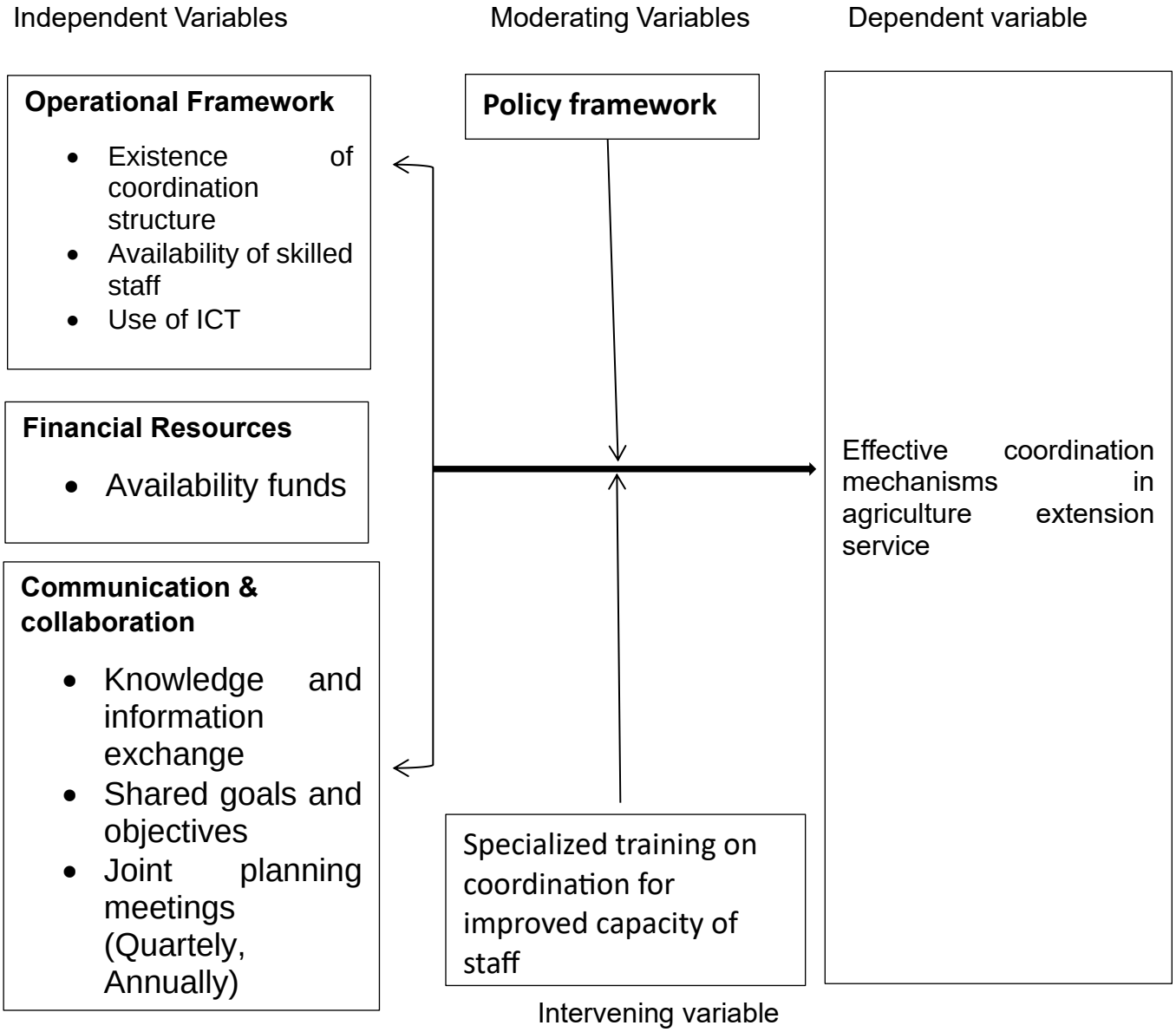

Figure 2.0 conceptual framework **Source: Author (2024)**

The effectiveness of coordination mechanisms in agriculture extension service is influenced by factors such as: operational framework factors, financial resources factors and collaboration and communication factors. All these factors are the study's independent variables and are in correlation with the study's dependent variable (ffective coordination mechanisms in agriculture extension service). Government policy influences the participation of stakeholders and contribution of the strength of the coordination mechanisms. Specialized training on coordination for staff will contribute to the effective performance of the staff in executing their roles and responsibilities for efficient AES delivery.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter gives an overview of methods adopted to give answers to the questions of the research detailed in the first chapter. The research methodology employed in this study was designed to provide robust insights into the intricacies of the subject matter. It encompassed various research techniques and approaches tailored to comprehensively investigate the coordination mechanisms, practical implementation, and tangible outcomes of stakeholder collaboration.

3.2 Research Approach

Mixed-Methods Approach: This research adopted a mixed-methods design, incorporating both qualitative and quantitative elements to provide a holistic understanding of stakeholder coordination in agricultural extension services. The mixed method is understood to strengthen and add validity to research studies. Hawell (2011), qualitative research focuses on understanding the experience as well as the thoughts of the participants as the results provide detailed, in-depth information. Quantitative resreahc tends to leave gaps in terms of providing information. Through this design it was also possible to establish the link between study variables and study problems (Kothari, 2004). This is because the research design did provide an opportunity to ask the respondents about their perceptions, attitudes, behaviours and values in regard to the research topic. And it is also an effective vehicle to collect data from samples representing large populations (Orodho, 2003).

3.3 Research Design

This study adopted the descriptive survey research design to assess the effectiveness of the coordination mechanisms in agriculture extension service in Katete district. Descriptive survey research design facilitated the gathering of both qualitative and quantitative data. Through this design it was possible to establish the link between study variables and study problem (Kothari, 2004). This is because the research design did provide an opportunity to ask the respondents about their perceptions, understanding and views in regard to the research topic.

3.4 Population

The target population of this study was a total of 219 focused on respondents including the 1 PACO, 1 DACO, 1 SAO, private sector coordinators (16) and Extension officers (50) and Agricultural Farmer Community Volunteers (150) involved in Agricultural extension service delivery.

3.5 Sample Size

The sample size for this study consisted of 90 respondents. These include the key informants such as PACO (1), DACO (1), SAO (1), private sector coordinators (7). Other targets to respond to the questionnaires are extension officers (20) and Agriculture Farmer Community Volunteers (60).

3.6 Sampling Techniques

Purposive Sampling: Purposive sampling was employed to select individuals with substantial knowledge and experience in stakeholder coordination. The primary objective of purposive sampling, according to Kothari, (2007), is to concentrate on traits of a population that are of interest, as they weill best allow to address the research questions.

3.7 Data Collection techniques

Surveys: Structured surveys were administered to a diverse group of stakeholders involved in agricultural extension services in Katete District. These surveys focussed on ascertaining their perceptions of coordination mechanisms, their effectiveness and practical challenges.

Key Informant Interviews: In-depth interviews were conducted with key informants, including government officials, representatives private sector entities and community volunteers. These interviews facilitated a deeper exploration of stakeholder perspectives, experiences, and challenges.

Document Analysis: An extensive review of relevant documents, reports, and policy documents related to agricultural extension services in Katete District was conducted to provide a policy context.

3.8 Data Analysis Procedures

Qualitative Analysis: Qualitative data from interview undergone thematic content analysis to extract key themes, issues, and narratives. Since the source of primary data was through the interviews as well as questionnaires, the tools were verified for fullness, correctness and consistency.

Quantitative Analysis: Survey data was subjected to descriptive statistics to identify patterns and correlations.

The Statistical Package for Social Scientists (SPSS) was used for analysis. This method was appropriate for this study since it aimed to describe and ascertain the status of the effectiveness of the Coordination Mechanism of the stakeholders in Agriculture Extension service delivery in Katete district. The sudy used the mixed method which involves both the qualitative and quantitative and quantitative data and the SPSS is a data analysis tool which analyses both data sets.

3.9 Ethical Considerations

Ethics is the study of moral obligations involving the distinction between right and wrong (Kreitner 2009). The research adhered to ethical standards, ensuring informed consent from participants and safeguarding the confidentiality of sensitive information.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESULTS

4.1 Introduction

In this chapter, the research findings and analyses regarding the Effectiveness of Coordination Mechanisms among Stakeholders in Agricultural Extension in Eastern Province of Zambia are presented. The chapter is structured into several main sections, including demographic representation of the study population, existing coordination mechanisms among stakeholders in Agriculture Extension Service (AES), effectiveness of the stakeholder coordination mechanisms in AES to the farmers within Katete district and key challenges experienced by stakeholders in the coordination of extension delivery in Katete district.

4.2. Demographic Characteristics

4.2.1 Gender

Figure 4.2.1 shows the gender of the respondents, indicating that women (39%) and men (61%) participated in the study. Data shows that the sample of respondents was represented by both female and male. It was noted that there is a disparity among the respondents with more males participating than women.

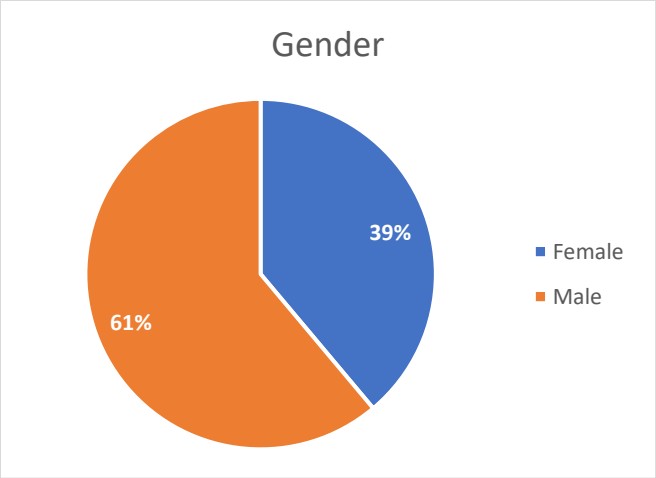

Figure 4.2.1

Age 4.2.2

The distribution of respondents in this study across different age ranges is seen in Table 4.2.2. About 43.3%, fell within the age range of 41-50 with 26.7% represnting respondents in the 31-40 age range. Furthermore, 21.1% were between 20-30 while 8.9% were categorized as above 50-years old. The analysis indicated that the high percentage 43.3% of respondents are within the age range of 41-50.

Age	Frequency	percentage (%)
20 - 30	19	21.1%
31 - 40	24	26.7%
41 – 50	39	43.3%
Above 50	8	8.9%
Total	**90**	**100%**

Table 4.2.2

4.2.3 Level of education

Figures 4.2.3.1 and 4.2.3.2 displays the educational levels of the respondents comprising of community volunteers and among government and private personel respectively. **Figure 4.2.3.1** reveals that most participants (farmers) in this study, accounting for 56.67%, possessed the primary level. Following, 25% attained a secondary level education, while with no formal education category represented 15% of the respondents. Lastly, 3.33% of the participants attained a tertiary education. Overall, these findings in figure 4.2.3 indicate that a significant number of respondents have attained certain education level.

Figure 4.2.3.2 shows the level of education attained by the key informants who included the extension officers, project coordinators and Ministry of Agriculture district and provincial staff. The highest level attained is Ph.D. level at representing 2.5% with 10% representing those with master's degree. Accounting 15% are those with certificates and

32.5% represents staffs with bachelor's degree. Lastly, 40% of the respondents attained a diploma level.

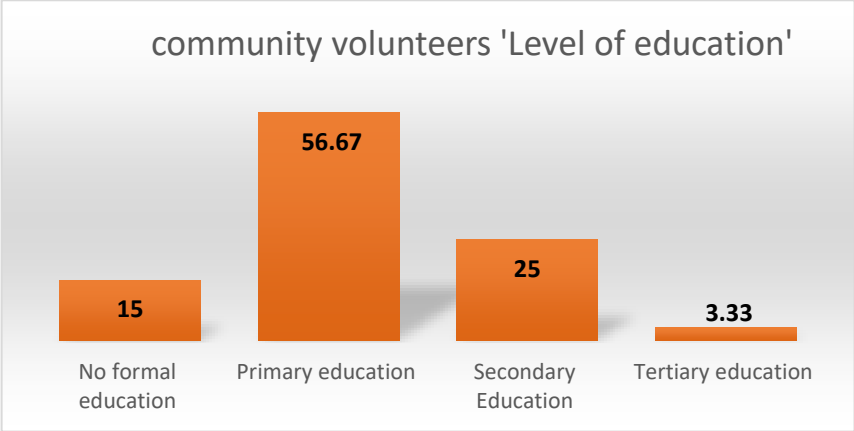

Figure 4.2.3.1 (Source, Author), 2024

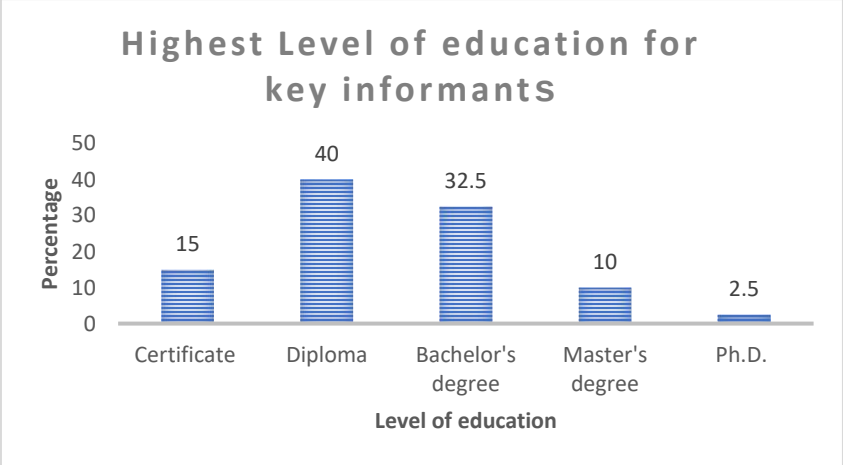

Figure 4.2.3.2 (Source, Author), 2024

4.3 Key Agricultural Extension Service Providers (AESP)

In this study, extension officers and key informants were interviewed in Katete district to establish the extension providers operating in the district, ranging from both public and private providers. Volunteers were also asked to state the extension service providers working in their respective areas. The **table 4.2** below summarise the extension service providers according to the responses.

Key agricultural extension service providers in Katete District

Extension service provider	Type	Category
Ministry of Agriculture (DACO)	GRZ	Public sector
ZARI – Msekera	Institution – GRZ	
UNIQUE Land Use	NGO	Private service providers
FAO	NGO	
GIZ	NGO	
WFP	NGO	
World Vision	NGO	
ADRA	NGO	
Self Help Africa	NGO	
COMMACO	NGO	
Total Land Care	NGO	
Seed companies	Input suppliers	

Table 4.3 (Source, Author), 2024

4.4 Response on receiving conflicting or contradictory information.

Figure 4.5 shows that 83% respondents affirmed receiving conflicting or contradictory information. Respondents, representing 17% did not affirm.

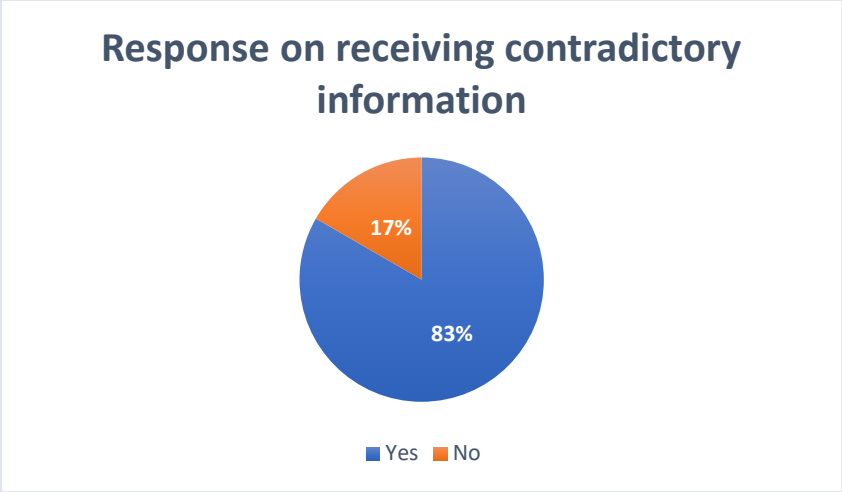

Figure 4.4 (Source, Author), 2024

4.6. Coordination mechanisms among stakeholders in the Agriculture Extension Service of Katete district

Respondents were asked whether they were aware of any existing coordnation mechanisms in the AES in Katete. The figure 4.6 below shows that 75.6% of the respondents were aware of some existing coordination mechaism in the AES while 24.4% represents those not aware of any.

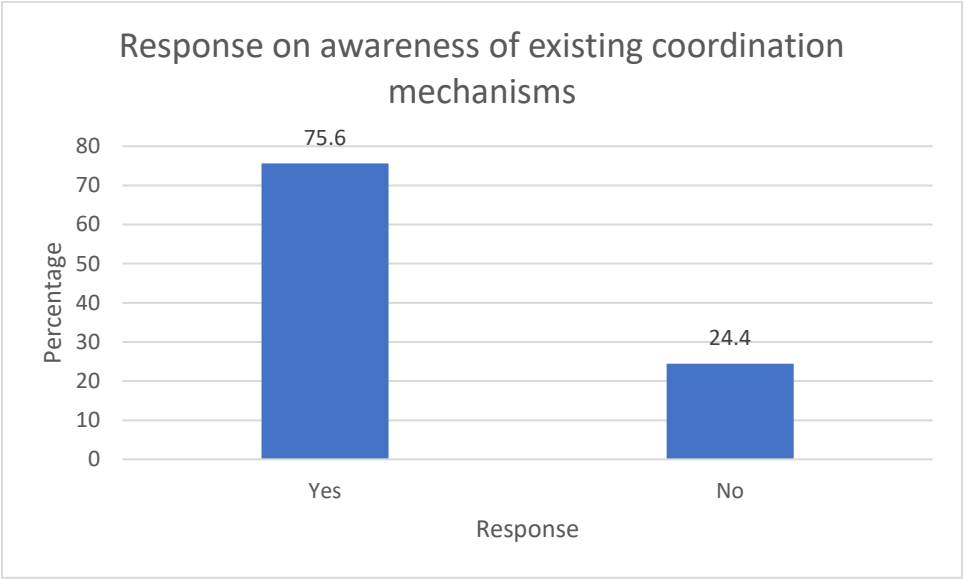

Figure 4.6 (Source, Author), 2024

The study identified the coordination mechanisms adopted in Katete District. Key informants indicated that meetings are the main coordination systems that are reliable in

their respective areas: “here the main system that we rely on as stakeholders in the AES mostly is a meeting”. Another key informant and other participatory stakeholders mentioned that meetings were effective: “the areas where we come from, meetings seem to be effective than any other system”. Meanwhile, Government officials that participated in the study added that workshops were also part of the mechanisms that used in Katete District: “Over years, workshops are also embraced as good coordination mechanism of AES in many parts of the country without an exception of Katete District”. Therefore, coordination appeared to exist mainly around joint meetings and workshops with a participatory extension approach.

4.7. Effectiveness of the coordination mechanism in the Agriculture Extension Service

The second objective of this study was to know how effective the stakeholder coordination mechanisms in place were in the delivery of AES to the farmers within Katete district. The informants were asked regarding their understanding of the effectiveness of the coordination mechanisms in place for coordination of different stakeholders involved in AES and their perceptions were analysed. Through the in-depth interviews, the reasons were given to support the responses. In the words of one of them: “If you want me to be very frank with you, the existing coordination mechanisms are good platforms for collaborations and exchange of experiences, however a number of challenges renders it difficult to achieve the intended purpose.

Another respondent stated that, “inherently, the mechanisms in place are effective but due to limited meeting opportunities it is difficult to say whether the platforms are that effective or not. Lastly, another responded in own words: “These platforms are not effective as they lack the critical component of the coordination, which is training of the staff for improved capacity to handle different stakeholders.”

The respondents were requested to indicate their views and brief explanation regarding the effectiveness of the existing coordination mechanisms at district level using a scale of a 5-point Likert scale. The scale ranged from 1, indicating very ineffective, to 5 indicating very effective. From the results, 46.7% and 32.1% of respondents indicated ineffective and effective respectively with 15.6% respondents indicating neutral while 5.6% indicating they very effective. Their responses were as shown in **Table 4.5**

Respondent's response on the effectiveness of the coordination mechanisms.

Opinion	Frequency	Percentage (%)
Very effective	5	5.6%
Effective	29	32.1%
Neutral	14	15.6%
Ineffective	42	46.7%
Very ineffective	-	-
Total 90		100%

Table 4.7 (source (author) 2024

Respondents who indicated that the coordination mechanisms were effective (32.1%) mainly attributed it to the ability of the mechanisms to provide a platform for interaction and exchange with other partners to share goals, experiences and knowledge. "During joint meetings, it is easier to share experiences and exhange knowledge on various interventions". Another participant emphasized, it's during these meetings that we meet other partners and learn of what they are exactly doing".

The other respondents representing 46.7% indicated that the coordination mechanism were ineffective. Reasons for the response included limited resource for organizing the event, inadequately capacity development initiative and low participation from partners.

"It requires funds to organize and attend the meetings with other partners. Meals, logistics and sometimes allowances need funds". One of the key informants indicated that "most partners have busy schedules, and it is difficult for them to attend the meetings".

4.8. Challenges experienced by stakeholders in the coordination of extension service.

The key informants were asked about their views on the challenges they experienced in coordination of extension service providers, the majority stressed several challenges in coordinating the extension service. One of the challenges that the stakeholders face in coordination of the extension service pointed out was lack of coordination structure to support the coordination. Respondents were asked for their response whether there was an existence of established coordination structure/team at district level.

Figure 4.8 shows the response regarding the established coordination team within the agriculture extension service in the district. Overwhelmingly, 100% respondents indicated there is no established structure/team to spearhead the coordination activities in the extension service. No respondent indicated the presence of the team at district level.

Response on whether there is an existing coordination structure

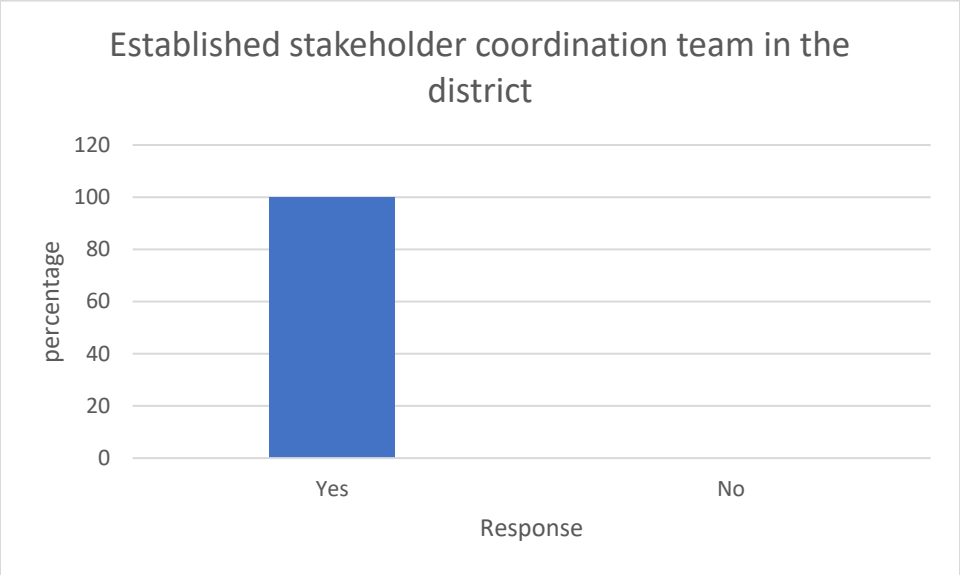

Figure 4.8 (source, Author), 2024

Notably, among other challenges encountered include inadequate resources and insufficient technical capacity. It was repeatedly pointed out that the number of personnel available at different was inadequate to get the job done. The words of one of the key informants stated, “there is no budget allocated for any coordination work of the extension service in the first place. There is need for logistic support such as vehicles and fuel for travels for the meeting and sometimes meals.” Quoting another informant, in his words

he clearly indicated that, “there are capacity issues such as lack of skills to organize and coordinate the stakeholders and low number of staffs especially from the government offices at district level to support and spearhead the coordination tasks.”

In words of an informant: “There is no required comprehensive framework within which the coordination of stakeholders needs to take place at different levels.”

Limited use of ICT is another challenge faced by stakeholders especially in holding meetings, sharing of information and storage of data for easy access by all key stakeholders.

Further, it was stated that inadequate communication is another challenge that poses an effective coordination of development partners’ efforts. Participant stated that “unwillingness of partners to divulge complete information” is one of the challenges. Lastly, it was also clearly mentioned that some staffs had limited capacity to coordinate the stakeholders because due to lack of capacity development initiative. The study sought to find out whether the staff attended any specialized training related to coordination of the stakeholders in extension service. From the research results the majority of the respondents, 65% indicated that they did not whereas 35% of the respondents indicated otherwise. This shows that a considerable number of the staff was lacking some specialized training in coordination related subject.

Table 4.4

Specialized training or workshops related to coordination of stakeholders	
Opinion	**Percentage**
Yes	35%
No	65%
Total	**100%**

Table 4.8 (Source, Author), 2024

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter covers the discussion of the results from the three study objectives, linking the information and what is already known as well as offering fresh perspectives and expertise in the field.

5.2. Coordination mechanisms among stakeholders in the AES of Katete district

The first objective of this study was to establish the existing coordination mechanisms among stakeholders in the delivery of AES in Katete district. To achieve this objective, an analysis was performed based on the responses from the interviews with respondents and key informants. During the interviews, the informants comprising of both public and private extension service providers were asked about their views on the existence of coordination mechanism at district level for the stakeholders involved in providing the agricultural extension services. Clearly, the study identified the coordination mechanisms in place. Coordination appeared to exist mainly around joint meetings and workshop with a participatory extension approach.

The majority of the informants retaliated, “the common platforms used are joint meetings where different stakeholders can meet to discuss their issues. Similar to a study by Iftikhar et al (2010), his established that both private and public stakeholders in involved in the agricultural extension service maximized use of the workshops and joint meetings as means of exchange and harmonizing messages in the extension service. Other key informant stated that, “Workshops and online platforms, especially WhatsApp groups have been our means for coordination of the stakeholders in the agriculture extension service in Katete district.” It is noteworthy that the primary goal of online collaboration platforms was to function as a means of harmonizing methods, activities, and extending messages or exchanging information. Public extension services were primarily delivered through the Participatory Extension Approach (PEA), according to PACO, DACO, and SAO. However, private sector coordinators and extension officers noted that PEA did not always align with the necessary modifications to the curricula of agricultural training institutions and Agriculture Community Services. Along with this, volunteers saw that PEA had created a knowledge gap among stakeholders regarding participatory extension

service delivery methods, which in turn led to inefficient distribution of agricultural inputs. Among other things, innovation confirmed that the country lacks the necessary skills to carry out PEA.

However, key informants expressed concern that there were no dedicated working groups as a platform to bring specific like-minded organizations for their specific objectives and sharing of information. “We don’t have working groups working on the similar topics within the extension service to enhance exchange of ideas and coordinate the activities for harmonized implemetation”, stated by one of the key informants.

Generally, the study reveals that the coordination mechanisms are supported by the government through the ministry of Agriculture. However, these mechanisms lack coordination team for spearheading. During the interviews, the study further established that not all the stakeholders know about the existing coordination mechanisms in place as they are not aware of the any common platforms for the stakeholders in the extension service. It was also explained that joint meetings or workshops only takes place when required by an individual partner or stakeholder. Generally, interviewed informants could provide some information about the existing coordination mechanisms mainly organized and managed by the Ministry of Agriculture through the District Agricultural Coordination Officer (DACO). A key informant stated that “most of the joint meetings or workshops are organized by partners with their resources whenever the need to discuss certain issues arise such as, identifying partners for joint interventions, opportunity for synergies and mapping the operational areas”.

5.3 Effectiveness of the coordination mechanism in the AES of Katete district

The second objective of this study was to know how effective the stakeholder coordination mechanisms in place are in the delivery of AES to the farmers within Katete district. The respondents were asked to rate the effectiveness of the existing coordination mechanisms from very effective to very ineffective. It was obtained that 46.7% of the respondents indicated that the existing mechanisms were ineffective with 32.1% representing those indicating effective. Through the in-depth interviews, the majority of the respondents emphasized that the coordination mechanisms were ineffective. The reasons attributed to the effectiveness varied from one respondent to the other. One of the main reasons for the effectiveness was identified as enhanced exchange and

collaboration through shared objectives, goals, experiences and knowledge. The joint meetings fostered the joint planning which is critical in coordination of extension service. This is in line with a similar study by Adeyemi (2023), which established that one of the key aspects of coordination is joint planning to avoid duplication of activities. It was also clearly stated that the joint meetings and workshops were effective platforms in enhancing the interaction among the stakeholders and facilitate alignment and harmonization of activities to reduce the possibilities of duplication of interventions and conflicting messages. This is in accordance with the recommendation by Chisinga (2008). Additional respondents emphasized that the provision of sufficient operational logistical support, including transportation, suitable housing (including staff residences and offices), and extension instruments and equipment, is necessary for the efficient performance of extension services. Extension officers sometimes operate with little or no operational resources these days. Extension employees may live in run-down homes or are required to make expensive lengthy commutes from other locations. The fact that extension staff must fulfill both regulatory and extension responsibilities present additional difficulties. Nonetheless, field-level spontaneous extension activity execution is frequent, which results in the wasteful utilization of limited resources. The lack of useful information exchange channels for stakeholders to coordinate and organize field extension projects further exacerbates this. Furthermore, the majority of field extension initiatives does not publish their results or only report a small enough portion of them to support management decision-making. The concept of a management information system is completely undermined when reports are sent because there is a pervasive culture of not providing feedback. In general, the method for monitoring and evaluating extensions is insufficient.

With the respondents indicating that the coordination mechanisms were ineffective, the dominating reasons mentioned were attributed inadequate or lack of specialized training for capacity to manage the stakeholders incorporated in the mechanisms especially that the platforms were costly to hold. The respondents were asked whether they attended any specialized training regarding the coordination and overwhelmingly, about 65% indicated never attended any training. This has a bearing on the capacity to manage the coordination mechanisms effectively. This is confirmed in a study by Micheal (2016) who found that training staff for improved capacity to manage the community-based organizations had an effect on the ultimate functionality of the coordination mechanisms.

Time was also another hurdle to the effectiveness. The mechanisms in place required time to organize and travel (Lamm, et al, 2020). The research found that in certain parts of the Katete District, there isn't a formalized system in place to coordinate the knowledge and assets that each participant has to offer. These regions specifically state in their draft agricultural policy papers that collaboration with the agriculture sector is necessary. Too far, there is, however, no plan in place for averting previous mistakes and enticing stakeholders to participate widely in coordinating units.

5.4 Challenges experienced by stakeholders in the coordination of extension service in Katete district

The key informants were asked about their views on the challenges they experienced in coordination of extension service providers, the majority stressed several challenges in coordinating the extension service. Notably, among the challenges encountered include inadequate resources and insufficient technical capacity. It was repeatedly pointed out that the number of personnel available at different levels was inadequate to get the job done. The words of one of the key informants stated, “there is no budget allocated for any coordination work of the extension service in the first place. There is need for logistic support such as vehicles and fuel for travels for the meeting and sometimes meals.” Other major issues raised were the absence of a clear and organized coordination function in the national and local agricultural sector policies, the lack of interest in and effectiveness of coordination, possibly due to the perception that it is a loss of autonomy or authority, the difficulty of coordinating actions amongst organizations with radically dissimilar working cultures, and mistrust amongst service providers. Numerous factors contribute to ineffective coordination, such as the absence of a shared set of sector performance indicators and collaborative performance review processes, duplication, inconsistent service delivery quality, wasteful resource usage, and less-than-ideal goal achievement.

The other challenges that the stakeholders face in coordination of the extension service pointed out were lack of inter-ministerial structure to support the coordination and inadequate guiding policy frameworks. The Katete district lacks the coordination task force or body with a mandate to support the coordination of all stakeholders. This has contributed largely to the poor coordination of the stakeholders. It was stressed that the coordination only happens between an interested organization (s) and the Ministry of Agriculture through the DACO when need arise.

Other notable challenge included poor communication among the organizations. The informants highlighted that the communication rarely happens, and, in most cases, it only depends on specific needs. Communication possesses an effective coordination of development partners' efforts as it hinders effective collaborations. This agrees with a study by Jona (2016) who stated that good communication and engagement can result in stakeholders and partners' increased participation and sharing of information.

Limited use of ICT is another challenge faced by stakeholders especially in holding meetings, sharing of information and storage of data for easy access by all key stakeholders. The use of ICT has an influence on the effectiveness of the communication hence leading to effective coordination. The findings are in line with the Bebbington and Sotomayor, (1998).

The study also revealed lack or inadequate funding to coordinate the stakeholders was another major challenge. Funds are critical for organizing, logistical supports and for other requirements. It was stated by the key informants that platforms such as joint meetings and workshops were difficult to organize due to limited funds.

It was also reported that there was suspicion and lack of trust among stakeholders, partly due to rivalry and competition, resulting in information hoarding; narrow-focused interventions which further exacerbated silos. The study found that that there was a relationship between open information sharing and experiences had impacted the effectiveness of the coordination mechanisms. Overall, AES delivery often requires efficient resource use, which calls for good coordination and communication amongst the stakeholders at all levels (national, provincial, district, and community). Duplication of effort within and among service providers characterizes the extended service delivery now in place, leaving other regions in need unaddressed. In addition, poor collaboration and communication have often led to contradicting information on the same subject.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

Chapter six draws conclusions and provides recommendations on the basis of the findings discussed in the previous chapter, Chapter 5. The conclusions are based on the key findings that were obtained from the objectives of study. The chapter offers a summary of the evaluation outcomes and suggests potential areas for future research pertaining the effectiveness of coordination mechanisms.

6.3 Conclusion

6.3.1 *To find out the existing coordination mechanisms among stakeholders in the delivery of AES in Katete district.*

This objective was achived and in the study it clearly indicated the existing coordination mechanisms of the stakeholders in the agriculture extension service delivery. It was noted that the number of mechanisms in existency are very few, only including the joint meetings and workshops with online platform mostly used for updates and sharing information. Unfortunately, the information obtained showed that these mechanisms are not used more often. Effectively this means that even the most frequently used methods are, in effective, only used sometimes, and this implies that most of the other methods are only rarely used or not at all. Noteworthy and positive from a coordination point of view, is that the mechanisms are those that foster information, skills and experience sharing.

Though there are existing coordination mechanisms in the agriculture extension service, there are limited to achive the intended purpose. In general, the findings indicate that there is a tremendous scope for improvement of coordination mechanisms in extension service delivery.

6.3.2. To know how effective the stakeholder coordination mechanisms in place are in the delivery of AES to the farmers within Katete district.

During the data collection, it was evident that the existing coordination mechanisms were effective, representing 46.7% while 32.1% indicated ineffective. During the interviews, for the effectiveness, main reasons were highlighted including enhanced collaboartion and exchange, shared goals, objectives, knowledge, and experiences. The platform fostered interaction for discussions on various issues affecting the extension service for better

harmonization of interventions. On the other hand, main reasons given for the that there is poor representation of the stakeholders especially the farmers and extension officers who are key and part of the the extension services. Another reason indicated for the ineffectiveness was that the mechanisms in place do not address the technical capacities of the staff in terms of technical skills. In other words, there are no capacity building initiatives present. The argument is substatiated by Jona (2016).

Further the mechanisms are limited due to costs and time attached to them. It was mentioned that one of the hindrances for the coordination of the extension services is financial demands. The nature of the coordination mechanisms begs for the funds for the stakeholders to meet. This is according to the study by micheal (2016) which noted that stakeholders experienced difficulties to organize and hold meetings or workshops due to fund limitations, particularly in agricultural extension services.

6.3.4. To find out the key challenges experienced by stakeholders in the coordination of extension delivery in Katete district.

Several challenges faced by the stakeholders in the coordination of agriculture extension services were obtained by the study. The key informants were asked about their views on the challenges they experienced in coordination of extension service providers. On challenges, the study concludes that the coordniation of the extension services is impacted by limited funds, absence of the coordination board or team to spearhead the coordination process and weak collaboration and communication among the stakeholders.

Insufficient technical capacity of among the staff also limits the extent to which the mechanisms can function. This is in line with a study by adeyemi (2023). It was repeatedly pointed out that the number of personnel available at different levels was inadequate to get the job done.

Limited use of ICT is another challenge faced by stakeholders especially in holding meetings, sharing of information and storage of data for easy access by all key stakeholders. The use of ICT has an influence on the effectiveness of the communication hence leading to effective coordination. The findings are in line with the Bebbington and Sotomayor, (1998).

6.4 Recommendations

6.4.1. To find out the existing coordination mechanisms among stakeholders in the delivery of AES in Katete district.

Based on the study's findings, the research recommendes that the government leads in strengthening the already existing coordination mechanism and ensure that all the stakeholders involved in agriculture extension services supports and key into the priorities as in the coordination mechanism. The coordination mechanisms should be designed to integrate activities at the national, provincial, district and community level to ensure coordination at all levels and support the harmonization and alighnment of interventions. Formation of the specific dedicated working groups to address issues in smaller grpups of stakeholders based on similar activities or interventions.

6.4.2. To know how effective the stakeholder coordination mechanisms in place are in the delivery of AES to the farmers within Katete district.

To improve the effectiveness of the coordination mechanisms, there is a need to budget for the coordination activities by the government and private sector involved in agriculture extension service delivery. This will support the government agriculture extension service in speaheading this process. It was noted that in the study funding of coordination of activities was found to be among the challenges experienced by the stakeholders. There must be a well represented coordination structure or body involving different stakeholders to facilitate harmonization of activities, sharing of the information, skills, and experiences for enhanced collaboration. This agrees with Okorley, Gray, & Reid (2010), it is worth noting that the need for creation of coordinating structures to strengthen coordination in extension service delivery is critical.

Further, it is important to make use of the digital platforms (ICT) and M&E system for enhanced information sharing and as a platform for exchange of priorities and objectives.

Lastly, there is a need to establish the dedicated working groups for specific similar interventions among the stakeholders to reduce the duplication of activities and conflicting messages.

6.4.3. To find out the key challenges experienced by stakeholders in the coordination of extension delivery in Katete district.

The researcher recommends that capacity building initiatives should be emphasized in enhancing the coordination among all the stakeholders involved. Lastly, the study also recommends there must be a clear and strong operational framework in place. In every case operational framework should provide a means for mapping all stakeholders core values or guiding principles against a consensus listing all excellence principles. It should provide a set of knowledge areas (or criteria) used to guide continual improvement and provide a results-driven methodology used to plan, implement, measure, and continually improve the agriculture extension service.

6.5 Recommendations for further research

The study recommends a focusing on the analysis of the government Agricultural extension service coordination framework for stakeholders. There is also a need to investigate the effectiveness of capacity building initiatives among the agriculture extension staff in managing the coordination of stakeholders**.**

6.7 Limitations of the study

Despite the efforts in ensuring the research was done successfully, the study faced the following limitations:

1. Some respondents were not willing to share complete information. The original assumption on this limitation was accurate. The participants that responded represented a suitable number for a study, and the participants provided accurate information on the questions they were asked.

2. The study focused on only Katete district, several districts within Eastern province the results may not be a representation all the districts in the province.

3. Some respondents could not read and write which time consuming; therefore, the researcher did read and interpreted for them which was time consuming.

APPENDICES

Questionnaire

Investigating the Effectiveness of Coordination Mechanisms among Stakeholders in Agricultural Extension in Eastern Province, Zambia

Introduction

Thank you for participating in this research study, aiming to understand farmers' perspectives on the coordination mechanisms among stakeholders in Agricultural Extension Services (AES) in Katete District. Your insights are crucial. Please respond thoughtfully and professionally.

Demographic Information

1 Age

a) 20-30

b) 31-40

c) 41-50

d) 50 and above

2. Gender

a) Male

b) Female

3 Education

a) No formal education

b) Primary education

c) Secondary education

d) Tertiary education

Are you aware of the services provided by Agricultural Extension Services in Katete District?

a) Yes

b) No

5. List the agriculture extension serivice providers you work with in your areas?

_____

_____

_____

6. Conflicting agricultural extension information

Have you ever received conflicting information about agricultural practices from different extension service providers?

a) Yes

b) No

7. If yes, how has conflicting information affected your farming practices? (Select all that apply)

a) Caused confusion in decision-making

b) Led to changes in crop selection or farming methods

c) Had no significant impact

d) Other (please specify): _____

Coordination Among Stakeholders

8. How would you rate the coordination among different stakeholders involved in delivering agricultural extension services in Katete District?

a) Very effective

b) Effective

c) Neutral

d) Ineffective

e) Very ineffective

Explain your answer

_____

_____

Suggestions for Improvement

9. In your opinion, what could be done to improve the coordination of agricultural extension services in Katete District?

a) Regular stakeholder meetings

b) Increased farmer involvement in planning

c) Enhanced communication channels

d) Other (please specify): _____

Conclusion

Thank you. The detailed responses will contribute significantly to understanding the challenges and opportunities in Agricultural Extension Services in Katete District.

Interview questiions for the survey

Section 1: Demographic Information

1.Years of Experience in Agricultural Extension:

a) Less than 2 years

b) 2-5 years

c) 6-10 years

d) More than 10 years

2. Highest Level of Education:

a) Diploma/certificate

b) Bachelor's degree

c) Master's degree

d) Ph.D. or equivalent

e) Other (please specify): _____

Section 3: Coordination Mechanisms

3.1 Are you aware of any existing stakeholder coordination mechanism AES in Katete district?

a) Yes

b) No

3.2 What coordination mechanisms are currently in place among stakeholders for delivering AES in Katete District? (Open-ended)

_____

_____

_____

_____

_____

3.3 How effective do you think these coordination mechanisms are in the delivery of AES to farmers within Katete District?

a) Very effective

b) Effective

c) Neutral

d) Ineffective

e) Very ineffective

3.4 In your opinion, give reasons to your answer

_____
_____
_____
_____
_____

3.5, what factors contribute to effective coordination among stakeholders in AES? (Open-ended)

_____
_____
_____
_____-
_____
_____

3.6, what factors hinder the effectiveness of coordination among stakeholders in AES? (Open-ended)

Section 4: Challenges and Solutions

4.1 What challenges have you encountered in coordinating with other stakeholders in AES, and how have you addressed or overcome these challenges? (Open-ended)

_____
_____
_____
_____

Section 5: Suggestions for Improvement

6.1 In your opinion, what strategies or improvements could enhance existing coordination mechanisms among stakeholders in AES? (Open-ended)

_____
_____
_____
_____

Section 6: Recommendations for Policy and Practice

7.1 What policy-level recommendations would you propose to improve coordination among stakeholders in AES at the district level? (Open-ended)

_____
_____
_____
_____

End

Thank you for taking the time to complete this questionnaire. Your detailed responses will contribute significantly to understanding the challenges and opportunities in Agricultural Extension Services in Katete District.

Research Questionnaire for Provincial Agriculture Coordinators (DACO)

Topic: Investigating the Effectiveness of Coordination Mechanisms among Stakeholders in Agricultural Extension Eastern Province, Zambia

Introduction

Thank you for your participation in this research study, which aims to explore the coordination mechanisms among stakeholders in Agricultural Extension Services (AES) in Katete District. As a Provincial Agriculture Coordinator (PACO), your insights are integral. The following questionnaire combines both open-ended and multiple-choice questions for a comprehensive analysis, and the information will be solely used for academic purposes. Please respond thoughtfully and professionally.

Section 1: Respondent Information

1.1 Name (Optional): .....

1.2 Position/Title: Provincial Agriculture Coordinator (PACO)

1.3 Province: .....

1.4 Years of Experience in Agricultural Extension: .....

1.5 Have you attended any specialized training or workshops related to coordination in AES?

a) Yes

b) No

Section 2: Overview of AES in the Province

2.1 Briefly describe the organizational structure of AES in your province, highlighting key stakeholders involved. Provide details on the composition and functions of the coordination team, if applicable.

_____

_____

_____

_____

_____

_____

Section 3: Coordination Mechanisms

3.1 How are coordination mechanisms currently organized among stakeholders involved in AES within your province?

a) Regular coordination meetings

b) Online collaboration platforms

c) Dedicated working groups

d) Other (please specify): _____

3.2 What administrative and technical capacities are in place to harmonize programs and activities under implementation?

a) Dedicated coordination staff

b) Information management systems

c) Training programs for stakeholders

d) Other (please specify): _____

3.3 Are there existing coordination mechanisms for stakeholders the coordination of AES?

a) Yes

b) No

Section 4: Effectiveness of Coordination

4.1 How would you rate the effectiveness of the current coordination mechanisms in the delivery of AES within your province?

a) Very Effective

b) Effective

c) Neutral

d) Ineffective

e) Very Ineffective

4.2 What indicators or benchmarks are used to assess the success of coordination efforts in AES? Provide specific examples or instances where these indicators were employed.

_____
_____
_____
_____
_____

4.3 Can you provide detailed narratives or examples of successful collaborative initiatives resulting from effective stakeholder coordination in your province?

_____
_____
_____
_____

4.4 In your opinion, what role does technology play in enhancing coordination among stakeholders in AES?

Section 5: Challenges and Solutions

5.1 What are the key challenges experienced by stakeholders in coordinating the delivery of AES within your province?

Please expound on each identified challenge, providing specific instances or scenarios.

_____
_____
_____
_____

5.3 From your perspective, what strategies or improvements could enhance existing coordination mechanisms among stakeholders in AES?

_____

_____

_____

_____

_____

Section 6: Recommendations for Policy and Practice

6.1 What policy-level recommendations would you propose to improve coordination among stakeholders in AES at the provincial level?

_____

_____

_____

_____

_____

6.2 How can coordination efforts contribute to overcoming challenges related to inadequate funding and competition among stakeholders in AES?

_____

_____

_____

_____

_____

Section 7: Multiple-Choice Questions

7.1 How frequently are coordination meetings held among stakeholders in AES?

a) Monthly

b) Quarterly

c) Annually

d) Irregularly

e) Not applicable

7.4 How do you envision the future role of technology in advancing coordination efforts in AES?

Thank you for your participation and comprehensive input. Your responses will provide valuable insights into the coordination landscape of Agricultural Extension Services in Katete District and the Eastern Province of Zambia.

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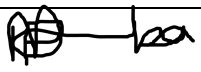
APPENDIX I

UNIVERSITY OF LUSAKA

SCHOOL OF POSTGRADUATE STUDIES

5TH TO 14TH JANUARY 2024 GBS800 DISSERTATION SUBMISSION

No	Item	Done
1	Were you registered for GBS800 in the JULY-DECEMBER 2023 semester?	✓
2	Has your FINAL DISSERTATION been signed by the supervisor[1]?	✓
3	Have you attached the Turnitin similarity report to the appendix?	✓
4	Is your Turnitin similarity report below 20 percent? Please append the similarity report to your dissertation.	✓
5	Have you submitted a soft copy version of your dissertation to the UNIVERSITY TURNITIN CLASS called "DISSERTATION FINAL SUBMISSION JAN 2024?" See point (3) on the next page for more details.	✓
6	What is your dissertation's total word count (including references and appendices)?	**16,448 WORDS**
	Candidate Name: Patrick Chikomba	
	Student Number: MDS22215936	
	Signature: 	
	Date: 13th March, 2024	

[1] Please ensure that the "SUBMISSION OF DISSERTATION FOR EXAMINATION FORM" (available on page 43 of the dissertation guidelines) is printed and signed by your supervisor and included as part of your submission.

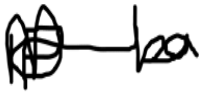
APPENDIX II

UNIVERSITY OF LUSAKA

SCHOOL OF POSTGRADUATE STUDIES

SUBMISSION OF DISSERTATION FOR EXAMINATION

Name of student	Patrick Chikomba
Student number:	MDS22215936
Programme of study:	Master of Arts Development Studies
Dissertation title:	Investigating the Effectiveness of Coordination Mechanisms among Stakeholders in Agricultural Extension in Katete District of Eastern Province, Zambia.

Signature of student:  **Date:**13th March 2024.

Supervisor's Comments:

I recommend/ do not recommend this dissertation for submission for examination (If you do not recommend, kindly provide a written report and attach hereto).

Name of Supervisor……. Mr Brian Mwiinga

Signature of Supervisor  **Date:** 13th March, 2024.